

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont’d)

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4697. April Dauenhauer (zip code: 97023) 4698. Orlin Braddy (zip code: 72641) 4699. Herbert Elwell (zip code: 16929) 4700. oscar holmberg (zip code: 72219) 4701. Sharon Olska-Michales (zip code: 13152) 4702. Londa Fowler (zip code: 87111)

4703. Mark Bernard (zip code: 12401) 4704. Stephen Stoker (zip code: 78209)

4705. Laurie Hein (zip code: 34446) NO MORE DANGEROUS ANTI CLIMATE/ ENVIRONMENT PIPELINES=PLEASE!~

4706. Randy Outland (zip code: 28786) 4707. O Lewis (zip code: 90009) 4708. Owen Peacock (zip code: 12977)

4709. Jan Peterson (zip code: 80526) It takes thousands of years to remove greenhouse gasses from the atmosphere, once there. If we are to have any hope of stopping global warming, we must not allow ever more fossil fuel commodities to be produced and burned. That means, iso fact, that we must STOP building pipelines to transport oil and methane. My children and grandchildren deserve no less!

4710. Sophie Galleymore Bird (zip code: TQ9 7RZ)

4711. Charles Phillips (zip code: 65233-1785)

4712. Paul Dyer (zip code: 43214) They want to ram one of those ***** pipelines right through some of the beautiful rural farmlands of northern Ohio that my ancestors settled in way back in the early 1800's and some of which is still in our family. That is just WRONG! Who do these people think they are, GOD?

4713. Shireen Parsons (zip code: 20012) I LEAVE IT IN THE GROUND!!!!

4714. Pat Chefalo (zip code: 14624) 4715. Paul Desjardins (zip code: 02152) 4716. P J September September (zip code: 7675) 4717. Michael Hedrick (zip code: 96744) 4718. Patricia Roberts (zip code: 30314) 4719. Dani Palomino (zip code: 91001) 4720. Pamela Hahler (zip code: 80204) 4721. Pamela Brocius (zip code: 10128) 4722. Pamela Kersting (zip code: 60440) 4723. Pamela Thinesen (zip code: 55303) 4724. Pamela VourosCallahan (zip code: 46530) 4725. Pamela Clark (zip code: 97527) 4726. Pamela Chismar (zip code: 44460) 4727. Pamela Scott (zip code: 95006) 4728. Pamyle Greinke (zip code: 11958) 4729. Pamela Miller (zip code: 76476) 4730. Pandora Edmonston (zip code: 95338)

4731. Phyllis Andrews (zip code: 95666) 4732. Patrice Anita (zip code: 90034)

4733. Pan Morigan (zip code: 1062) Our government needs to STOP acting like there is no climate change. It is truly insane. Keep the gas in the ground - stop ruining our water supplies with fracking, and support alternative energies NOW before it is too late.

4734. An anonymous signer (zip code: 03431) 4735. Patricia Petersen (zip code: 80304) 4736. Silvana Garcia (zip code: 91335-1310) 4737. Louis Rourke (zip code: 02725)

4738. Raymond Millette (zip code: 01062) 4739. Brian Waak Waak (zip code: 60505)

4740. Paul Richey (zip code: 15217) I don't want to live near gas pipelines. Especially when those pipelines carry dirty gas like the production from fracked gas.

4741. PA Reynolds (zip code: 30324) The only plan for the excess gas we develop in the USA is to export it so big oil/gas can make more money. Why should we risk the environment to build pipes to export oil/gas? It's not for the USA consumer!!! It's for BIG BUSINESS.

4742. Larry Forrest (zip code: 80228) 4743. Diane Varney-Parker (zip code: 03048) 4744. debra Houle (zip code: 55079) 4745. Sharon Parshall (zip code: 98024-0593) 4746. Pat Wolff (zip code: 91006) 4747. Roncin Pascale (zip code: 92150) 4748. Marie Pascale LEGELEUX (zip code: 95370)

4749. Paul Huddy (zip code: 85712) 4750. Pamela Sheridan (zip code: 08098)

No unsafe pipelines please!

4751. Patricia Nazzaro (zip code: 41091)

4752. Pat Mineau (zip code: 94131)

4753. Patrick O'Meara (zip code: 33755) Where is the tipping point, the point of no return? Are we there yet?

4754. Pat Gottschalk (zip code: 55419) 4755. Patricia Luck (zip code: 29455) 4756. Pat Makowski (zip code: 55082) 4757. Patricia Barth (zip code: 60016-3606) 4758. Pat Vesco (zip code: 27513)

4759. pat ament Ament (zip code: 55444) We Demand Clean Energy!!!

4760. Polly Stonier (zip code: 97535) 4761. Patricia Chelmecki (zip code: 60119)

4762. Patricia Copenhaver (zip code: 50126-1427) We have less than 15 years to totally wean ourselves off fossil fuels.. We can't do that if we continue to build pipelines. We must stop now!

4763. Patricia Daly (zip code: 07043) 4764. Patricia Cole-Ferullo (zip code: 28782) 4765. Pat Blackwell-Marchant (zip code: 94552-1708) 4766. Pat McKenna (zip code: CF11 9DG) 4767. Patricia Borri (zip code: 80033)

4768. patricia borchmann (zip code: 92026) 4769. Patricia Smith (zip code: 60615) 4770. Patricia Cachopo (zip code: 95050) 4771. Patricia Savage (zip code: 93546) 4772. Patrick Maloney (zip code: 60657) 4773. Patrick Judge (zip code: 70118-5536) 4774. Patricia Shaw (zip code: 52535)

4775. Patsy Lowe Lowe (zip code: 93065) FERC, WHICH IS SUPPOSED TO BE REGULATORY FOR THE BENEFIT OF THE PEOPLE, INSTEAD WORKS FOR CORPORATIONS. THIS IS FULL BLOWN FASCISM. I hear pitchforks.

4776. Mary Patterson (zip code: 66002) 4777. Patricia Wynn (zip code: 33186)

Please STOP! We need clean, renewable energy resources, NOT more dirty coal, oil and gas.

4778. Patti Rose (zip code: 19608) Keep IT In The Ground! No more fracked gas pipelines!

4779. Patti Batchelder (zip code: 01633) To the members of FERC: If you have children, and grandchildren, for THEIR sake, we need to convert to clean, renewable energy ASAP!

4780. Patty Erwin (zip code: 52807) 4781. Patty Bonney (zip code: 97223) 4782. Patty Buttlere (zip code: 60107) 4783. MaryAnn Heaphy (zip code: 25422) 4784. pat wilkins (zip code: 01453)

4785. PATRICIA POLIZZI (zip code: 14514) 4786. Pat Zuber (zip code: 72774)

4787. Paul Riemer (zip code: 89508) 4788. Paul Durkin (zip code: 34714) 4789. Paul Jefferson (zip code: 66044)

4790. Paul Roden (zip code: 19067) Fossil fuel needs to stay in the ground. The only reason we are building all of these pipelines is to export the abundant natural gas overseas. This results in our gas and oil prices to go up in the free market. They want to build pipelines, natural gas compressor stations and LNG or Liquefied Natural Gas terminals for export on the global gas and oil market. But I thought we needed all of this cheap, abundant natural gas as a "transition fuel" until renewable energy will be ready? How much profit is enough for these greedy, dirty fossil fuel companies?

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont’d)

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4791. Paul Rinear (zip code: 07747) 4792. Paula Yurkovitch (zip code: 43062) 4793. Paula Fox Fox (zip code: 55403) 4794. Paul Brooks (zip code: 15222) 4795. Paulette Kaplan (zip code: 22030) 4796. Pauline Wasserman (zip code: 02904) 4797. Paul Nasuti (zip code: 19130) 4798. Paul Paz y Mino (zip code: 94619) 4799. Paul Vee (zip code: 59027) 4800. Paul Rafferty (zip code: 10025) 4801. Pavel Lihani (zip code: 44134) 4802. Michelle Emry (zip code: 80223) 4803. Mary Paynter (zip code: 98198) 4804. Paul Borcharding (zip code: 97850) 4805. Patrick Barrows (zip code: 92106) 4806. Peter Beves (zip code: 1473) 4807. Peter Harwood (zip code: 93245) 4808. paul bikoff (zip code: 11743) 4809. Patricia Kingsbury (zip code: 20645) 4810. Robin Craft (zip code: 43064) 4811. Phillip Cripps (zip code: 92234) 4812. Phillip Crown (zip code: 66609) 4813. Pam Slater-Price (zip code: 92014) 4814. Carol Soper (zip code: 54234) 4815. Peggy Baughns (zip code: 30032) 4816. Dan Pepin (zip code: 60510) 4817. Eleuthera DUPONT-PASSIGLI (zip code: 3602) I can only hope that you will do all in your power to oppose new pipelines and to help our world fight against climate change 4818. kay allen (zip code: 95973) 4819. Trina McKee (zip code: 87124) 4820. John Satter (zip code: 80305) 4821. Nicolas J S Davies Davies (zip code: 33161-5021) 4822. Patricia Greene (zip code: 03741) 4823. Jeff Pearson (zip code: 57042) 4824. Patty Diana (zip code: 85301-2137) 4825. Jim Petkiewicz (zip code: 95125) 4826. John Peeters (zip code: 60901) 4827. Ken Ward (zip code: 12078) 4828. Peggy Bergen (zip code: 53916) 4829. Peggy Alt (zip code: 12565) 4830. Margaret Rogers Rogers (zip code: 94062-1315) 4831. Peggy Tibbetts (zip code: 81652) 4832. Paul Ghenoju (zip code: 12901) 4833. Carolyn Hawk (zip code: 54229) 4834. Josh pelleg (zip code: 04965) 4835. Penelope Curtis (zip code: 95945) 4836. penelope Gilles (zip code: 70447) 4837. Larry LaPointe (zip code: 92589) 4838. Lillian Winter (zip code: 8818 50Y) 4839. Penny Perkins (zip code: 32003) 4840. penny signalness (zip code: 97330) 4841. Giuseppe Graceffa (zip code: 12432) 4842. Paul Rice (zip code: 14886) 4843. Peter Erb (zip code: 05461) 4844. Anne Bodin (zip code: 95065) Dozens of fossil fuel gas pipelines are not what we need to address our climate crisis. FERC and other agencies must stop this dangerous direction by disallowing gas pipelines that are hazardous to the climate goals we wish to achieve. We must stop poisoning our communities. 4845. Pete Wilson (zip code: 96778-0327) 4846. Sally Abrams (zip code: 94110) 4847. Carla Tevelow Tevelow (zip code: 21044) 4848. Carol Cetrone (zip code: 90004) 4849. Martine Stern (zip code: 10538) 4850. Perry Phillips (zip code: 44240) 4851. Perry Gx (zip code: 92780) "Time 2 Think" Climate Change & Global Warming 1st! Stop Building Pipelines!!! 4852. Perry Harris (zip code: 10918) 4853. Jennifer Perugini (zip code: 90401) 4854. Phyllis Erwin (zip code: 05301) 4855. Tobe Martin (zip code: 89506) 4856. GRACIELA HUTH Huth (zip code: 90045) Let's send a loud message, NO MORE FOSSIL FUELS! We want the government to stop approving these pipe lines through our communities. STOP THEM! Start promoting solar and wind energy! 4857. Judith Peter (zip code: 33948) 4858. David Peterson (zip code: 92116) 4859. Peter Corkey (zip code: 94121) 4860. Peter Sigmann (zip code: 54235) 4861. Peter Cohen (zip code: 10025) 4862. Peter J. Keiser (zip code: 13104-2444) 4863. Peter Altman (zip code: 95616) 4864. Neena Petersen (zip code: 97210) 4865. Kyle Peterson (zip code: 48313) 4866. Paula Fischer (zip code: 55406) 4867. Peter Schultz (zip code: 60516) Just building the pipelines will disrupt the local environment and mess up the lives of people directly in their paths. 4868. Peter Curia (zip code: 85257) 4869. Pamela Gibberman (zip code: 91402) 4870. Pat Duncan (zip code: 87031) 4871. P Pierce (zip code: 04072) 4872. Piotr Grabowski (zip code: 42-200) 4873. Phil Hanson (zip code: 97222) 4874. Per Fagereng (zip code: 97202) 4875. Ekst Swindell (zip code: 30830) 4876. paul Abram (zip code: 93669) 4877. patricia harris (zip code: 13042) 4878. Patricia Harris (zip code: 4217) 4879. Paula Heeren Heeren (zip code: 80021) 4880. Philip Gasper (zip code: 53717) 4881. Philip Hadley (zip code: 5753) 4882. Phil Wagner (zip code: 32169) 4883. Susan Babbitt (zip code: 19107) 4884. Phillip Dooley (zip code: 6084) In order to meet the Paris agreement, we have to stop building any more fossil fuel infrastructure now. 4885. Mitch Cholewa (zip code: 54636) 4886. Philip J. Hyun (zip code: 08820) 4887. Phoebe McLeod (zip code: 29205) 4888. phoebe turner (zip code: 19348) 4889. Don Lowery (zip code: 97101) 4890. Vic DeAngelo (zip code: 94121) 4891. Diann Mistelske (zip code: 43026) 4892. Jon Singleton Singleton (zip code: 10118) 4893. Carole H (zip code: 98368) 4894. Phil Miller (zip code: 64093) 4895. Phyl Newbeck (zip code: 05465) 4896. Phyllis Park (zip code: 45601) 4897. Marilla MacGregor (zip code: 26650) 4898. Meredith Needham (zip code: 43023) 4899. alicia hecht (zip code: 92831) 4900. Candice Lowery (zip code: 10550) 4901. Hilarie Gade (zip code: 05472) 4902. Pam Wilbourn (zip code: workingfam) 4903. Jessica Rondeau (zip code: 81001) Burning fuel for energy is frankly stupid, we have clean technology that won't ruin our fragile planet. It's high time we ended our sordid love affair with fossil fuels. 4904. Pippa Lawson (zip code: 68502) 4905. Anja Kollbach (zip code: 94025)

COMPANIES/ORGANIZATIONS COMMENTS

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4906. Terrie Williams (zip code: 77662) 4907. Michelle Pfenninger (zip code: 15224) 4908. Amy Hansen (zip code: 08802) 4909. Casey Pittman (zip code: 75019) 4910. SCOTT GREEN (zip code: 72855) 4911. Pat Dufau (zip code: 92673) 4912. Penny Hooper (zip code: 28579) This is the morally responsible move for the next generation.... Think of your grand children! Leave it in the Ground. 4913. Pamela Jiranek (zip code: 22936) 4914. Philip Johnson (zip code: 27517) 4915. Phil Young (zip code: 60517) 4916. Patricia Keljik (zip code: 60056) 4917. Frederick C Granlund (zip code: 91601) We need to STOP extracting and burning fossil fuels (including natural gas) in order to save the planet for future generations. The deeply harmful practice of fracking is a good place to start. 4918. Jon Spitz (zip code: 95454) 4919. Anita Morrison (zip code: 97075) 4920. Paul Lapidus (zip code: 95004) 4921. Richard Valencia (zip code: 91105) 4922. Patricia Webb (zip code: 24572) 4923. Patricia Brown (zip code: 92672) 4924. Patricia de Garmo (zip code: 97215) 4925. Pat Guevara (zip code: 95076) 4926. Piotr Sliwka (zip code: 20109) 4927. Pieter Hull (zip code: 87508) 4928. pamela mcdonald (zip code: 92505) It doesn't make sense to build new pipelines. Our country is making an attempt to switch to climate- friendly energy. THERE IS NOTHING CLIMATE-FRIENDLY ABOUT FOSSIL FUELS. To allow new pipelines to be built would be a waste of the money going into the pockets of corporations, and will divert our progress toward clean energy sources. If we used the money these corporations are willing to spend in order to to increase their own profits (at OUR expense), and use it to build our clean energy sources, it would provide not only jobs, but help us move toward a cleaner and safer environment. PLEASE consider the overall impact this would have not only on our environment, but our nation's resolve to improve the health and well-being of our country and it's citizens. 4929. Pattie Meade (zip code: 92672) 4930. Phyllis Robinson (zip code: 99212) leave the oil and gas in the ground! 4931. Sandy Dalcals (zip code: 11377) 4932. Patrick Donaldson (zip code: 97213) 4933. Pete MacGregor (zip code: 19145) If public officials betray the public good and public health, they should go to jail. 4934. Patricia Martin (zip code: 03461) 4935. Patricia Matz (zip code: 60561) 4936. Patricia+Berry Berry (zip code: 60201) 4937. Pat McNabb (zip code: 55112) Please! We must all do our part to save the livability of our planet! 4938. Diana Jung (zip code: 75254) 4939. Patricia Messmer (zip code: 47909) 4940. Michael Payne (zip code: 34613) 4941. Nellie Newman (zip code: 91324) 4942. Patrick Reyna (zip code: TR11 3QG) 4943. Ronn Koester (zip code: 43615) 4944. Stephanie Mory (zip code: 29940) 4945. Nancy Brodersen brodersen (zip code: 91201) 4946. laura dickey (zip code: 07463) 4947. w . (zip code: 60614) 4948. w . (zip code: 60614) 4949. s d (zip code: 60618) 4950. S . (zip code: 60585) 4951. Daphne Bernard (zip code: 11217) 4952. Christian Blaul (zip code: 01159) 4953. Rebecca Pollini (zip code: 75007) 4954. Brenden Polvadore (zip code: 70506) 4955. Katherine Kormanik (zip code: 55427) 4956. Leslie Wilbanks (zip code: 65775) 4957. Paul Vesper (zip code: 94703) 4958. sandra geyer (zip code: 37268) 4959. William Young (zip code: 24503) 4960. Lauren Porosoff (zip code: 10583) 4961. Bryce Powers (zip code: 37763) 4962. Patricia Parker (zip code: 17837) 4963. Pam Patterson (zip code: 33165) 4964. Peter Cook (zip code: 28901) 4965. Paul Petruccelli (zip code: 11727) 4966. Pat Pollard (zip code: 43119) 4967. Prudy Wiolak (zip code: 60137) 4968. John Praprotnik (zip code: 85069) 4969. meg Jones (zip code: tp12jd) 4970. Philip Drumm (zip code: 07503) 4971. PEGGY O'NEIL (zip code: 90807) 4972. Carol Preston (zip code: 74074) 4973. Philip Rampi (zip code: 55105) 4974. Paul Gill (zip code: 91060) how completely sick and stupid is petroleum when there is hemp, solar and wind energy. 4975. Phillip Hurst (zip code: 40004) Amen 4976. Mary Price (zip code: 74020) 4977. Peter Rimbo (zip code: 98038) 4978. Dr. Prisca Gloor (zip code: 90066-5411) 4979. Probyn Gregory (zip code: 91042) 4980. Peggy Roeske (zip code: 55124) 4981. Lisa Anthony (zip code: 30016) 4982. M Royce (zip code: 33435) 4983. Shanna Scott (zip code: 60660) 4984. Pam Rubenstein (zip code: 33611) 4985. Joanna Williams (zip code: 94705) 4986. Kelly McConnell (zip code: 97223) I want clean air and water and I'm damned tired of begging for them. STOP selling us out to the greedy fucking rich! 4987. Nicholas Prychodko (zip code: 11932) 4988. Paul Sansone (zip code: 97117) 4989. Phillip Schaffner (zip code: 23669) We should be investing in renewable energy. 4990. Paul Sering (zip code: 33948) 4991. Pamela Lichtenwalner (zip code: 94970) 4992. Peter Spitzform (zip code: 5452) 4993. Paul Szymanowski (zip code: 43412-0074) 4994. Paul Tabili Tabili (zip code: 53406-4609) 4995. Linda Sparks (zip code: 80123) 4996. Donald Singer (zip code: 80501) 4997. Petra Thombs (zip code: 10595) 4998. Peter Jameson (zip code: 15658) 4999. Paul Turner (zip code: 28740) 5000. peter butterworth (zip code: 94134) 5001. Paul Troyano (zip code: 70119) 5002. Carol Elder (zip code: 88012) 5003. Noni Russell (zip code: 33596)

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont’d)

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5004. **diane olson olson** (zip code: 90403) I cannot imagine that any pipeline is possible that would not endanger communities or our environment, therefore we should say NO to fracking and pipelines to move the product. Spend the money instead on working for green energy production and employment.

5005. **Gregory Smith** (zip code: 41502)

5006. **Joan Paul** (zip code: 93003) When all the tress have been cut down. When all the animals have been hunted. When all the water have been polluted. When all the air is unsafe to breathe, Will we then say. You cannot eat money? Put people first not profits ! This will affect their families & yours too! Not just ours!

5007. **Pura Calo** (zip code: 60640) 5008. **Ron Garcia** (zip code: 33305) 5009. **Paul Vilches** (zip code: 33025) 5010. **Patricia Wakeman** (zip code: 45245) 5011. **Peter Watson** (zip code: 94118) 5012. **Paul Fung** (zip code: 10025)

5013. **Terri Schneider** (zip code: 10989) 5014. **Pamela Martin** (zip code: 55423) 5015. **Qayyum Johnson Johnson** (zip code: 94965) 5016. **Quando Gerst** (zip code: 27610) 5017. **Richard Spadola** (zip code: 33909) 5018. **Qienby Morrow** (zip code: 94611) 5019. **Querido Galdo** (zip code: 94601) 5020. **Audrey Müller** (zip code: 7093)

5021. **Barbara Swyden** (zip code: 87124) 5022. **JOSEPH LITE** (zip code: 45420) 5023. **marla Wyatt** (zip code: 92399) 5024. **Wilmalyn Puryear** (zip code: 21093) 5025. **Robert Rutkowski** (zip code: 66605-2086) 5026. **Robin Powell** (zip code: 10003) 5027. **Rita Vallet** (zip code: 77007-7145) 5028. **Robert R. Waddell** (zip code: 60102)

Stick a fork in the energy extractive industries because they are sooooo DONE!

5029. **Gina Dignan** (zip code: 50021) Our water supply is much more valuable than oil.

5030. **Ray Anderson** (zip code: 92501) 5031. **Rachel Scott** (zip code: 53190) 5032. **Robert Stach, Ph.D.** (zip code: 48439) 5033. **Babette Kling** (zip code: 60652)

5034. **Roberta Young** (zip code: 10603) 5035. **A Bonvouloir** (zip code: 94086) 5036. **Mary Ann Toy** (zip code: 3258) 5037. **Rachael Zur** (zip code: 11205) 5038. **Rachel Scarlata** (zip code: 80814)

5039. **Rachel Wynnberry** (zip code: 34235) We don't need pipelines. We need to develop the clean energy like solar, and wind. The earth is at a critical dipping point. We must help it by without approvals for all proposed pipelines.

5040. **Rachel List** (zip code: 10009)

5041. **Rachel Mandelbaum** (zip code: 20011) 5042. **Rachel Gullett** (zip code: 85718) 5043. **Kyle Kleckner** (zip code: 48072) 5044. **Rae Otter** (zip code: 32934)

5045. **rafael de leon jr de leon jr** (zip code: 95831) 5046. **Rafael DiCristina** (zip code: 30340)

5047. **Rachel Havrelock** (zip code: 60622) Michigan aquifers and tributaries hold the key to the fresh water future and economic revival in the region. We cannot jeopardize this potential with more pipelines.

5048. **Nancy Griffith** (zip code: 95819) Build sustainable energy infrastructure instead.

5049. **Randolph Hogan** (zip code: 06031) 5050. **Tara Thralls** (zip code: 95449) 5051. **Arleen Barber** (zip code: 48239) 5052. **Rainbow Di Benedetto** (zip code: 78750)

5053. **Lin DeMartini** (zip code: 97056) No more dirty pipelines! Our focus needs to be 100% focused on clean energy not only for us, but more importantly for future generations.

5054. **Faye Rye** (zip code: 90505) 5055. **Lorraine turner** (zip code: 26503)

5056. **Mitchell Diamond** (zip code: 94086-6324) and to the plutocracy for which you stand...

5057. **Sonia Lazreg** (zip code: 10029) 5058. **Rajal Cohen** (zip code: 83843) 5059. **Rose Kaiser** (zip code: 46750)

5060. **Rheta Alexander** (zip code: 91405) 5061. **Roger Nehring** (zip code: 57325) 5062. **ralph lovino** (zip code: 05742) 5063. **Ralph Loewenthal** (zip code: 71725) 5064. **Robert Hensman** (zip code: 34224) 5065. **Charlene Kerchevall** (zip code: 92054-4040) 5066. **Christopher Lawrence** (zip code: 99203) 5067. **Randy Harrison** (zip code: 97402)

5068. **Vicky Lockwood** (zip code: 85024) 5069. **Randat Pride** (zip code: 28704) 5070. **Gordon Andrews** (zip code: 48507)

5071. **James R Monroe** (zip code: 94521) 5072. **Russell Manning** (zip code: 92675) 5073. **Rhea Angle** (zip code: 83704)

5074. **Randy Handley** (zip code: 37115) 5075. **Sally Hills** (zip code: 85739)

5076. **Chanda Farley** (zip code: 28716) 5077. **raquel brac** (zip code: 92374) 5078. **J. Steinberg** (zip code: 37068) 5079. **Wendy Raschke** (zip code: 55116) 5080. **Roger Seapy** (zip code: 90720)

5081. **Richard Spotts** (zip code: 84790) 5082. **Linda Morero** (zip code: 85326) 5083. **Jerry Ravnitzky** (zip code: 10541) 5084. **Mikki Chalker** (zip code: 13905) 5085. **Agoya Killeen** (zip code: 95061-8179) 5086. **Ray Hetchka** (zip code: 32034) 5087. **Richard Babula** (zip code: 14167) 5088. **Robert Carpenter** (zip code: 32079) 5089. **Robert DiGiovanni** (zip code: 92940) 5090. **Rose Berkowitz** (zip code: 78759) 5091. **Linda K Lindquist** (zip code: 98177-2359) 5092. **Robert Keim** (zip code: 33513)

5093. **Jane H Beattie** (zip code: 83340) 5094. **Ron Bridges** (zip code: 91737-8923)

5095. **Renee Brinker** (zip code: 63366) Fracking and pipelines for their horrificly dirty products would make a mockery of our signatures on the international agreement to cut back on the production and addition of producing fracking's products.

5096. **Robert Fraser** (zip code: 10512) 5097. **Bronwyn Specht Specht** (zip code: V3H3M4) 5098. **Ryan Bunson** (zip code: 94602) 5099. **Rand Carter** (zip code: 13323) 5100. **Ronald Chacey** (zip code: 81147-2890)

5101. **Mark Canright** (zip code: 08802) 5102. **Ramsay Kieffer** (zip code: 19963) 5103. **Robb Mottl** (zip code: 84103) 5104. **Roberta R Conlan** (zip code: 96734) 5105. **Rene G Castle** (zip code: 94541) 5106. **Ron Taylor** (zip code: 85122)

5107. **Rita Santamaría** (zip code: 55106) 5108. **Ron Jordan** (zip code: 33009) 5109. **robert davidson** (zip code: 60131) 5110. **Robert Davis** (zip code: 66554) 5111. **Relne Durantaye** (zip code: H2V 3V2) 5112. **Rosemary delPino delPino** (zip code: 15005) 5113. **Robert Emery** (zip code: 80218)

5114. **ray derrickson** (zip code: 27604) 5115. **Roseann Divicino** (zip code: 29502) 5116. **Richard Lee** (zip code: 93907) 5117. **Richard D Jones** (zip code: 98107) 5118. **Rhonda Johnson** (zip code: 23009) 5119. **Beth Stanberry** (zip code: 28802) 5120. **Richard Dunn** (zip code: 97211) 5121. **Rebecca Bierbaum** (zip code: 62002)

5122. **Rebecca Casstevens** (zip code: 13905)

5123. **Rebecca Klemme-Ekceir** (zip code: 63119)

5124. **Rebecca Canright** (zip code: 08803)

5125. **rebecca levinson** (zip code: 10003)

5126. **Rebekah Laros** (zip code: 94949)

COMPANIES/ORGANIZATIONS COMMENTS

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R-394

5127. Ed Parks (zip code: 73505-5135) Please don't put out the fire with gasoline, or fracked gas; we're smarter than that (...aren't we?)

5128. Robert Belknap (zip code: 27603) 5129. Ruth White (zip code: 01760) 5130. Richard Grzeskowiak (zip code: 48130) 5131. Debra Banes Banes (zip code: 95834) 5132. Kathleen Galligan (zip code: 08807) 5133. D D REDMAN (zip code: 55109)

5134. Eugene Chadwell (zip code: 68504) 5135. Kim Foster (zip code: 88337)

We have one earth. Quit poisoning it and our people. 5136. Linda Morgan (zip code: 94806) 5137. Redlion York (zip code: 60525) 5138. Gary Reese (zip code: 92673)

5139. Brenda Reese (zip code: 95008) 5140. T DeAngelis (zip code: 19067) 5141. Rees Urban (zip code: 60618)

5142. Reeveyn Aronson (zip code: 94061) 5143. carol Regan (zip code: 66106) 5144. Regina Ferrera (zip code: 60402)

5145. Regina Logue (zip code: 92596) 5146. sa re (zip code: 19087)

5147. Elizabeth Songalla (zip code: 55107) stop building pipelines!

5148. Reisa Gould-Donath (zip code: 12866) 5149. Ruth Kastner (zip code: 12078) 5150. Joan Yates (zip code: 04092) 5151. rell star (zip code: 91763)

5152. Rita Pesini (zip code: 19454) We should be investing in safe, clean, renewable energy sources not the same old oil and gas pipelines that are a disaster to our environment!

5153. Remy Goglio (zip code: 98005)

5154. Remy Gessinger (zip code: 92057) Poison in out back yards, air, land and water, well frankly I would like to see the elites of this world have all the toxic crapola in their areas or backyards, maybe they would give a dam then

5155. Renae McKeon (zip code: 68845)

5156. Richard Ferry (zip code: 9) Please do not build in failure. Help the climate to stabilize and recover. Do not approve these pipelines.

5157. Stéphane RENAULT (zip code: 27110) 5158. Renee Meyer (zip code: 93010) 5159. Pat Hanbury (zip code: 89506)

5160. Lauren Tucker (zip code: 32308) With how dangerous fracking is for the environment, I don't see how improved pipes would help. It seems that the safest course of action would be to stop.

5161. D McInnes (zip code: 39204) 5162. Sylvia Hayes (zip code: 48239) 5163. Russell Se (zip code: 01301) 5164. Resa Blatman (zip code: 02145) 5165. S. H. (zip code: 94960)

5166. Diana Duffy (zip code: 48750)

5167. Loretta Kerns (zip code: 44410)

5168. Dale Biersteker (zip code: 02649)

5169. Reuel Sherwood (zip code: 33319-3866)

5170. Rev. Allan B. Jones (zip code: 95404) Thank you.

5171. Rev. L. Cline (zip code: 11710) 5172. Lisa Telomen (zip code: 60525)

5173. Myrna Tuttle (zip code: 93110) This fight isn't just about communities on the pipeline routes – it's also about all those impacted by fracking, as well as everyone who will be devastated by climate impacts.

5174. James race (zip code: 92211) 5175. Robert Chapman (zip code: 34223) 5176. Rachel Felver (zip code: 21401) 5177. Rita-Ann FitzGerald (zip code: 12936) 5178. Randi Fitch (zip code: 98650)

5179. Roger French (zip code: 60302) 5180. Robert Fritsch (zip code: 04930) 5181. Sibyll Gilbert Gilbert (zip code: 12564) 5182. Robert Gall (zip code: 26003) 5183. Robert Gammon (zip code: 20782-1136) 5184. Veronica Garrett (zip code: 27502) 5185. Rhonda Bradley (zip code: 38535) 5186. Raymond Gibson Gibson (zip code: 33020)

5187. mr-mrs r odom (zip code: 33062) USE COMMON SENSE withhold approvals for all proposed pipelines until it is proven that they are safe

5188. Raleigh Gould (zip code: 80550)

5189. Richard Hendricks (zip code: 14580) Now that we are proudly moving away from fossil fuel energy and making huge cut-backs in oil consumption in the name of climate action, we need to let the whole world know about this so that legal action will result in successfully breaking up energy set-ups like this one. Now let's get enough people involved and legal action taken so that we can finally put a complete stop to this unwanted madness once and for all. Many Americans and the vast majority of the world's population will not stand for this, so let's get the word out that this energy-driven madness will no longer be tolerated if we want to save the whole world from the doomsday effects of climate change that threatens to throw us all into Armageddon.

5190. Rolf Habersang (zip code: 79159) 5191. Roselene Haines (zip code: 38044) 5192. Rex Heeter (zip code: 45449) 5193. Robert Helm (zip code: 97217) 5194. Rhett Lawrence (zip code: 97217) 5195. Roger H. Harrell Harrell (zip code: 90254)

5196. Rhoda Levine (zip code: 10003) 5197. Robert Hotaling (zip code: 12208) 5198. Raymond Howard (zip code: 14456)

5199. Robert Robson (zip code: 48236) 5200. Robert Sanford (zip code: 98607) 5201. Ron Hubert (zip code: 86001) 5202. Richard Theriault (zip code: 33759) 5203. Richard Crozier (zip code: 17082) 5204. Loree M. Rice (zip code: 73034) 5205. Rich Bornfreund (zip code: 33993) 5206. Richard Han (zip code: 48103) 5207. Richard Timm (zip code: 46033) 5208. Richard Warren (zip code: 2338) 5209. Richard McCrone (zip code: 22903) 5210. Richard Sedivy (zip code: 90042) 5211. Richard S. Marten (zip code: 23451) 5212. Richard Schwamb (zip code: 11206) 5213. Richard Brandes (zip code: 91381) 5214. Richard E Cooley (zip code: 87111) 5215. Richard Skinner (zip code: 85705) 5216. Richard Calk (zip code: 74075) 5217. Richard Gray (zip code: 94933) 5218. Richard Hoff (zip code: 95465) 5219. rich camp (zip code: 92311) 5220. Richard Rutherford (zip code: 24401) 5221. peggy richardson (zip code: 80305) 5222. Richard Martini (zip code: 94123) 5223. Richard Chadburn (zip code: 37876) 5224. Richita Anderson (zip code: 10014) 5225. Richard Gray (zip code: 60657-5926) 5226. Rick Anderson (zip code: 60660) 5227. Rick Canning (zip code: 60506) 5228. rich reard (zip code: 05156) 5229. Frederick Jackson (zip code: 92103)

5230. Richard Schulte (zip code: 91941) If we put half the money we have put into oil subsidies over the years we could probably put solar panels on all the houses in America.

5231. Robert Graver (zip code: 68088) 5232. Gary Houston (zip code: 60660) 5233. Risa Kiam (zip code: 33484)

5234. Richard Solomon (zip code: 94611) Please represent the people. Protect their health and safety and the welfare of the environment by NOT approving these pipelines.

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont’d)

R-395

5235. Rita Jaskowitz (zip code: 11215) 5236. Rita Glasscock (zip code: 87506)
We must SAVE our beautiful planet. 5237. Annie McMahon (zip code: 86324) 5238. Liter Spence (zip code: 81321) 5239. Rhode Izaguirre (zip code: 77003-1433) 5240. Russell James (zip code: 28405) 5241. Raymond Arent (zip code: 21146)
5242. Robert Schuessler (zip code: 14150) I live in the East and don't want pipelines anywhere near me. Clean fuel is the answer.
5243. Roberta Marley-Merchant (zip code: 17601) 5244. Robert Marshall (zip code: 94112) 5245. Rodney Jones (zip code: 74743) 5246. Robin Wilson (zip code: 60304)
5247. Rodger Sillars (zip code: 80021) 5248. Rosalind Kenworthy (zip code: 14850-9521) 5249. Kevin O'Kelly Okelly (zip code: 02143) 5250. Robin Kory (zip code: 97007) 5251. Robin Kozloff (zip code: 95616) 5252. R.K. Piper (zip code: 06114) 5253. Rick Krolak (zip code: 55347) 5254. Rachel Krucoff (zip code: 60615) 5255. Rick Moore (zip code: 70117) 5256. Ralph Bobroski (zip code: 7016) 5257. Robert Lesko (zip code: 10009) 5258. Ruth Boice (zip code: 08088) 5259. Roxann Carmean Floyd Carmean Floyd (zip code: 85541) 5260. Roger Horne (zip code: 24230)
5261. Robert Hooper (zip code: 64083) 5262. Robert Johnson (zip code: 90245) 5263. Robert Andrews (zip code: 72120) 5264. Richard Abel (zip code: 43017)
5265. Rome Marinelli (zip code: 44663) Play the tape forward. Please think about the impact this can have years down the line. Please stay on the people's side and not the side of the oil and gas/fossil fuel industry. I know they're intimidating and they do have a lot of power in this country but that can all change as long as we have people standing up against them. Many Americans want and need climate change action. This can all start with you. Make your mark. Start your legacy.
Sincerely, Rome Marinelli
5266. Rose Ash (zip code: 14202) 5267. Ross McCluney (zip code: 32920) 5268. Robert Foley (zip code: 32765) 5269. Robert Johnson (zip code: 94951) 5270. Rosemary Scully (zip code: 32258) 5271. Linea Anthony (zip code: 53403-1767) 5272. Ruthie moccia (zip code: 65203) 5273. Richard Moller (zip code: 98087)
5274. Paula Miller (zip code: 03048) 5275. Richard Zoah-Henderson (zip code: 95503) 5276. Randall Nerwick (zip code: 97222) 5277. Chris Gomez (zip code: 91401) 5278. Russell Novkov (zip code: 53705) 5279. Ron Chelland (zip code: 49444) 5280. Jeffrey Starr (zip code: 53222) 5281. Robert Showalter (zip code: 17033) 5282. Robert Greene Greene (zip code: 32804) 5283. Robert Rivera (zip code: 10025-6776) 5284. Robbie White (zip code: 20902) 5285. Robert Oberdorf (zip code: 33322) 5286. Robert Petersen (zip code: 02138-5755) 5287. Robert Swett (zip code: 28711) 5288. robert spaccarotelli (zip code: 91711) 5289. Roberta LaFrance (zip code: 94579)
5290. Roberta Stuemke (zip code: 54904) Haven't we had enough problems with fracking and pipelines? If we are to reduce the use of fossil fuels, and protect both our environment and our climate, isn't it time to take greater care when approving pipelines? As things stand now, these projects simply are NOT safe!
5291. Roberta Cade (zip code: 97304) 5292. Roberta E. Newman (zip code: 94941) 5293. Roberta Fox (zip code: 32812) 5294. Bob Kinsey (zip code: 60906) Lets end the US record of broken agreements when it suits our short term desire to confiscate natural resources to increase the wealth of a few. 5295. Robert Anderson (zip code: 60605) 5296. Robert Edwards (zip code: 98033) 5297. Robert Hill (zip code: 53562)
5298. Robert Huggins (zip code: 03820) 5299. Robert Branson (zip code: 78041) 5300. Robert O'Gara (zip code: 02184) 5301. bob nace (zip code: 94523)
5302. Roberto Palomino (zip code: V6Z 3G2) 5303. Robert Oelman (zip code: 33483) 5304. Robert Posch (zip code: 33305) 5305. Cindy Roberts (zip code: 80524)
5306. Robert Thompson (zip code: 98022) These energy sources are dead meat. Past due time to move on. I do not want my grand children turned into "french fries!"
5307. Robert Wohlberg (zip code: 55423) 5308. Robert Fenstermaker (zip code: 18444) 5309. Robin Salter (zip code: 44074) 5310. Robin Boynton (zip code: 98014) 5311. William Anderson (zip code: 19121) 5312. Robin Scott (zip code: 01970)
5313. John Robinson (zip code: 06084) 5314. Robert Krueger (zip code: 60626) 5315. Rob Sweeney (zip code: 91505) 5316. Robert McKinnie (zip code: 84116) 5317. Nathan Kraft (zip code: 20817) 5318. Robert Reed (zip code: 92651) 5319. Bob Thomas Thomas (zip code: 97457) 5320. Carol Johnson (zip code: 60542-1776)
5321. Manny Garcia (zip code: 80206) Stop fucking poisoning us for your fucking profits!!!! Executives, start tracking in your neighborhoods and backyards!!!!
5322. Dave Roehm (zip code: 98640-3455) 5323. Roel Cantú (zip code: 78572) 5324. rob fursich (zip code: 10530) 5325. roger Saunders (zip code: 03049) 5326. Roger Eddy (zip code: 93940)
5327. Roger Runnoe (zip code: 94611)
5328. Roger Kirk (zip code: 59771)
5329. Roger Hayes (zip code: 48239)
5330. Roger Desy (zip code: 15147) Leaving gas in the ground's better than burying the planet.
5331. Judy Rogers Rogers (zip code: 96719) 5332. Roger Szeszalski (zip code: 48642)
5333. Roger Straw (zip code: 94510) Thank you, Matt, for bringing this important issue to the FERC, meeting in my home state of Michigan. I live in California now. No more pipelines, and no more oil trains!
5334. Jeffrey & Betsy White (zip code: 97116) 5335. Roseanne Rohrer (zip code: 99208) 5336. raymie roland (zip code: 94952) 5337. Mitchell Greene (zip code: 5404)
5338. Romeo Tango (zip code: 46204) 5339. p romero (zip code: 11735) 5340. Matt Edwards (zip code: 01752) 5341. Ron Matthews (zip code: 01752) 5342. Ron Katz (zip code: 48070-1406) 5343. Rona Armillas (zip code: 11238) 5344. Ron Carlson (zip code: 08008) 5345. Ron Frank (zip code: 02138) 5346. Caleb Snow (zip code: 34450) 5347. Ronit Corry (zip code: 53101) 5348. Ronlyn Schwartz (zip code: 98260) 5349. Ronna Bejarano (zip code: 37919) 5350. Ron Rattner (zip code: 94109) 5351. Ronald Warren (zip code: 91206)
5352. Rosalind Bresnahan Bresnahan (zip code: 92405) These pipelines are a threat to the environment and public health. And don't replace them with oil trains!
5353. Rosalynn Dzikonksi (zip code: 53235) 5354. Rose Greco (zip code: 60189)

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont’d)

R-396

5355. Rosemary Prescimone (zip code: 21234) I think enough is enough! We need more clean energy and costs that people can afford rather than destroying our earth any more.

5356. Mary Phillips-Burke (zip code: 12498) The fact is that NO pipeline is risk-free, nor is there any known way to make them risk-free, period! The oil industries know this. The FERC knows this. No further increase in accessing fossil fuels is acceptable. Only when the FERC forces this knowledge upon the oil/coal industries can this nation, or any other nation, make the progress for renewable energy sources a goal that can be achieved.

5357. Rosario Cosimo (zip code: 81100)

5358. Catherine Ross (zip code: 98026)

5359. Ross Aird (zip code: 48327)

5360. Barbara Rothkrug (zip code: 94925)

5361. Daniel Rothman (zip code: 08225)

5362. Nancy L. Lutz (zip code: 60466-2054)

5363. Dianne Ensign (zip code: 97219) Protecting the environment is my highest priority issue.

5364. Marguerite Rouleau (zip code: 48367-2262) It is the moral and humane thing to do!!

5365. Troy Christian (zip code: 72927)

5366. Ronnie Rouse Rouse (zip code: 67068)

5367. Robert Weingart (zip code: 43065)

5368. Robert Owen (zip code: 53562) Stop facilitating fracking, FERC!

5369. Rowland Spear (zip code: 9025396194) 5370. Rowland Shepard (zip code: 74006)

5371. R Ryce-Paul (zip code: 10002) 5372. Roxy Gray (zip code: 2021) 5373. C. Argall (zip code: 92260) 5374. Roy Treadway (zip code: 98503) 5375. Roy England (zip code: 33713) 5376. Roy Hess (zip code: 86326) 5377. Roy Hyder (zip code: 85023) 5378. Roy Pales (zip code: 95472) 5379. Rose Martin (zip code: 60429-1309) 5380. RJ Padiernos (zip code: 92780) 5381. Rich Panter (zip code: 94923)

5382. Robert Paquette (zip code: 91107) 5383. R. Peter Burnham (zip code: 01643) 5384. Robert Weissburg (zip code: 94002) 5385. Roy Pearson (zip code: 87016) 5386. Pamela Davidson (zip code: 54935) 5387. Kandace Loewen (zip code: 98103) 5388. Rosita Aranita (zip code: 96819-1413) 5389. Robert Ridgard (zip code: 34474) 5390. Rolf Friis (zip code: 40218)

5391. Robert Schilling (zip code: 60018)

5392. Richard Rydelek (zip code: 20720) 5393. Ruth Schmidt (zip code: 15068) 5394. Raymond Santiago Jr. (zip code: 11369) 5395. Rondi Saslow (zip code: 94705)

5396. ray savarda (zip code: 27587) 5397. Rebecca Berlant (zip code: 11231)

5398. Richard Segura (zip code: 78129) I'm against all fossil fuel and nuclear energy sources. We need to move toward clean, renewable energy such as solar, wind and geothermal. There is no time to waste due to greed by the oil and gas industry. There are more employment opportunities in renewable energy than fossil fuels. The oil and gas industry is infringing on my rights as an American, life, liberty and pursuit of happiness. This is also endangering my children and their rights.

5399. Ruth Sheets (zip code: 19015) WE DON'T NEED THOSE GAS PIPELINES!!!! Do you really want the end of our planet as we know it? Do you really want the death and destruction that wil come following the floods, droughts, storms, etc. that will be covering our planet? I hope you care enough to answer "no" to all of the above. We don't need to make the gas/petroleum industry richer. We already know they would answer "yes" to the above questions. Say NO NO NO to new pipelines. R.Sheets

5400. Russell Skinner (zip code: 54136) 5401. Rachel Smolker (zip code: 05461) 5402. Robert Shippee (zip code: 23233)

5403. Rick Sparks (zip code: 91602) 5404. Rick Stack (zip code: 20910)

5405. Lynn Stapes (zip code: 97431) We must work together to save the planet. It is not disposable and must be saved for future generations. Our current actions of indiscriminate polluting will forever change our planet. It is time to stop undermining the efforts to switch to alternative, clean fuel.

5406. Lawrence East (zip code: 28540)

5407. Katherine Schock (zip code: 82901) Can you not see that we are destroying whatever chance we may have left to save the planet we live on? Enough is enough! 5408. Russell Symonds (zip code: 92627) 5409. Jeanette Traudt (zip code: 80134)

5410. David Stanley (zip code: 61822-7704) We call on the government to withhold approvals for all proposed pipelines until it is proven that they are safe for the climate and for the communities they would pass through.

5411. George Erecg (zip code: 15065) 5412. Russ Bannon (zip code: 92234) 5413. Carole Russelle (zip code: 97229) 5414. Russell Schachterle (zip code: 80231) 5415. Russell Kelhofer (zip code: 54467) 5416. Ruth Helfeld (zip code: 02026)

5417. Ruth Briggs (zip code: 48183) 5418. Ruth Clifford (zip code: 95126-4135) 5419. ruth griffith (zip code: 44004) 5420. Ruth Kay Souder (zip code: 18976) 5421. Ruth Kram (zip code: 07052) 5422. Ruth Mendes (zip code: 10576) 5423. Ruth Miller (zip code: 27516) 5424. Ruth Miller (zip code: 27516) 5425. Ruth Reischman (zip code: 66048) 5426. Rupesh Vaswani (zip code: 91745)

5427. Riley Canada II (zip code: 30066) 5428. Robert Veronelli (zip code: 01354)

Stop all pipelines!

5429. Roxanne Warren (zip code: 10025) Fracking is NOT a clean source of energy !

5430. Russ Wagner (zip code: 60134) 5431. Richard O'Dell (zip code: 32937) 5432. Robin Weaver (zip code: 60103) 5433. Richard Farrell (zip code: 10471) 5434. Patricia Williams (zip code: 14701) 5435. Ryan Witalison (zip code: 54212) 5436. Rita Sloan (zip code: 89511)

5437. Wyman Whipple (zip code: 61428) 5438. ryan Christopher (zip code: 85260) 5439. Ryan Davis (zip code: 91502) 5440. Ryan Sabol (zip code: 55425) 5441. Katherine Rykowski (zip code: 92240) 5442. Rich Yurman (zip code: 94618)

5443. Susan Oakie (zip code: 85020) 5444. Simone Ossipov (zip code: 85283) 5445. Suzanne Birch (zip code: 55021) 5446. Steven Ott (zip code: 46201)

5447. Suzanne Geraci (zip code: 97402)

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont’d)

R-397

5448. **Sandra Gross** (zip code: 40516) We need to protect our Nation against abrogators that destroy our Nations Lands, Waters, Air and Sea's!
5449. **Susan Kozinski** (zip code: 53235)
5450. **Sean Bishop** (zip code: 11725) Our climate is a run-away train, headed towards disaster. Greenlighting projects like this only take us further down the path toward destruction.
5451. **Sarah Murdoch** (zip code: 90272)
5452. **Sadie Sullivan-Greiner** (zip code: 92020) The status quo of allowing fossil fuel companies to damage any- and every-thing in their paths must stop. AT MINIMUM: Fossil fuel companies MUST be responsible for the full cost of remediation and restoration of any project they plan.
5453. **Steve Wolfe** (zip code: 34285)
5454. **Sabine Prather** (zip code: 92021)
5455. **susan sachs** (zip code: 02879)
5456. **Judy Sachter** (zip code: 90025)
5457. **mark sackoor sackoor** (zip code: 32724)
5458. **Linda Bescript** (zip code: 85747)
5459. **patricia barnes** (zip code: 85710)
5460. **Sam Dratch** (zip code: 33401)
5461. **Daniel Safer** (zip code: 19104)
5462. **Sherrill Futrell futrell** (zip code: 95618) Why do we have to beg you to do your job? PROTECT US.
5463. **James Donahue** (zip code: 47282)
5464. **Sage Johnson** (zip code: 94133) NO MORE PIRLINES. NO MORE FRACKING. WATER POLLUTION = 100% KILLING FLORA FAUNA. OCEAN CRITTERS. HUMANS. ENVIRONMENT SUFFERINGS
5465. **Nancy Peck** (zip code: 80524)
5466. **sagen smith** (zip code: 97520)
5467. **Susan Harris** (zip code: 89131)
5468. **Bruce Athey** (zip code: 33706)
5469. **sarah jaeschke** (zip code: 96793)
5470. **Steve Kowal** (zip code: 80027)
5471. **Sally Dries** (zip code: 17801)
5472. **susy Hendrix** (zip code: 38107)
5473. **Sally Yost** (zip code: 21212)
5474. **Sally Small** (zip code: 46219)
5475. **sally jacques** (zip code: 78745)
5476. **Sally Bookwalter** (zip code: 46260) It's foolhardy to turn our heads away from the negative effects of fracking and wish-think our way into believing everything will be all right and there is little danger. The evidence of the negative effects is there for all to see. We must simply be willing to open our eyes and look for positive influences instead. Fracking is not the answer. It is the anti-answer.
5477. **Salme Armijo Armijo** (zip code: 89004)
5478. **Joy Mamoyac** (zip code: 97330)
5479. **Mark Ondrejicka** (zip code: 32653) Get over yourselves, we all must be able to live healthy lives, so don't pollute our natural resources. Without them our lives become more haphazard.
5480. **Barbara Burgess** (zip code: 94559-4441)
5481. **Kathy Oppenhuizen** (zip code: 49460)
5482. **Sam Miller** (zip code: 45220)
5483. **Samantha Turetsky** (zip code: 32176)
5484. **Salvatore Privitera** (zip code: 14626)
5485. **Samuel Wong** (zip code: 91792)
5486. **Michael C. Ford and Richard B. Marks** (zip code: 95076)
5487. **Samuel Newman** (zip code: 21044)
5488. **Sanders Schelber** (zip code: 33904) We have long passed the point where all our efforts and dollars need to go to safe and clean energy. Wake up !!! Why do we keep investing in old toxic buggy whips?
5489. **Anju Sandhu** (zip code: 92014)
5490. **Sandra Stratton Gonzalez** (zip code: 11209)
5491. **Sandra Holtzmuller** (zip code: 45459)
5492. **Rochelle Foran** (zip code: 47918)
5493. **Sandra Cope** (zip code: 92612)
5494. **Sandra Kissam Kissam** (zip code: 12550)
5495. **Sandra Perkins** (zip code: 98125)
5496. **Sandra Garber** (zip code: 94952)
5497. **Sandra Dieterich-Hughes** (zip code: 89104)
5498. **Sandra Hiser** (zip code: 94551)
5499. **Sandra Wagner** (zip code: 43506)
5500. **Sandra Blumenfeld** (zip code: 21093)
5501. **Gilmer Borbo** (zip code: 96789)
5502. **Ralph Lopez** (zip code: 90012-5017)
5503. **Sara Fisch** (zip code: 85260)
5504. **Sara Fisch** (zip code: 85260)
5505. **Sara Abramson** (zip code: 21136)
5506. **Sarah Adrian** (zip code: 48076)
5507. **Sarah Hafer** (zip code: 98684)
5508. **Sara Hopewell** (zip code: 64114)
5509. **Sari Steuber** (zip code: 19064)
5510. **Sarie Bryson** (zip code: 91361)
5511. **Sarina Amato** (zip code: 84123)
5512. **Shirley Rels** (zip code: 34982)
5513. **Sasha Gillis** (zip code: 35741)
5514. **Brenda Psaras** (zip code: 11940)
5515. **Donna Turiano** (zip code: 33406)
5516. **Doro Reeves** (zip code: 97420) We need more fossil fuel facilities and operations like a dog needs more fleas. The "Fossil Fuel Era" has come and gone, and consequently, what we are paying at the pump is the least of it. So please... NO MORE PIPELINES and NO MORE EMINENT DOMAIN!
5517. **Anaounda Elijah** (zip code: 93401)
5518. **Sharon Torrisi** (zip code: 90254)
5519. **Janet Kraiosky** (zip code: 44452)
5520. **Bill Both** (zip code: 34788)
5521. **Serge Lubomudrov** (zip code: 60613)
5522. **Saundra Crowell** (zip code: 11787) Give our children a lifelong break !!!
5523. **Susan Desisto Desisto** (zip code: 80016)
5524. **Savannah Hawkins Hawkins** (zip code: 60614)
5525. **Steve S** (zip code: 85741)
5526. **Tamara Saarinen** (zip code: 98335)
5527. **Richard Saxon** (zip code: 78133)
5528. **Sylvia Barnard Barnard** (zip code: 12218)
5529. **Sara Bassett** (zip code: 48158) Not to mention all the risks of these pipelines leaking or bursting open like has happened, e.g. near Kalamazoo, MI. And what about the massive change in earthquakes in Oklahoma that has a lot of fracking in it?
5530. **Shirley Bayless** (zip code: 28345)
5531. **Susan Chamish** (zip code: 33467)
5532. **Sue Bradley** (zip code: 60515)
5533. **Steven Belfield** (zip code: 14120)
5534. **Steven Berkson** (zip code: 97303-1999)
5535. **Sharon Bills** (zip code: 91406)
5536. **Scott Bishop** (zip code: 98502)
5537. **Sharon Bailey** (zip code: 75081)
5538. **Aleda Richardson** (zip code: 50131)
5539. **Steven Carpenter** (zip code: 48183)
5540. **Stephen Carrillo** (zip code: 94706)
5541. **Brian Wilson** (zip code: 95123)
5542. **Kathleen Eaton** (zip code: 19709)
5543. **Stephanie C. Fox** (zip code: 06002)
5544. **Suzanne Challinor** (zip code: 80238)
5545. **js** (zip code: 18104) European countries have already proven the efficiency of clean energy. The USA, of all places, is not working hard to get clean energy, even though the people ask for it. It is no longer just ideas....they WORK! We desperately

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont’d)

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need clean energy, too, saving our land, air, water, and our people,...and our food! We need clean energy NOW! No fracking, no pipelines.

5546. **David Scheer** (zip code: 98225-8280) We DON'T need any more oil pipelines in the country! ESPECIALLY of "fracked" gas and oil. What is more important---making money, money, money off of gas, oil, and "fracked" gas and oil...or saving the Planet and the air we breathe?! The latter, OBVIOUSLY!

5547. **Kathy Billicke Billicke** (zip code: 90069)

5548. **Bob Schmetzer** (zip code: 15081) Lost real estate in never found again. To take one persons private property for another's benefit is stealing. Property rights are being ignored.

5549. **Sherry Schnebel** (zip code: 36372)

5550. **Bill Chockla** (zip code: 80517) fracking is a bad idea period! before it became "popular" the ceo of an energy company said "no fracking in my neighborhood". If it's unsafe for the ceo and his family, it's unsafe for us all!

5551. **Lorenz Steininger** (zip code: 22554) 5552. **Jullann Rule** (zip code: 56310)

5553. **gretchen schulz** (zip code: 14612) Stop building pipelines. Put your money into green and renewable energies.

5554. **David Plath** (zip code: 97367) 5555. **Marie Rourke** (zip code: 68134) 5556. **Scott Coahran** (zip code: 93635) 5557. **timmlie smith** (zip code: 16512) 5558. **Susan Cornwell** (zip code: 81301)

5559. **James Smith** (zip code: 95076) We must stop fracking and oil trains & pipelines that endanger our land, our waters and our health. Invest instead in renewable energy.

5560. **Stephanie Costa** (zip code: 85711) 5561. **Scott Logan** (zip code: 33131) 5562. **Scott Barlow** (zip code: 94087) 5563. **Scott Gibson** (zip code: 25177) 5564. **Scott Dubose** (zip code: 77062) 5565. **s logan** (zip code: 33131)

5566. **Scott Jennings** (zip code: 70118) 5567. **Scott Sederstrom** (zip code: 60613) 5568. **Scott Woodard** (zip code: 49461)

5569. **scott chapman** (zip code: 93406) 5570. **J. David Scott** (zip code: 97424) 5571. **O. Bisogno Scotti** (zip code: 90007)

5572. **Scott Pace** (zip code: 80550)

5573. **David Scott** (zip code: 81601) 5574. **Sally Courtright** (zip code: 12211)

Keep it all in the ground! 5575. **Sterling & Louise Proffitt** (zip code: 22947) 5576. **Summer Crabtrees** (zip code: 80205) 5577. **Judy Seriptunas** (zip code: 17202) 5578. **Stephen Smith** (zip code: 18018)

5579. **Stephen Reid** (zip code: 60115-8204) 5580. **Deann Plehl** (zip code: 54913) 5581. **Sylvia Duncan** (zip code: 75075)

5582. **Stephen Dutschke** (zip code: 40207)

5583. **Ronald Clayton** (zip code: 27203) Don't wait until it is too late, or the planet will be doomed! Think about your children, grandchildren and future generations. What kind of world do you want to have to endure?

5584. **Jawara Pittman Pittman** (zip code: 30309) 5585. **Clayton Jones** (zip code: 98168) 5586. **Kristina Cotten** (zip code: 23464) 5587. **Donny Seals** (zip code: 47130)

5588. **Christina Babst** (zip code: 90069) 5589. **Sean Horner** (zip code: 98499) 5590. **Sean Craft** (zip code: 23220) 5591. **Sean G** (zip code: 07060)

5592. **Sean Robison Robison** (zip code: 75056) 5593. **Christine Roberts** (zip code: 09000)

5594. **Lenora Seaton** (zip code: 20710-1953) Do the right thing by the environment, because she will retaliate on us, for all of man's destruction. Like I say "Man's mind of modern technology is going to kill all of us.

5595. **sebastian rodriguez** (zip code: 07666) 5596. **NS Khalsa** (zip code: 87552) 5597. **Holly McDuffie** (zip code: 91606)

5598. **Sef Magrath** (zip code: 99202)

5599. **Suzanne Saunders** (zip code: 33702) 5600. **Fredrick Seil** (zip code: 94708) 5601. **Brent Mitchell Mitchell** (zip code: 92069) 5602. **Nita Sembrowich** (zip code: 02139) 5603. **Aaron Senegal Senegal** (zip code: 94804) 5604. **John Bacon** (zip code: 6108)

5605. **Jennifer Cunningham** (zip code: 60506)

5606. **Sarah Peacock** (zip code: 14609)

5607. **Serena Wittkopp** (zip code: 97060)

5608. **Serena Moench** (zip code: 80906) Please keep it in the ground.

5609. **Maria Lambert** (zip code: 02050) 5610. **Seth Snapp** (zip code: 98225-3316) 5611. **Barry Delst** (zip code: 17201) 5612. **Scott Krauser** (zip code: 01850) 5613. **Michele Meyer** (zip code: 94590) 5614. **Sandra Folzer** (zip code: 19118) 5615. **Scott Garrett** (zip code: 1830) 5616. **Susan Downhower** (zip code: 43221) 5617. **Sandy Grisko** (zip code: 60181) 5618. **sandra s** (zip code: 14850)

5619. **Robert Beverly Beverly** (zip code: 77631)

5620. **Sandy Wraight** (zip code: 14850) 5621. **Steve Gyetko** (zip code: 10605) 5622. **Shannon Healey** (zip code: 94070)

5623. **Hodge Villarre** (zip code: 75501) 5624. **sha daves** (zip code: 96001) 5625. **Lauren Fenenbock** (zip code: 79902)

5626. **Shawn Hall** (zip code: 70117)

5627. **Sharon Barone** (zip code: 85255) 5628. **shannon Wenger** (zip code: 47402) 5629. **Shannon Whalen** (zip code: 48640)

5630. **Sharon Owen** (zip code: 19380) Here in Chester County Pennsylvania they MARCELLUS SHALE Natural Gas - Sunoco are putting pipelines under schools sports fields, right up to people front doors and in High density residential area! You have no choice they basically come in tell you this is how it's going to work. If you don't like it we take your property or you take this below market value price. Good luck in selling your home in th future after you worked hard to save for your retirement. So they can ship their products overseas for a profit. Meanwhile they are ruining the Earth,Air,Humans Lives and Our Children's Future!!

5631. **Sharon Ray** (zip code: 81149) 5632. **William Sharfman** (zip code: 10024) 5633. **Sharon Hoffman** (zip code: 15237)

5634. **Sharon Adena** (zip code: 95062) 5635. **Sharon Rich** (zip code: 32119) 5636. **Sharon Barnes** (zip code: 91436) 5637. **Sharon Callahan** (zip code: 08512) 5638. **Sharon Rose** (zip code: 95945)

5639. **Sharon Shelby** (zip code: 14482) 5640. **Shirley Harris** (zip code: 95490) 5641. **Sharron Coontz** (zip code: 98502)

5642. **Sharron Stewart** (zip code: 77566) 5643. **Susan Hartford** (zip code: 97031) 5644. **Sauna Sparlin** (zip code: 67235)

5645. **Justin Shaw** (zip code: 13820) 5646. **Shawn johnson** (zip code: 92024) 5647. **Shay Chan Hodges** (zip code: 96708)

5648. **Stan Benton** (zip code: 78073) It is long past time to "leave it in the ground", stop building pipelines, and hopefully, ban fracking. But we realize that our sellout politicians won't fight their fossil fuel owners to do that.

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont’d)

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5649. Shearie Furnish (zip code: 72223) 5650. Steve Sheehy (zip code: 97603) 5651. Sheila Tran (zip code: 51346) 5652. Sheila Conry (zip code: 15024) 5653. Sheila Brown (zip code: 98070) 5654. Stephen Heinzelman (zip code: 14534) 5655. Helen Jones (zip code: 97520)
5656. Shelby Elliott (zip code: 33604) 5657. Jeffrey Shelby (zip code: 94131)
5658. Mr. Shelley Dahlgren (zip code: 98029) Stop building new pipelines for oil products. Start digging up the old pipelines that need maintenance. SDD
5659. Shelley Simcox (zip code: 98312-9614) 5660. Shelley Wehberg (zip code: 77064) 5661. Steve Shepard (zip code: 39564) 5662. Michael Sherber (zip code: 06001) 5663. Sheri Minix (zip code: 91916)
5664. Sheri Henry (zip code: 43066) 5665. Sheri Ambrose (zip code: 97367) 5666. Sheri Bresson (zip code: 06801) 5667. Sheri Rollison (zip code: 94945) 5668. Shannon Jacobs (zip code: 08317) 5669. Sherry Monie (zip code: 97089) 5670. Edie Bruce (zip code: 94530) 5671. Lisa MacMillan (zip code: 34715) 5672. Shirley McCarthy (zip code: 06405) 5673. Shirley Schue (zip code: 13320) 5674. Meghan Behm (zip code: 96143) 5675. Justin Laubach (zip code: 95401) 5676. Judith Moore (zip code: 95602) 5677. Virginia Mattson (zip code: 45217) 5678. L. Mateas (zip code: 34229) 5679. Michael Shores (zip code: 85281)
5680. Jared Long (zip code: 80203)
5681. Darren Showers (zip code: 14214)
5682. Shirley Wallack (zip code: 95403)
5683. Sumner Pelrce (zip code: 33309)
5684. Sharon Paldn (zip code: 95454)
5685. Pamela Shuel-Sargent (zip code: 03461) Please stop okaying Pipelines. They no longer make sense for America.
5686. Stephen Hunt (zip code: 35242) 5687. William Weaver (zip code: 95648) 5688. Sidney Bailey (zip code: 82201)
5689. sidney berman (zip code: 7052) 5690. s s (zip code: 95684)
5691. Silvana Borrelli (zip code: 19004) 5692. Sil Reynolds (zip code: 10960) 5693. APRIL Burchardt (zip code: 95963) 5694. Christine Sepulveda Sepulveda (zip code: 92802) 5695. Simon Harvey (zip code: 11010)
5696. Carl Pflus (zip code: 07735-1329) 5697. Jeanne Schlatter (zip code: 43812) 5698. Shaun Levin (zip code: 94065)
5699. Ethel Dumas (zip code: 33543-6932) 5700. Joan Dickerson (zip code: 87307)
5701. Virginia Collins (zip code: 94577) NO MORE!!!
5702. Shelton Jenkins (zip code: 28562) 5703. Stephen Bellomo (zip code: 14609) 5704. Stephen Girard (zip code: 55401) 5705. Susan Lundberg (zip code: 92234) 5706. Sister James Marie Gross (zip code: 52001) 5707. Sjoerd Dejong (zip code: 10034)
5708. Andrea Jones (zip code: 60506) 5709. Sandra Porter (zip code: 13224) 5710. SJ Stratford (zip code: 10031)
5711. Sandy Toland (zip code: 80914) All the earth's ecosystems are in danger of collapse from human activity. What we do to the earth, we do to ourselves. A stable climate, clean air, land, and air are real wealth: an economy based on the destruction of our earth will destroy our wealth and be the cause of our demise. We need to convert to renewable energy ASAP, instead of building more fossil fuel infrastructure.
5712. Philip Ratcliff (zip code: 97302) 5713. Sharon Baker (zip code: 80133) 5714. Suzanne Bremmer (zip code: 13053)
5715. Taria Walton Walton (zip code: 98506)
5716. JAKE HODIE (zip code: 81611) Global warming is real. And so we must do something NOW to help protect the Earth. We must be proactive as too much time has already passed and the threat is growing by the day. The animal kingdom is already suffering and what hurts them will also hurt us. The animal kingdom is a fragile thing, and we cannot and must not let global warming do any more damage to them. Our air is already suffering. The environment is already suffering. The waters are already suffering. Haven't we suffered enough?! CLEAN energy is the cure!!!
5717. Stephen Mineck (zip code: 52349) put this money into solar, instead
5718. John Skillman (zip code: 92397) 5719. Scott Robins (zip code: 43609) 5720. Dr. William 'Skip' Dykoski (zip code: 55112-2662) 5721. Sandra Watts Kennedy (zip code: 32615) 5722. Stephanie McFadden (zip code: 44070) 5723. Sharon Richey (zip code: 76133)
5724. Sherry Svec (zip code: 10940) Allowing the building of new pipelines is harmful in so many respects. The damage to our environment, the reliance on fossil fuels that I learned when I was in 1st grade would run out in 30 years - now I am 63. We need a safe climate to live in and to leave to our children and grandchildren.
5725. Schuyler Judd (zip code: 83429) 5726. Margaret Crawford (zip code: 62281) 5727. Sharon Laabs (zip code: 92037-2903) 5728. Stephen La Serra (zip code: 02180) 5729. Dana Slawson (zip code: 90019) 5730. Sara Booth (zip code: 36526) 5731. Susan Coffi (zip code: 95137) 5732. Dave Renaud (zip code: 21703) 5733. Sharon Narushoff (zip code: 17331) 5734. Scott Letendre (zip code: 01085-4056) 5735. James Laliberte (zip code: 33782) 5736. Sarah Lincoln (zip code: 05473) 5737. Steven Kostis Kostis (zip code: 7059) 5738. Susan Lanes (zip code: 60051) 5739. Sherry Lewis (zip code: 87594) 5740. Sharon Marquis (zip code: 06279) 5741. Tom Sloan Sloan (zip code: 12986) 5742. Steve Roth (zip code: 95409)
5743. Sandra Shoemaker (zip code: 45206) No More Deadly Gas Pipelines
5744. Sandra Lucas (zip code: 88061) 5745. Samuel L. Vance (zip code: 35801-1613)
Don't give in to the big petroleum companies! Keep it in the ground where it belongs! 5746. Skip Lyford (zip code: 46168) 5747. Smara Patsaros Voglesong (zip code: 8055) 5748. Suzanne Maresca (zip code: 07849)
5749. Sandra Cobb (zip code: 44022) 5750. Stephen Diamond (zip code: 33134) 5751. Susan Diaz (zip code: 87107) 5752. S.M. Dixon (zip code: 85283) 5753. Steve Garrett (zip code: 97411) 5754. Shirley Andrews (zip code: 37923) 5755. George Smith (zip code: 95003) 5756. Lynn Hill (zip code: 80545)
5757. Lloyd Smith (zip code: 61235)
5758. Susan LoFurno (zip code: 14580)
5759. Simone Pistas (zip code: 95460)
5760. Stephen M. Reinfranc (zip code: 60202-3506)
5761. Donna Hayes (zip code: 61064)
5762. Nancy Willis Willis (zip code: 66749)

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont’d)

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5763. Susan Van Wagoner *[zip code: 34482]*
5764. Rick Snyder *[zip code: 14437]*
5765. James Soares *[zip code: 98247]*
5766. Samantha Siler *[zip code: 45249]*
5767. Suzanne Tishkoff *[zip code: 44122]*
5768. An Sokolowska *[zip code: 02238]*
5769. Jonathan Hill *[zip code: 95959]*
5770. Barbara Hearnly *[zip code: 92105]*
5771. aurelia holtman *[zip code: 76087]*
5772. Tony Menechella *[zip code: 40601]*
5773. sonja chan *[zip code: 60901-4645]* All pipelines leak, all pipelines are dangerous. Two good reasons to stop building pipelines.
5774. Kristen Soothill *[zip code: 33315]* 5775. Sam Sheldon *[zip code: 97230]* 5776. sophia lyles *[zip code: 78702]* 5777. Sophia Savich *[zip code: 95497]*
5778. Drew Shiner *[zip code: 33063]* 5779. Marina Soto *[zip code: 97202]* 5780. Tamara Romaine *[zip code: 32640]* 5781. Glen Benjamin *[zip code: 03801]* 5782. Allan Campbell *[zip code: 95132]* 5783. Maria Gomez *[zip code: 72653]* 5784. Ed Fiedler *[zip code: 78750]*
5785. Kristina Peterson *[zip code: 98026-6543]* 5786. Pete Sandifer *[zip code: 36109]*
Time is running out! Some say less than 9 years before irreversible to turn around... 5787. Ruth Bauer *[zip code: 28792-7813]* 5788. Scott Benenati *[zip code: 80027]* 5789. Marie Travis *[zip code: 75227]*
5790. Susan Peirce *[zip code: 80540]* 5791. SPENCER Adams *[zip code: 90034]* 5792. Maria Morehead *[zip code: 98106]*
5793. Karin Hauk *[zip code: 86157]* 5794. Teresa Sullivan *[zip code: 90065-1727]* 5795. Patricia Townsend *[zip code: 12533]* 5796. JUSTINE TILLEY *[zip code: 23188]* 5797. Steve Kunz *[zip code: 19460]* 5798. Susan Plubell *[zip code: 16830]*
5799. Susan Anderson *[zip code: 84111]* 5800. Kathleen DeLander *[zip code: 94080]*
5801. Jo Hills *[zip code: 12526]* Spend our money on progress -- green, non-fossil fuels.
5802. Amy Weappa *[zip code: workingfam]* 5803. S Hurrell *[zip code: 80524-4330]* 5804. Susan Right *[zip code: 45766-8910]* 5805. Jamie Green *[zip code: 93004]* 5806. Josephine Scherer *[zip code: 87107]* 5807. Steve Schildwachter *[zip code: 34787-9125]*
5808. Kevin Teeple *[zip code: 08050]* Approval of these pipelines is now being based on profit not on need. If these projects go forward it is only to propagate the obscene fleecing of the taxpayers, not for any real necessity.
5809. Bobbie Hensley *[zip code: 37743]* 5810. Shelley Ries *[zip code: 97333]* 5811. Susanna Purucker *[zip code: 33139]*
5812. Cheryl Maslin *[zip code: 94501]* 5813. Sarah Raffel *[zip code: 79912]*
5814. Stanley Charles *[zip code: 29715]* 5815. Susanna Cummings *[zip code: 95469-8762]* 5816. Sona Rejebian *[zip code: 60201]* 5817. Sharon Fortunak *[zip code: 55016]*
5818. Susan Kepner *[zip code: 03909]* When will someone have the courage to say NO to the fracked gas companies??
5819. Susan Kilgore *[zip code: 98262]* 5820. Sharon Lloyd *[zip code: 33573]* 5821. Suzanne Wooldridge *[zip code: 40328]*
5822. Ralph Guay *[zip code: 59601]* 5823. Cheryl McKinney *[zip code: 33442]* 5824. Sandra Brady *[zip code: 33781]* 5825. Steve Schroeder *[zip code: 48124]* 5826. Valerie Rushton *[zip code: 02814]* 5827. Suzy Slegmann *[zip code: 33617]* 5828. sharon coughlin *[zip code: 07005]* 5829. Scott Species *[zip code: 98101]* 5830. Joseph Gulas *[zip code: 6418]* 5831. Catherine Malec *[zip code: 46350]* 5832. Susan Sturgeon *[zip code: 01960]* 5833. Stacey Sklute *[zip code: 90034]* 5834. Stacia Dawson *[zip code: 92014]* 5835. Edward Conte *[zip code: 89052]* 5836. Joanna Stalker *[zip code: 33063]* 5837. STANLEY GORALCZYK *[zip code: 33313]* 5838. Stanley McDonald, Jr., *[zip code: 01770]* 5839. Gerald Stansfield *[zip code: 98201]*
5840. Susanne Groenendaal *[zip code: 16801]* 5841. Athena Malloy *[zip code: 11215]* 5842. Janet Tice *[zip code: 27516]* 5843. Lynn Shaulinger *[zip code: 94117]*
5844. Fred Wiand *[zip code: 04358]*
5845. Steve Aydelott *[zip code: 97701]*
5846. Stephanie Thompson *[zip code: 94945]*
5847. Stefanie Yellis *[zip code: 94619]*
5848. Stephanie Morris *[zip code: 22827]* Stop fragmenting our national forests and public lands, and allowing the stealing of private property.
5849. Bob Steininger *[zip code: 19460]* 5850. J. Stemmler *[zip code: 98055]* 5851. Stephanie Netzberger *[zip code: 59601]*
5852. Stephan Donovan *[zip code: 60625-5107]* Why do we never learn? Oil companies care nothing about the environment and only about profits. They will not maintain pipelines properly.
5853. Stephanie Doyle *[zip code: 77077]* 5854. Stephanie Millet *[zip code: 39401]* 5855. Stephanie Benson *[zip code: 27358]* 5856. Stephen Brundage *[zip code: 45241]* 5857. Stephen Cessna Cessna *[zip code: 48917]* 5858. Steve Troyanovich *[zip code: 08518]*
5859. Stephen Bohac *[zip code: 95383]*
5860. Stephen Friedrich *[zip code: 98388]* 5861. Stephen McClasky *[zip code: 33312]* 5862. John Steponaitis *[zip code: 94109-7895]* 5863. Steve Ellsworth *[zip code: 13830]*
5864. Marge Heggison Heggison *[zip code: 05033]* 5865. Steve Oder *[zip code: 97330]* 5866. Steve Robey *[zip code: 94708]* 5867. Stephen Bogoff *[zip code: 94941]*
5868. Steven Wiese *[zip code: 55404-4249]*
5869. Steve Lawmick *[zip code: 65203]*
5870. Steve Downing *[zip code: 93109]*
5871. Stephen Dwight *[zip code: 33596]*
5872. Steve Campbell Campbell *[zip code: 97439]*
5873. Steve Hansen Hansen *[zip code: 98225]* Climate disruption is real! We must start acting on that fact.
5874. Steven Schaffer *[zip code: 97281]* 5875. Steve Wineman *[zip code: 02139]* 5876. tamara mcreedy *[zip code: 93063]*

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont’d)

R-401

5877. **STEVEN COFFEYSMITH** (zip code: 95497) WE NEED UNPOLLUTED AIR, GROUNDWATER AND CLEAR-HEADED THINKING ABOUT FRACKING!
5878. **Steven Kostis** (zip code: 10001) 5879. **Steve Radcliffe** (zip code: 97527)
5880. **Steven Wright** (zip code: 65202) 5881. **Steven Viens** (zip code: 2816) 5882. **Steve Weinshel** (zip code: 60640) 5883. **Jasmina Stevkovska** (zip code: 32750) 5884. **Eric Meyer** (zip code: 52556)
5885. **George Hurst** (zip code: 07081-3239) 5886. **Bran Wilkerson** (zip code: 55447)
The risks aren't worth it and the technology is becoming more and more obsolete as time goes by.
5887. **Sherry Toelle** (zip code: 50622) Much of fracking is an unknown--chemicals used, their long-term effects on people's health and that of the environment. However, what we DO know should be enough to halt them. They cause earthquakes. They use much needed water in huge quantities that we cannot afford. STOP fracking NOW!
5888. **S. Thomas Bond** (zip code: 26376) 5889. **Erica Johanson** (zip code: 8525) 5890. **Suzanne Selhy** (zip code: 90042)
5891. **Jon Hager** (zip code: 84065)
5892. **casee maxfield** (zip code: 90028)
5893. **Sharon Tozzi** (zip code: 8620)
5894. **Albert and Betty Hoehn** (zip code: 17022)
5895. **Maryann Piccione** (zip code: 34690)
5896. **Teresa Sirena** (zip code: 46901) This destroys the air and water! Think about what we are leaving the next generation!
5897. **Paul Johnson** (zip code: 40205) 5898. **Deb Stringham** (zip code: 02067)
5899. **Lawrence Rogovin** (zip code: 02474) 5900. **Sandra Joy** (zip code: 04473) 5901. **Stefan Taylor** (zip code: 33604) 5902. **Stuart Blood** (zip code: 05075)
5903. **Stuart Lynn** (zip code: 01602)
5904. **Rebecca Walding** (zip code: 87010) It is obvious that we cannot continue to approve or build pipelines without destroying our climate commitments. Please... what is more important short term gain or long term? At this point it has to be long term. There is no other choice.
5905. **Angela Stuebben** (zip code: 08844) 5906. **Shawn Abrahamson** (zip code: working/om) 5907. **Susan Allen** (zip code: 27612) 5908. **Peter Schafer** (zip code: 60603) 5909. **Subrata Sircar** (zip code: 94087) 5910. **MICHELLE JACKSON** (zip code: 60657) 5911. **John Zahos** (zip code: 60076) 5912. **Sudesh Prasad** (zip code: 94806) 5913. **Sue Craig** (zip code: 97402) 5914. **Sue Moon** (zip code: 98144) 5915. **Suzanne Young** (zip code: 02131) 5916. **Susan Mackenzie** (zip code: 97526) 5917. **Susan Roberts** (zip code: 60061) 5918. **susan gillette** (zip code: 04093)
5919. **Sue and John Morris** (zip code: 05658) 5920. **Sue Stromberg** (zip code: 44060) 5921. **susan zarzycki** (zip code: 95006) 5922. **Terry Bergeron** (zip code: 63128) 5923. **Susan Buchalter** (zip code: 00831) 5924. **Asdur Triff** (zip code: 33135)
5925. **Sharon Sullivan** (zip code: 60586) 5926. **Susan Boyce** (zip code: 97457)
End the corporate power its We the People!
5927. **Clyde Summerell** (zip code: 32218)
5928. **Kristin Sunada** (zip code: 80526)
5929. **Hollie Hallman** (zip code: 44035)
5930. **Barb Wiebesick** (zip code: 56467) Love water, not oil!
5931. **Sunil Misra** (zip code: 21045) 5932. **Leanne Tucker** (zip code: 32935) 5933. **Peter Roche** (zip code: 87507) 5934. **Susan Preston** (zip code: 32658) 5935. **Joni Listerman** (zip code: 66047) 5936. **Scott Gorn** (zip code: 06053) 5937. **Susan Lefter** (zip code: 78737) 5938. **susan baxter** (zip code: 10128)
5939. **Susan Dobbelaere** (zip code: 66012)
5940. **Susan Krawietz** (zip code: 33710-1948)
5941. **Susan Meehling** (zip code: 20137)
5942. **susan waggoner** (zip code: 15208)
5943. **Susan N Todd** (zip code: 97222)
5944. **Susan Campbell** (zip code: 32162)
5945. **Susan Chenelle** (zip code: 07102)
5946. **susan clancy** (zip code: 06801)
5947. **Susan Watts** (zip code: 92506)
5948. **Susan Ostle** (zip code: 87112)
5949. **Susan Porter** (zip code: 91103)
5950. **Susan Walp** (zip code: 91103)
5951. **Susan Wechsler** (zip code: 97330)
5952. **Susan Wigfield** (zip code: 55414)
5953. **Andrew Goldman** (zip code: 13068)
5954. **Sue Dennis** (zip code: 83001)
5955. **susan foley** (zip code: 01085) Fracking destroys the suburface and renders it unstable. Not good!
5956. **Susan Gellert** (zip code: 20882) 5957. **Lindsay Suter** (zip code: 06471) 5958. **Vickie Sutherland** (zip code: 84057)
5959. **Sam McKinney** (zip code: 97212)
5960. **Suzanne DeerlyJohnson** (zip code: 90806)
5961. **Suzanne Wood** (zip code: 49093) You better not elect Hillary Clinton President if you want to stop building gas pipelines and continued fracking. She vigorously supports both of these.
5962. **Suzanne McCoy** (zip code: 05461-8997) 5963. **suzi young** (zip code: 94537) 5964. **Suzanne Koury** (zip code: 32240) 5965. **Susan S** (zip code: 07871)
5966. **Suzy Fraser** (zip code: 70112) 5967. **Suzy Richardson** (zip code: 49453) 5968. **Suzy St. Denis** (zip code: 21703)
5969. **Stef van der Made van der Made** (zip code: 90893) Please support renewable energy, it is so much more future proof giving our children and children children a chance for a healthy planet.
5970. **Janet Anderson** (zip code: 48237)

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5971. Steve Walts (*zip code:* 28092)
5972. Stephen Wallace (*zip code:* 34285)
5973. Stephen Disch (*zip code:* 17036)
5974. Carolyn Shaw (*zip code:* 90046) No new pipelines. Our goal must be that all fossil fuels are replaced with clean energy.
5975. Sharon Wesoky (*zip code:* 16335) **5976.** s cook (*zip code:* 97236) **5977.** Sarah Gallagher (*zip code:* 10665) **5978.** susanne willard (*zip code:* 04033)

5979. Scott Wilson (*zip code:* 13843) **5980.** Steve Wolpert (*zip code:* 16532) **5981.** Linda paleias (*zip code:* 32308) **5982.** Sylvia Russell (*zip code:* 03824) **5983.** R. Susan Woods (*zip code:* 01035) **5984.** sheila wynn (*zip code:* 91403) **5985.** Sybilie Vital (*zip code:* 98576) **5986.** Victor Escobar (*zip code:* 21313) **5987.** Sydney Wright (*zip code:* 21239) **5988.** Sy Kover (*zip code:* 08054)

5989. Sylvia Outhoudt (*zip code:* 57049) We must put a stop to these climate-destroying pipelines now, before it is too late!
5990. s n (*zip code:* 04424-4011) Common sense, was preached to us as children , adolescence, young adulthood and never accepted. New adults soon learned the folly of their ways. I do not think this Universe has a way to correct the folly of our ways. This planet is aging and at a tipping point at to what lives we will be allowed to live. We need to prepare!

5991. Sylvia Cardella (*zip code:* 95547)
5992. Sylvia Forte (*zip code:* 67202)
5993. Geoffrey Symcox (*zip code:* 90272)

5994. Eric E. Symborski Jr (*zip code:* 08653) WTF!!!!!!!!!!!!!!
5995. Heather Rebuck (*zip code:* 21228) **5996.** Michael Harrison (*zip code:* 32259) **5997.** Thomas Carlisle (*zip code:* 87108)

5998. Tim Burns (*zip code:* 98022) **5999.** Robert Messing (*zip code:* 5602) **6000.** Susan Tabor (*zip code:* 10025) **6001.** T. F. (*zip code:* 11001-9238) **6002.** Taen Scherer (*zip code:* 98118) **6003.** Anna Sandfield (*zip code:* N8R JHJ) **6004.** Autumn G. Van Kirk Van Kirk (*zip code:* 77057-4761) **6005.** Dianne Joyce (*zip code:* 33133) **6006.** Elizabeth Ashcroft (*zip code:* TR3 GLZ) **6007.** Veronica Cox (*zip code:* 13032) **6008.** takako Ishii-Kiefer (*zip code:* 07747) **6009.** takedhi imajo (*zip code:* 23212) **6010.** Tal Kinnersly (*zip code:* 94913) **6011.** j talbot (*zip code:* 78704)

6012. Vicki Tailboot (*zip code:* 40516) We need to protect our Nation against abrogators that destroy our Nations Lands, Waters, Air and Sea's!

6013. Tamara M (*zip code:* 94110)
6014. Tanaya McKenna (*zip code:* 43061) Please stop this from continuing. It will damage our climate and create long term issues that currently cannot be met. Please think of needs of the future, not just today's needs.

6015. Leslie Smith (*zip code:* 78666) **6016.** Mo Kanaka (*zip code:* 11106) **6017.** Barbara Stanford Tanguma (*zip code:* 80005)

6018. Tanya Lyders Lyders (*zip code:* 90110) **6019.** Tanya Hough (*zip code:* 44077) **6020.** Taran Wender (*zip code:* 95512) **6021.** Paul Williams (*zip code:* 27103)

6022. Thomas Robinette (*zip code:* 98064) **6023.** Colleen O'Neill (*zip code:* 33704) **6024.** Tauny Kasuya (*zip code:* 94901)

6025. Deborah Lallier (*zip code:* 94045) **6026.** Tavla Gilbert (*zip code:* 11215) **6027.** Taylor Vulgare (*zip code:* 61820)

6028. Alan Taylor (*zip code:* 80302)
6029. Taylor Smith (*zip code:* 45344)
6030. Taza Guthrie (*zip code:* 85716)
6031. Tim Zemba (*zip code:* 91606)

6032. Trudie Barreras (*zip code:* 30306) Some things [JUST DON'T MAKE SENSE!!!

6033. Raymond Bartlett Birtley (*zip code:* 16421) **6034.** Timothy Baues (*zip code:* 53203) **6035.** Tony Blanks (*zip code:* 92116) **6036.** T Y (*zip code:* 80920)

6037. Terry Brejlla (*zip code:* 95370) **6038.** Tina Brenza (*zip code:* 61111)
6039. Tom Heller (*zip code:* 94919) **6040.** Thomas Aber (*zip code:* 61413) **6041.** Tina Caliga (*zip code:* 76107) **6042.** Tara Blackburn (*zip code:* 94971)

6043. Susan Gage (*zip code:* 19518) The evidence is everywhere...fracking is a disaster for humans, wildlife, and the environment. Clean, sustainable energy is what all energy companies should be focusing on now!

6044. Dan Clapsadle (*zip code:* 97477) **6045.** THEODORE Mertig (*zip code:* 79928) **6046.** Tracy Brock (*zip code:* 53704)

6047. Raymond Farrington (*zip code:* 13207) It's time we need get serious about meeting our climate change goals instead of pandering to the fossill fuel industry and their well paid lobbyists,

6048. John Simmons (*zip code:* 14615) **6049.** Sheryl Schmatjen (*zip code:* 80701) **6050.** William Schlesinger (*zip code:* 90046) **6051.** Donald Marburg (*zip code:* 78756) **6052.** Susana Blanton (*zip code:* 28630) **6053.** Tina Carantza (*zip code:* 48906) **6054.** Ted Fishman (*zip code:* 95123) **6055.** Ted Dreier (*zip code:* 97219-1340) **6056.** Todd Ward jr (*zip code:* 62675) **6057.** Ted Kunzel (*zip code:* 46208) **6058.** Thomas Durst (*zip code:* 97520)

6059. Theo Gesiy (*zip code:* 33508) **6060.** Theodore Voith III Voth III (*zip code:* 53704)

6061. Wayne Teel (*zip code:* 22832) Pipelines are an energy conduit of the past. They function to bring us a gas that is killing our planet. We do not need them. The alternatives exist; negawatts, wind, and solar. I have solar on my own house and my energy company owes me money. Alternatives are possible.

6062. Martha Shogren (*zip code:* 95472 5405) **6063.** Carolé Mehl (*zip code:* 64113) **6064.** Candy LeBlanc (*zip code:* 95667)

6065. Teresa Manzella (*zip code:* 55109) Experience has proven that the pipelines are not safe, and the whole extraction infrastructure is counterproductive to reducing the use of fossil fuels. No more pipelines should be built.

6066. Marc Nunez (*zip code:* 94546)

6067. Marie Templeton (*zip code:* 18478)

6068. Arthur Templeton (*zip code:* 80439)

6069. Todd Templeton (*zip code:* 91040)

6070. Cheryl Eigler (*zip code:* 98045)

6071. Ted Cheeseman (*zip code:* 95066)

6072. Noel Orr (*zip code:* 98155)

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont’d)

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6073. Teri Sonnenberg (zip code: T2C 2H4)
6074. Celeste Rogers (zip code: 96707)
6075. Robert Kraft (zip code: 17353) Profits over people ---- has always been a bad idea and still is !
6076. Theresa Holzem (zip code: 53714) 6077. Therese MacKenzie (zip code: 60626)
For better energy, better jobs, and better future, keep the oil in the ground! Invest in renewable energy!
6078. Terri Wilson (zip code: 60651) 6079. Linda Bridges (zip code: 62613) 6080. Terry Kourda (zip code: 91913) 6081. Theresa Yandel (zip code: 93105) 6082. Terry Herckenrath (zip code: 85024) 6083. Terry Whitaker (zip code: 80027)
6084. Terry McNally (zip code: 59255) No more fracking. This practice is far too dangerous to the future of our water and to the earth. Alternative sources of power may have their flaws, but are not nearly as dangerous as fossil fuels, esp. gathered by fracking. STOP FRACKING EVERYWHERE!!!
6085. Tess Fraad (zip code: 10009)
6086. Ralph D. Dowden (zip code: 76209) Gas pipelines are bad for the environment. Rather than building more of them, we need to further encourage the development and marketing of energy efficient homes, factories, business properties, automobiles, trucks, and buses. We must do everything in our power NOW to try to leave fossil fuels of every kind IN THE GROUND.
6087. Thomas Cierach (zip code: 07456)
6088. Kathleen Fiorelli (zip code: 18434) We need protection from the fossil fuel industry. We in the northeast are being bombarded by fossil fueled power plants. The more pipelines built the more fracking and the more power plants being built without concern to the residents' health, property devaluation and is ruining our way of life.,
6089. Tami Fosmark (zip code: 98027) 6090. Anthony Bravos (zip code: 60098) 6091. Thomas Dahl (zip code: 34655)
6092. Kimberly Nieman (zip code: 55446) 6093. Nathaniel Hansen (zip code: 11375)
6094. Ellen Beschler (zip code: 10022) 6095. Theresa H Deery (zip code: 33706) 6096. Jeff Beesley (zip code: 54937-1217)
6097. David Wiley (zip code: 19143)
6098. Chris Beitt Beitt (zip code: 04011) 6099. shemayim elohim (zip code: 98122) 6100. Nick Webb (zip code: 84097) 6101. Andrew Freer (zip code: 87122) 6102. Thea Geotas (zip code: 57702) 6103. Letitia Dace (zip code: 66502)
6104. James Giles (zip code: 98376) 6105. Linda Cave (zip code: 06430)
6106. The wojo Family (zip code: 80526) Our water and health is too precious
6107. Dori Bailey (zip code: 98368)
6108. Edouard Dawson (zip code: 81007)
6109. Marc Lionetti (zip code: 78745)
6110. Gabriela Sosa (zip code: 90027) no more!
6111. Janet Bernson (zip code: 91401) 6112. Davina Ilgin (zip code: 75039) 6113. Kristin Ziama (zip code: 53095-4573)
6114. Theima Hardman (zip code: 55417) 6115. Dian Hardy (zip code: 95472) 6116. Theodore Burger (zip code: 18017)
6117. Penelope Fletcher (zip code: V66 1R2) 6118. Chandra Paetsch (zip code: 97424) 6119. Pat Berger (zip code: 04963)
6120. Rachel Wolf (zip code: 95060) 6121. Theresa Billeaud (zip code: 78207-4619) 6122. Theresa Sullivan (zip code: 98370) 6123. Tess Castell (zip code: 60108) 6124. Joseph Bongiorno (zip code: 11580) 6125. Greg Rosas (zip code: 94546) 6126. Beverly Linton (zip code: 02476) 6127. Michael Sileno (zip code: 27408) 6128. Jerry buechler (zip code: 34953) 6129. W.J. Zack (zip code: 94114) 6130. Terry Harmon (zip code: 66604) 6131. Carlotta Kidd (zip code: 95842) 6132. Thomas W. Cranston (zip code: 78621) 6133. Janet-Jo Walter (zip code: 44685) 6134. Thomas Steeg (zip code: 33703)
6135. S Thompson (zip code: 90026) 6136. Gary Thomsen (zip code: 92661) 6137. Tom Hooper (zip code: 33617) 6138. Tara Hottenstein (zip code: 33707) 6139. Jonathan Mitchell (zip code: 35757) 6140. Michele Womack Dennis (zip code: 19083) 6141. Toni Howard (zip code: 98058)
6142. Sebastian Romero (zip code: 09283) 6143. John Schmitt (zip code: 40205) 6144. Linda Ferland (zip code: 93001)
6145. Donna Turner (zip code: 94112) Climate disaster MUST be taken seriously, we need to end our dependence on oil immediately!! The future of our planet is at stake here, humanity will NOT survive if we do not make serious changes now!
6146. Tiffany Snyder (zip code: 80305) 6147. Tiffany Rapplean (zip code: 80031) 6148. Beverly Lane (zip code: 32909) 6149. Christopher Rowley (zip code: 63104) 6150. R Wells (zip code: 90020)
6151. Nikki Schipman (zip code: 28227) 6152. Patricia McCain (zip code: 77808)
6153. Tim Chreene (zip code: 75214) Deny deny deny. It's the climate. IT'S THE CLIMATE!
6154. Yvonne Johnson (zip code: 43080)
6155. Timothy Fleischer (zip code: 40208) 6156. Tim Johnson (zip code: 68510) 6157. Timothy Gabriele (zip code: 06473)
6158. Tim Fountain (zip code: 84088)
6159. tim nichols (zip code: 94605) You've done enough, nay too much damage already with the overdevelopment of fracking infrastructure, endangering the entire U.S. environment. Our land, air, and water supplies have been pushed to the limits of human habitability. ISN'T THAT ENOUGH!!?
6160. Thomas Morse (zip code: 93105) 6161. Judy Moran (zip code: 32404) 6162. Tina Tine' (zip code: 37919) 6163. Kristina Lowe (zip code: 65807)
6164. Tina Mizhr (zip code: 10573) Fracking is NOT CLEAN ENERGY!!!! We need more wind, and solar projects. I am sick of Washington talking crap and never doing what is necessary to obtain the goal of clean energy. You are all so corrupt it is disgusting.
6165. Tina Gerow (zip code: 85306)
6166. christine tendle (zip code: 55113)
6167. Tlohe Barron (zip code: 93022)
6168. Cindy Johnson (zip code: 49707)
6169. Tom Bell (zip code: 66044)
6170. Marie Clements (zip code: 87122) Keep it in the ground for the Common Good of All.
6171. Judith McElwain (zip code: 11743) 6172. Karen Johnson (zip code: 03071)

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont’d)

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6173. Thomas Johnson (zip code: 24962) 6174. TJ Reed (zip code: 85718) 6175. Terry Karl (zip code: 94114) 6176. Terri Camara Camara (zip code: 75206) 6177. thomas pauley (zip code: 29745)
6178. Theodora Watts (zip code: 20657) Enough already! We need to keep the rest of the fossil fuels in the ground or we may not survive.
6179. Timothy Liebe (zip code: 13210) 6180. Lori Mulvey (zip code: 49321) 6181. Terry Strauss (zip code: 94941) 6182. T C (zip code: 98075)
6183. Timothy McLaughlin (zip code: 02360) 6184. Thomas Grill (zip code: 06478) 6185. Teresa Iovino Iovino (zip code: 39117) 6186. Ted Mindt (zip code: 98597)
6187. Tracy Mott Mott (zip code: 80210) 6188. Tracy Musgrove (zip code: 75103)
Keep it in the ground! 6189. Patricia Ranstrom (zip code: 98070) 6190. Thomas Lawson (zip code: 90802) 6191. Tom Nulty (zip code: 92629-3050) 6192. Axel Meier (zip code: 94606)
6193. Todd Tanner (zip code: 59911) 6194. A. Todd (zip code: 97404) 6195. Todd Fisk (zip code: 92131) 6196. Todd Smarr (zip code: 80202) 6197. Timothy O'Dell (zip code: 5039)
6198. Tony Cochrane (zip code: v9a5r7) Have you people heard of climate change, green house gasses. Look it up. We are supposed to be trying to clean up the environment NOT polluting the water and air MORE than it is.
6199. Thomas Frank (zip code: 92025 7849)
6200. Toni G (zip code: 92875) This type of approach to our energy needs need to stop now. The people are being put in danger (including my neighborhood).
We must begin to put money into energy sources that do not harm our planet -- these people should either comply or go out of business entirely.
6201. John Teague (zip code: 74953) 6202. Thomas Olmsted (zip code: 60647)
6203. Thomas Meacham (zip code: 42103) Either stop fracking, or let us know what you're pumping into our ground water.
6204. Thomas Artin (zip code: 10976) 6205. Thomas Smith (zip code: 84780) 6206. Bobblejo Winfrey (zip code: 40219)
6207. Tom Fitzpatrick (zip code: 90048) 6208. thomas koven (zip code: 08827) 6209. Thomas Albanese (zip code: 85747)
6210. Sharon Tompkins (zip code: 28803)
6211. Thomas Shultz (zip code: 29303) 6212. Thomas Hutton (zip code: 81520) 6213. Tom Rooney (zip code: Y8V1T3)
6214. Toni Littlejohn (zip code: 94956) 6215. Toni Watson (zip code: 91977) 6216. Toon Dockx (zip code: 2018) 6217. Lisa Allarde (zip code: 18054) 6218. Theodore Cooper (zip code: 98034) 6219. Lance Vilter (zip code: 90026) 6220. Victoria Tonaati (zip code: 37601) 6221. Greg Grieman (zip code: 96150) 6222. Tris Palmgren (zip code: 48236) 6223. Toddy Perryman (zip code: 59828) 6224. tom pietras (zip code: 48322)
6225. Theresa Pretlow (zip code: 44120) It is time we take climate change seriously and keep untapped fuels in the ground.
6226. Thomas Rose (zip code: 47371) Fossil fuels started in the ground so keep them where they belong!
6227. Tracey Aquino (zip code: 23452) 6228. Tracey Katsouras (zip code: 20601) 6229. Tracy Ouellette (zip code: 98232)
6230. Tracy Feldman (zip code: 27713)
6231. Johnie Kemp (zip code: 49746) 6232. William Hill (zip code: 75026)
6233. Martha Iancu (zip code: 97224) Do not approve pipelines. Both pipelines and fracking must be discouraged because of local (water contamination, environmental destruction) and global (climate change) consequences.
6234. Heather Cross (zip code: 11222)
6235. Cheryl Holley (zip code: 78723)
6236. Thomas Conroy (zip code: 90266)
6237. Theodore Reed (zip code: 19103)
6238. Tess Dunlap (zip code: 16033)
6239. Theresa Freeman (zip code: 32955) STOP destroying our Country/Earth!
6240. ted rees (zip code: 94040)
6241. Martha Trejo (zip code: 77041)
6242. Jessica Treon (zip code: 97394)
6243. Thomas Sleeper (zip code: 01520)
6244. Catherine Miller (zip code: 10025)
6245. Trevor Robinson (zip code: 78722)
6246. Alice Trexler (zip code: 02474) We don't want fracked gas or fracked gas pipelines. Don't kill the environment!
6247. patricia doyle (zip code: 60527) 6248. Lehman Holder (zip code: 98664) 6249. Patricia Foschi (zip code: 87505)
6250. Patricia Wilson (zip code: 22630)
6251. Trisha Connolly (zip code: 60201) No more. We want to invest in renewables!
6252. Trisha Sherman (zip code: 6239) 6253. Mekala Ravishankar (zip code: 8837) 6254. Terry Wilson (zip code: 8302) 6255. Lorie James (zip code: 94952) 6256. Trudy Crow (zip code: 29365) 6257. valentine wolfe (zip code: 14424)
6258. Payten El-Dehaibi (zip code: 15217) 6259. Terri Barreras (zip code: 60634)
6260. Alice (Sally) Bauman (zip code: 01431) Time to stop handing money to pipe line pushers and start thinking about what you can do to increase natural sources for energy. PLEASE study the situation from a non-profit goal and start thinking in terms profit for the earth!
6261. tami schreurs (zip code: 33472) 6262. Thomas Scott (zip code: 92352) 6263. Terrance Shoemaker (zip code: 80134)
6264. Tim Shorkey (zip code: 48519) 6265. uni siegrist (zip code: 02116) 6266. terry lyon (zip code: 24179)
6267. Terry Sopher Sr (zip code: 22003) FERC: comply with: President's new NEPA climate action guidelines by (1) re-do NEPA analysis of all fossil fuel related projects incorporating consideration of climate change impacts; (2) stop approving fossil fuel projects that individually & collectively have adverse impact on climate
6268. tonya stiffler (zip code: 98133)
6269. T. Watanabe (zip code: 60076) 6270. Tanya Wagner (zip code: 17050) 6271. Frank Asturino (zip code: 15136) 6272. Thomas Tassinari (zip code: 15119) 6273. Terry Tedesco-Kerrick (zip code: 85016) 6274. Kevin Smith (zip code: 1376)

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont’d)

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6275. Kathleen Carr (zip code: 81413) 6276. Gerald Leslie (zip code: 77407-2156) 6277. Tulsı Milliken (zip code: 92023) 6278. diana horowitz (zip code: 91301) 6279. Jake Turner (zip code: 22904) 6280. Bruce Culver (zip code: 01342) 6281. Ralph Tobin (zip code: 76103) 6282. Janet Gatiliff (zip code: 98520) There has been plenty of talk about it. Now it's time for some serious action. No More Pipelines! Let's start moving to clean, renewable energy before it is too late. 6283. Tom Ray (zip code: 40222) 6284. Lorraine Brabham brabham (zip code: 07030) 6285. Gillian Suess (zip code: 61013) 6286. Sarah Garrett (zip code: 14486) 6287. Tom Williams (zip code: 65251) Stop letting the energy industry dictate our ecologic future. These pipelines would commit to infrastructure our energy future. We need to build infrastructure for future green, sustainable, energy sources, not the dirty, unsustainable, fossil fuel past. 6288. Larianna stanton (zip code: 94107) 6289. Anne-Marie Treon (zip code: 95028) 6290. Rhonda Yellin-Waldron (zip code: 34232) 6291. Joseph Brown (zip code: 70401) 6292. Ann Woll (zip code: 2138) The more pipelines industry builds (often at taxpayers expense), the more tied we are to this fuel. Meanwhile, all the resources are diverted away from the development of renewable energy, grid upgrades, and storage technology. Please - don't commit our children's future to a fossil fuel. They can't afford it and neither can the nation. 6293. Michelle Lind (zip code: 90250) 6294. Ted Wilcox (zip code: 14610) 6295. Vivian Harvey (zip code: 79852) 6296. Stephen Locke (zip code: 75418) 6297. Ernie Verbraeken (zip code: 7250) 6298. Tyler Newton (zip code: 04101) 6299. tyler harrington (zip code: 12985) 6300. Judith Zaccone (zip code: 95070) 6301. Thomas Herzog (zip code: 10590) 6302. Ute Heilig (zip code: hd9 Slp) 6303. Barbara Conrad (zip code: 55042) 6304. James Padier (zip code: 76901) If you weren't just our enemy from WW2, you'd actually be concerned with improving and innovating technology. Not being dependent on this crippling system of fossil fuel dependency that will leave the U.S. left out to dry when the grid goes down and you aren't able to drill anymore. We need a Preemptive, Regenerative system or else we are doomed. You have based your entire society on a finite resource with infinite demand, it has to end at some point, it is up to you how. 6305. Fritz D. (zip code: 02494) These polluting CRIMINALS - MUST BE STOPPED!!!! 6306. Laura Migas (zip code: 11218) 6307. Dan Duefrene (zip code: 96024) 6308. Linda Moorman (zip code: 06653) 6309. Urmila Padmanabhan (zip code: 94538) 6310. Judy Denberg (zip code: 80305) 6311. Susan Carroll (zip code: 18436) 6312. Ute Saito (zip code: 97229) 6313. Virginia Utt (zip code: 32935) 6314. Gina Stiff (zip code: 23188) 6315. Bruce Waterman (zip code: 94609) 6316. Siamak Pooladi (zip code: 97405) 6317. Marguerite King (zip code: 12058) Climate change will cook the surface for most plants and animals including us, and the pipelines and the Fracking will destroy all the fresh water. Seems a lot to lose! But the Fracked Gas People keep on looking at their bottom line only. 6318. Jenifer Alexander (zip code: 30022) 6319. Valerie Justus-Rusconi (zip code: 95076) 6320. Valerie Levine Levine (zip code: 87505) 6321. Valerie Romero (zip code: 95971) 6322. Catherine Keys (zip code: 97501) 6323. Val Leonardi (zip code: 43606) 6324. Vivian S. Valtri Burgess Burgess (zip code: 05753) 6325. Adelheid Pranhass (zip code: 1201) 6326. Vincent Kotnik (zip code: 53208) 6327. freddie sykes (zip code: 37178) 6328. Virginia Bennett (zip code: 96822) The fossil fuel industry is probably one of the most profitable in the country. They could spend millions bringing their operations "up to snuff" and hardly even notice it. The only way they can be persuaded to change is through the enforcement of much stricter laws regulating their operations. Many of us voters wonder whether Congress isn't completely "in the pockets" of our oil industry!! 6329. Brenda Hayes (zip code: 27278) 6330. Russel Deroche Jr (zip code: 70052) 6331. Vincent De Stefano (zip code: 91107-2727) 6332. Mary Metcalf (zip code: 5491) 6333. Aaron David (zip code: k1c2e9) 6334. Vera Brown (zip code: 94065-1338) 6335. Vera Loewer (zip code: 94044) 6336. Rocio Ungaro (zip code: 33604) 6337. Vesna Glavina (zip code: 52556) 6338. Valerie Dare (zip code: 11694) 6339. Jorge rosas (zip code: 77057) 6340. Bret Smith (zip code: 95060) 6341. Vic Paglia (zip code: 12533) 6342. Vicki Grunwald (zip code: 34601) 6343. Vicki Don (zip code: 12061) 6344. Vickie Stimac (zip code: 89550) 6345. Vicki Kerr (zip code: 97850) 6346. Vicki Walberg (zip code: 64106) 6347. Victoria Olson (zip code: 32309) Green energy is the only way this planet will survive 6348. Victoria Randall (zip code: 38139) 6349. Victor Zaveduk (zip code: 60646) 6350. Arthur Noble (zip code: 97411) Hay how about some clean safe drinking water. 6351. Mike Lega (zip code: 7032) 6352. David Soares (zip code: 95726) 6353. Vincent De Keyzer (zip code: 1180) Support from Belgium 6354. Dave Starke (zip code: 41092) 6355. Kathryn Vinson (zip code: 98107) 6356. Dave R (zip code: 07666) 6357. Virginia Fontaine (zip code: 94590) 6358. Virginia Mendez (zip code: 33160) 6359. Kathryn Vitek (zip code: 21550) 6360. Vicki Best (zip code: 30546) 6361. Valeri Fornagiel (zip code: 16901) 6362. Virginia Langford (zip code: 95694) 6363. Valerie Marak (zip code: 02879) 6364. Vincent Busch (zip code: 12303) 6365. Valerie Jues (zip code: 92111) 6366. V. Louis (zip code: 94118) 6367. Verlene Lewis (zip code: 84790) 6368. Virginia McIntosh (zip code: 19119) 6369. Vic Mandarich (zip code: 53120) 6370. Vicki Brenner (zip code: 96067) 6371. Valerie Meluskey, Ph.D. (zip code: 08540) 6372. Virginia Olienechak (zip code: 44090) The fossil fuel industry has spent millions trying to push fracked gas as a "clean" fuel. But our new report on these pipelines shows that label is simply wrong. Any way you slice it, these pipelines would be a disaster for the climate, as well as huge risks to communities threatened by explosive pipelines and fracking dangers 6373. Verónica Moore (zip code: 34683) 6374. Robert Clifton (zip code: 54853) 6375. Val Sanfilippo (zip code: 92111) 6376. Veronica Schweyen (zip code: 20712) 6377. Harold Robinson (zip code: 35160) 6378. Vittorio Tedesco Zammarrano (zip code: 85024) 6379. John Harper (zip code: 65201) It is time we try and quit burning up all the fossil fuels we can get and sell. We now know that if we switch to solar we can save our selves and our Mother Earth.

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont’d)

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6380. Jeannine Leffel (zip code: 93108) 6381. John Limbach (zip code: 53703) 6382. Tung Vu (zip code: 95117) 6383. Valerie Yarborough (zip code: 27607)
6384. wendy bullar (zip code: de4 2as) 6385. Barbara Fry (zip code: 95409) 6386. Herman Wactien (zip code: 94960)
6387. Wendy Stevens (zip code: 28214) 6388. Mary Joan Wald (zip code: 10012) 6389. Gilbert Wald (zip code: 08807)
6390. Bill Nygren (zip code: 06107) 6391. Damita Walker (zip code: 48911) 6392. Charlie Wallin (zip code: 28607) 6393. Wally Elton (zip code: 12866) 6394. Walter Juchert (zip code: 95409)
6395. Stephen Sleeper (zip code: 34135) Why are you even considering allowing them to murder OUR earth?? Once it's gone we have NO where else to go. If you don't care because YOU won't be here to see it happen and they are making you rich in the meantime, think about what you will be putting those who will continue your blood line through. ...just so you can have a few extra bucks. There will be a special place waiting for you to spend eternity, if you allow this and I'm quite sure you aren't going to like it.
6396. Patricia Nicholson (zip code: 13115) 6397. Pat Walsh (zip code: 53074-1211) 6398. Walter Pirie (zip code: 24060) 6399. Walt Milder (zip code: 33618)
6400. Walter Ramsey (zip code: 94561)
6401. Walter Tulys (zip code: 08861-2218) Over the past decade how many oil and gas pipelines have sprung leaks and led to disaster? In the same time frame, how many new pipelines have been pushed through? Enough already.
6402. Walter Jorgensen (zip code: 98501) 6403. Wanda Crain (zip code: 13838) 6404. W. C. (zip code: 40207) 6405. Diane Pease (zip code: 03561) 6406. Ward Hinds (zip code: 94521)
Do we care about the future for our children or not?? 6407. Marlene Warkoczewski (zip code: 19320) 6408. warren anderson (zip code: 20011) 6409. Elizabeth Warriner (zip code: 97703)
6410. Wayne Schafer (zip code: 21228) 6411. Ann Wasgatt (zip code: 95678) 6412. Andrea Beatty (zip code: P1H 2N5) 6413. I. Hartz (zip code: 43055)
6414. Sharon Holford (zip code: 97222) 6415. Harold Watson (zip code: 65802) 6416. Dorothy Richmond (zip code: 85719) 6417. Wayne Lewis (zip code: 79424) 6418. Walter Bock (zip code: 07670)
6419. Wayne Boyles (zip code: 80525) 6420. Wally Bubelis (zip code: 98136) 6421. Walter Ceglowski (zip code: 19046)
6422. NANCY NEELY (zip code: 91767)
6423. Wendt Cohen (zip code: 10562) 6424. Wayne Gibb (zip code: 95436) 6425. William D. Prystauk (zip code: 18042)
6426. wes weaver (zip code: 28607) 6427. Wanda Berry (zip code: 60430) 6428. Della Hamlin (zip code: 64804) 6429. Mona Weckung (zip code: 87544) 6430. Carol Miller (zip code: 48893) 6431. Valentino Weiss (zip code: 27502) 6432. Weldon Barker (zip code: 29485) 6433. Julie Wade (zip code: 75007) 6434. cynthia crawford (zip code: 33901) 6435. Wendy Joffe (zip code: 33133) 6436. Wendy Weldon (zip code: 33446) 6437. Wes Rock (zip code: 85601) 6438. Christine Taulbee (zip code: 30916) 6439. Mark Westcott (zip code: 14620) 6440. George Williams (zip code: 33146) 6441. William Nusbbaum (zip code: 55426) 6442. IJ (zip code: 60618) 6443. Lynn Schneider (zip code: 34108)
6444. Wendy Hansen (zip code: 95004-9615) 6445. Lynn Wheeler (zip code: 72227)
6446. Stephen Fabricio (zip code: 12411) pipe lines are just a way for corp. to make money and get away with it.
6447. Jean Adams (zip code: 87110) 6448. Tasha Carpenter (zip code: 97054) 6449. Peggy White White (zip code: 42301)
6450. Dave Matthews (zip code: 00080) 6451. Sandra Hultt (zip code: 96740) 6452. Henry Weinberg (zip code: 93110) 6453. Annika Swenson (zip code: 90249) 6454. Marie Hoel (zip code: 48422) 6455. Joanne Wieland (zip code: 55104) 6456. Michael Helwig (zip code: 97080-9613) 6457. Wallace Iimura (zip code: 95014) 6458. Amie Corrado-Babe (zip code: 19805) 6459. Lara Ellis (zip code: 22835) 6460. Vivian Rice (zip code: 80909) 6461. Elizabeth Wilkes (zip code: 30606) 6462. Casey Remy (zip code: 97429) 6463. susan schorin (zip code: 22314) 6464. Matthew C Willey (zip code: 34205) 6465. William Mages (zip code: 17268) 6466. William Rullo (zip code: 11776) 6467. William P Bell (zip code: 19302) 6468. William Korbet (zip code: 13165) 6469. Nancy Lee Lee (zip code: 13862) 6470. William O'Hearn (zip code: 07456) 6471. Maria Williamson (zip code: 77532) 6472. John Fish Kurmann (zip code: 64111) 6473. William McKae (zip code: 92109) 6474. Wilma Davison (zip code: 08088)
6475. Marcia Bailey (zip code: 34698) Stop fracking. It helps only the companies that get money from it. We don't want it damaging our water and our land.
6476. June Picard (zip code: 48706) Why are they allowed to ignore basic science and continue to do harm? Now they irrigate our food with the waste water? What is wrong with everyone who supports this insanity? Oh, right. GREED.
6477. Christine Turek (zip code: 29789) 6478. Mark Dankoff (zip code: 87505) 6479. suzy winkler (zip code: 13315) 6480. Leslie Winston (zip code: 90278) 6481. Timothy Mathlason (zip code: WFF) 6482. Crystal Rector (zip code: 85014) 6483. Traver Cowles (zip code: 06405) 6484. David Gaumer (zip code: 61821)
6485. W Jansen (zip code: 20814) 6486. William Van Bel (zip code: 08724) 6487. Wendy Wittl (zip code: 93105) 6488. William Kavanagh (zip code: 60304) 6489. William Fast (zip code: 66070) 6490. Ellen Rice (zip code: 04011) 6491. Wendy Anctil (zip code: 02915) 6492. William Montgomery (zip code: 19465-7567) 6493. William M. Musser IV (zip code: 06897) 6494. Stephanie smith (zip code: 60084) 6495. Karen Spradlin (zip code: 36265) 6496. michele wojnar (zip code: 13433) 6497. Wolfgang Loera (zip code: 98005) 6498. vivien traiman (zip code: 10001-4758) 6499. Audrey Ellicerio (zip code: 99710) 6500. Indigo Summer (zip code: 98102)
6501. Sebastian Meiler (zip code: 92129) We need to stop investing in items that harm our environment and citizens' health. We have progressed to a point in history where these are the activities of yesteryear and we need to invest in clean and renewable energy solutions. Stop being a dirty dinosaur
6502. anne wolf (zip code: 95405) 6503. Donald Barker (zip code: 27949)
6504. Karen Lozow (zip code: 47403) I want a beautiful, clean world for my lifetime and for the future. There is no planet "B" so it behooves us to protect our planet. We need our water, air and land to support animals and humans too. 6505. Leslie Woods (zip code: 84047) 6506. Linda Woodward (zip code: 98312) 6507. Andrew Nicholas (zip code: 14526)
6508. William Packard (zip code: 92105) 6509. Dana Bleckinger (zip code: 97498) 6510. michael mills (zip code: 91025) 6511. Rosalie Hartman (zip code: 11236) 6512. Jori Zimmermann (zip code: 81054) 6513. Patrick Sennello (zip code: 89448)

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont’d)

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6514. **Patty Ridenour** (zip code: 45419) Please STOP trying to kill all of us with fracked gas pipelines. Not only is the operation of the extraction process dangerous to our lives and futures, but the resulting escalating temperatures that will be produced once those gases are released to the atmosphere will surely be the end of our planet and us. Is that what you want? For money? Good grief.

6515. **Lacey Wozny** (zip code: 64108) **6516. Walter Pinkus** (zip code: 85206) **6517. William mittig** (zip code: 95338) **6518. Steven Sugarman** (zip code: 90265) **6519. Mary Gallagher** (zip code: 94301) **6520. William St. George** (zip code: 28403) **6521. Susan Wright Wright** (zip code: 93301) **6522. Clark Smith** (zip code: 94708)

6523. **Wanda Ballentine** (zip code: 55105)

6524. **Wendy Ebersberger** (zip code: 22630) **6525. Wayne Shattes** (zip code: 11764) **6526. Warren Sheay** (zip code: 98225)

6527. **Wm O'Donnell** (zip code: 60640) **6528. William Spademan** (zip code: 01330) **6529. Susan Wilson** (zip code: 89408)

6530. **Bill Darnell** (zip code: 32413)

6531. **A /** (zip code: 60585)

6532. **L ' (** (zip code: 46383)

6533. **Bill Russell** (zip code: 30308) The transition should have started long ago.

6534. **elaine Wunderlich** (zip code: 20904) **6535. Jeff Reynolds** (zip code: 04401) **6536. Victoria Brandon** (zip code: 91325)

6537. **Wyman Rice** (zip code: 40502) **6538. Imel** (zip code: 03908)

6539. **Linda Gazzola** (zip code: 10465) **6540. Eric Indermuehle** (zip code: 80525) **6541. Timothy Spurlin** (zip code: 63701)

6542. **Alice Meek** (zip code: 78645) **6543. Lucina Selva** (zip code: 77011) **6544. William Krause** (zip code: 77077)

6545. **Justin Maul** (zip code: 80521) **6546. Ed Martin** (zip code: 90250) **6547. Marx Andrews** (zip code: 30087) **6548. Jason Bowman Bowman** (zip code: 95667) **6549. Maria Selva** (zip code: 77011)

6550. **Harley Armentrout** (zip code: 86323) We must stop polluting our only home, earth, NOW!

6551. **Jonathan Peter** (zip code: 13905) **6552. Kevin Bannon Bannon** (zip code: 7461) **6553. Johnny Fifies** (zip code: 83001) **6554. Terrie Williams** (zip code: 77662) **6555. Mary Fineran** (zip code: 19031) **6556. Ann K Brady** (zip code: 55104) **6557. Yolanda Stern Broad PhD** (zip code: 15701) **6558. Yvonne Dawson** (zip code: 50313) **6559. Frank Gonzales Jr.** (zip code: 48170) **6560. Jerry Orr** (zip code: 19610) **6561. Jan Jordan** (zip code: 92870) **6562. Gordon George** (zip code: 05819) **6563. Ace Hull** (zip code: 85086) **6564. Kathleen Kinsey** (zip code: 45209) **6565. Lee Backus** (zip code: 93063)

6566. **Beverly Smalley** (zip code: 19053)

6567. **Yvette Fallandy** (zip code: 95404-8544)

6568. **Yvonne White** (zip code: 62854)

6569. **Robert Jonas Jonas** (zip code: 7480)

6570. **Brenda Eisenhauer** (zip code: 17545)

6571. **Scott Erickson** (zip code: 68114) no more pipelines, green energy is the way forward, leave carbon fuels in the ground

6572. **Connie Dunn** (zip code: 30256) **6573. Michael Fergot** (zip code: 10021) **6574. Yok Potts** (zip code: 46038) **6575. Yolanda Reynolds** (zip code: 95128) **6576. Yosh Yamanaka** (zip code: 90803) **6577. Carol Yost** (zip code: 10011-6194) **6578. Lou Orr** (zip code: 98155)

6579. **Mark Davis** (zip code: 11235) **6580. virginia green** (zip code: 01520) **6581. Debra Young** (zip code: 72543) **6582. Samantha Eppenauer** (zip code: 64109) **6583. David Wisbey** (zip code: 80231)

6584. **Yvonne Hardgrave** (zip code: 06511) **6585. Vincent Turano** (zip code: 10512) **6586. Alex Krevitz** (zip code: 93614)

6587. **Jae Yun** (zip code: 07446-1149) **6588. Rod Roesler** (zip code: 57042) **6589. Zach Kadar Kadar** (zip code: 14610) **6590. Bob Zal** (zip code: 45241)

6591. **Jacques Zakin** (zip code: 43017)

6592. **Danielle Dryden** (zip code: 59102)

6593. **James Hardison** (zip code: 20850)

6594. **Kathryn Melton** (zip code: 77536)

6595. **Susan Acosta** (zip code: 90303) Fracking must be banned nationally. It is toxic.

6596. **Craig Soule** (zip code: 97760)

6597. **Elisabeth Caron** (zip code: 60640)

6598. **Zygmunt Czykleta** (zip code: 60639)

6599. **Annabella Morse** (zip code: 3440)

6600. **.. (** (zip code: 92057)

6601. **Max Salt** (zip code: 02895)

6602. **Tina Brown** (zip code: 98221)

6603. **KC Carney** (zip code: 15224)

6604. **Zrinka Kiel** (zip code: 60546)

6605. **Steven Bard** (zip code: 10014) 50% of them fail after 20 years.

6606. **Althea Fiore** (zip code: 1609)

6607. **Zola Packman Packman** (zip code: 27605) **6608. S Dri** (zip code: workingfam) **6609. Michael Skidmore** (zip code: 60660) **6610. Zoe Strassfield** (zip code: 11976)

6611. **Zsanine Alexander Alexander** (zip code: 91504) **6612. Carolyn Price** (zip code: 76010) **6613. Linda Zussy** (zip code: 32317) **6614. Betty Weinstein** (zip code: 44074)

6615. **Jaric Ziemmer** (zip code: 45011) **6616. Steve Ditore** (zip code: 98125)

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont'd)

R-408



A BRIDGE TOO FAR: HOW APPALACHIAN BASIN GAS PIPELINE EXPANSION WILL UNDERMINE U.S. CLIMATE GOALS


JULY 2016

 OILCHANGE

 BOLD ALLIANCE

 GREENPEACE
ocean



 ENVIRONMENTAL
ACTION




 SIERRA
CLUB

 350.org

PROTECT OUR WATER, HERITAGE,
RIGHTS (VIRGINIA & WEST VIRGINIA)

SIERRA CLUB
WEST VIRGINIA

 Friends
of Water

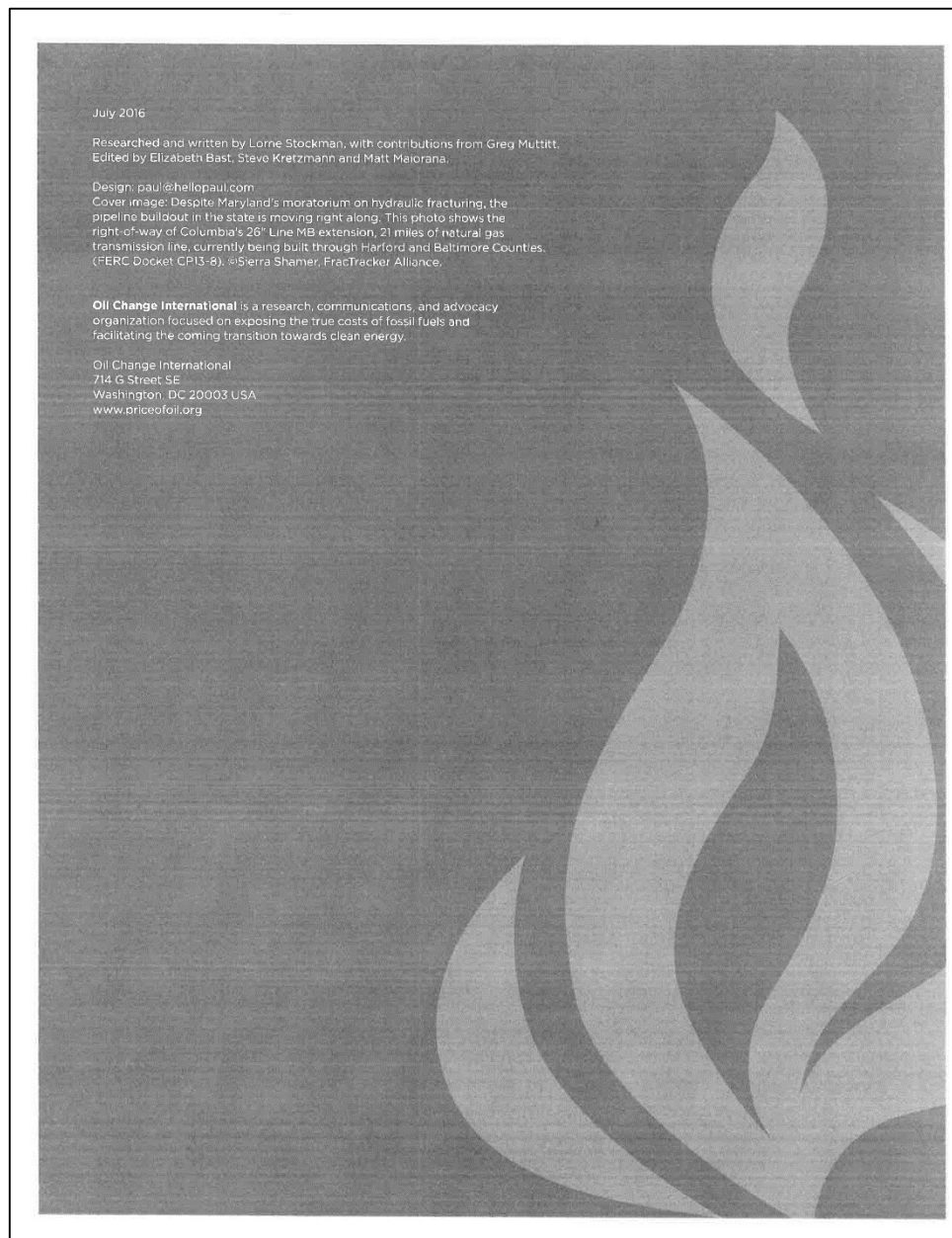
 Appalachian
Voices

Companies/Organizations Comments

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont'd)

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COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont'd)

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COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont'd)

EXECUTIVE SUMMARY

"There is such a thing as being too late when it comes to climate change. The science tells us we have to do more."
President Barack Obama, August 2015

This report details the increasing threat to the climate from American natural gas production. We document the emergence of the Appalachian Basin as the key source of projected natural gas production growth in the coming decades. We also identify the proposed pipelines that would enable that growth, and how this gas production would undermine national and global climate goals.

In the early 1990's, many promoted natural gas as a "bridge" to a clean energy future. Despite 25 years of changing economics, technology, and climate science, some in government and industry still believe in this bridge over a gap that no longer exists. This report rebuts the remaining "natural gas as bridge fuel" arguments and recommends constraining gas production by applying a climate test to the permitting of all gas pipeline proposals. Energy policy must align with climate science.

KEY POINTS

- ❑ Current projections for U.S. natural gas production – fueled by the ongoing gas boom in the Appalachian Basin – are not aligned with safe climate goals, or the current U.S. long-term climate target.
- ❑ Any analysis of the need for gas supply must be premised on national and international climate goals, not business-as-usual.
- ❑ Currently there are 19 pending natural gas pipeline projects that will increase the takeaway capacity from the Appalachian Basin and enable a doubling in gas production from the region in the coming decade. Dozens of downstream projects are also planned.
- ❑ With the 40-year plus lifespan of gas pipelines and power plants, new pipelines would lock in unsustainable levels of gas production, as investors and operators will have financial incentive to maximize production once initial investment is complete.
- ❑ Reducing methane leakage is important, but it does not provide a license to grow production.
- ❑ The Obama Administration must work to align FERC and all government agency decisions with safe climate goals. A Climate Test is essential for all decisions regarding fossil fuels: www.climate-test.org
- ❑ It doesn't have to be this way. Clean energy technology is here now, affordable, and ready to meet our needs

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont'd)

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THE APPALACHIAN BASIN IS THE KEY SOURCE OF POTENTIAL U.S. GAS PRODUCTION GROWTH

In the past decade, natural gas production in the Appalachian Basin has experienced unprecedented growth – particularly in the Marcellus and Utica shale formations in Pennsylvania, West Virginia, and Ohio. As a result of the use of hydraulic fracturing (fracking) and horizontal drilling to access previously inaccessible gas formations, gas production from the Appalachian Basin has grown 13-fold since 2009, reaching over 18 billion cubic feet per day (Bcf/d) in 2015.

It is widely expected that production in the Appalachian Basin region will double over current levels by the early 2030s. In 2010, the Appalachian Basin produced just four percent of U.S. gas production, but by 2030 it could provide around 50 percent.

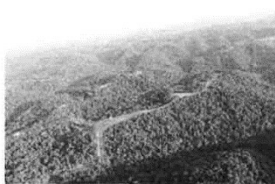
THE PIPELINE RUSH WOULD UNLOCK NEW GAS

To support this planned huge expansion of production, the industry wants to build infrastructure, and in particular, pipelines. Dozens of proposed pipeline projects in the region are currently being considered for permitting by FERC. Of these, there are 19 key pending pipeline projects that would unlock at least 15.2 Bcf/d of production. Building these pipelines would enable the Appalachian Basin to expand production well beyond current levels. All together, these 19 pending pipeline projects would enable 116 trillion cubic feet of additional gas production by 2050.

U.S. GAS PRODUCTION GROWTH IS OUT OF SYNC WITH CLIMATE GOALS

The potential for further growth in gas production represents a major challenge for U.S. climate policy. The Paris Agreement on climate change, signed by 178 nations as of June 2016, establishes the goal of “holding the increase in global average temperature to well below 2°C above preindustrial levels and pursuing efforts to limit the temperature increase to 1.5°C above preindustrial levels.”¹ The current U.S. long-term climate target – which may not be enough to achieve the ‘well below 2 degrees’ goal set in Paris – is an emissions cut of 83 percent from 2005 levels by 2050.²

The U.S. Energy Information Administration’s (EIA) latest projection for U.S. gas supply and demand (Annual Energy Outlook 2016) shows a 55 percent increase in production and a 24 percent increase in consumption by 2040. The difference between the greater rise in production than consumption would go to export, making the U.S. a major exporter of natural gas in the coming decades. This projection also sees U.S. energy-related CO₂ emissions declining only around 4 percent from 2015 levels, in stark contrast to the climate leadership this Administration has strived for.



Cross-country pipe being installed.
©Ed Wade, Wetzel County Action Group,
FracTracker Alliance

COMPANIES/ORGANIZATIONS COMMENTS

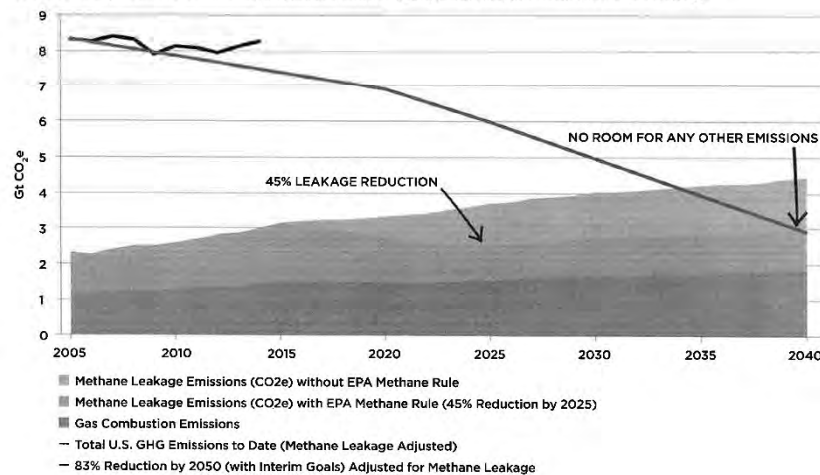
CO31 – Oil Change International (cont'd)

The currently planned gas production expansion in Appalachia would make meeting U.S. climate goals impossible, even if the Administration's newly proposed methane rules are successful in reducing methane leakage by 45 percent. Our calculations show that the rise in gas consumption projected by the EIA would alone lead to emissions that would surpass the current long-term U.S. climate target by 2040, even after accounting for methane leakage cuts. This ignores the emissions from the production (and consumption) of exported gas. In other words, even if gas were the only source of greenhouse gases in 2040, it would still blow the U.S. carbon budget. This makes it clear that the growing use of gas is out of sync with U.S. climate goals (see Figure ES-1).

New gas power plants and pipelines are designed to last at least 40 years. Once the initial capital has been spent on them, they will likely operate even at a loss to the detriment of cleaner sources. It makes more sense to avoid these investments now and instead allow clean energy technologies to fulfill their maximum potential.

When President Obama made the historic decision to deny the Presidential Permit for the Keystone XL pipeline, he did so because, in his words: "America is now a global leader when it comes to taking serious action to fight climate change. And frankly, approving this project would have undercut that global leadership. And that's the biggest risk we face – not acting."⁴

Figure ES-1: Projected U.S. GHG Emissions from Gas Usage & Leakage vs. U.S. 2050 Climate Target
Sources: U.S. Energy Information Administration, Environmental Protection Agency, and the Intergovernmental Panel on Climate Change¹



COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont'd)

RECOMMENDATIONS

Not acting to constrain gas production and consumption to within science-based climate limits is a major risk. The planned gas pipelines in the Appalachian Basin simply cannot be built if the U.S. is to achieve climate goals. Gas pipelines and other fossil fuel projects must be considered in light of climate targets. Specifically:

- ❑ All federal government agencies and departments, including FERC, should apply a climate test in the permitting processes of all fossil fuel infrastructure, including in Programmatic Environmental Impact Statements.
- ❑ No new natural gas pipeline projects should be considered unless they can pass a climate test. The climate test should be applied to all currently pending and future pipeline applications.
- ❑ The EIA should provide detailed guidance in its Outlook reports for U.S. fossil fuel supply and demand under various climate goals, including the nation's long-term climate goal, a 2°C path, and a 1.5°C path.

RENEWABLE ENERGY IS READY

Renewable energy is already set to become the dominant source of new generation, replacing coal and gas with zero-carbon power. In many parts of the U.S., renewable energy is today the lowest-cost and lowest-impact means to add generation capacity to our electricity system. Battery storage and grid management technology are ready to even out the intermittency of wind and solar. Widely held assumptions about the need for fossil fuel baseload power and limits to renewable energy penetration are unravelling fast. It is increasingly clear that the clean energy sector is poised to transform our energy system.

There is nothing standing in the way of building the renewable energy capacity we need to sustain our electricity needs – except maybe the entrenched interests of the natural gas industry. Renewables are the clear choice for future energy production, and natural gas is simply a bridge too far.

U.S. Climate Goals

The U.S. has made a series of international and domestic climate commitments:

- ❑ Paris Agreement (2015): "Holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels";
- ❑ Intended Nationally Determined Contribution pledge (2015): 26-28% reduction in emissions from 2005 levels by 2025;
- ❑ Copenhagen long-term goal (2010): "By 2050, the Obama administration's goal is to reduce U.S. greenhouse gas emissions approximately by 83 percent from 2005 levels".

For the purposes of this report, we have measured against the existing Copenhagen target, which has the virtue of being both long term and specific. Oil Change International believes that the science demands full decarbonization of energy systems as soon as possible, on a trajectory that meets or exceeds internationally agreed upon goals.

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont'd)

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Companies/Organizations Comments

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont'd)

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INTRODUCTION

Both of these myths are countered in this report.

This report details the following:

- ❑ The Appalachian Basin could become the primary source of U.S. gas in the future.
- ❑ Proposed pipelines in the Appalachian Basin would unlock substantial growth in U.S. natural gas production.
- ❑ The surge in natural gas supply associated with these pipelines is entirely out of sync with U.S. climate goals.
- ❑ Renewable energy is ready now to supply U.S. energy needs at competitive cost.

Finally, the report recommends that in order for the U.S. to achieve the climate goals it has set, government agencies must apply a climate test to future infrastructure and policy decisions. The test should be based on prevailing climate science and an understanding of the role of fossil fuel supply on energy markets. In particular, FERC must apply a climate test to gas pipelines and other gas infrastructure that seeks a permit.

On April 22, 2016, over 170 nations signed the Paris Agreement on climate change at the U.N. in New York. Today the number of signatories stands at 178. The U.S. received credit for working with China and other large emitters to seal the deal.

The targets in the agreement aim to keep global temperatures “well below” 2°C and “pursu[e] efforts to limit the temperature increase to 1.5°C above preindustrial levels”. Given the level that emissions have reached in recent years, these targets will require a dramatic effort.

The role of the U.S. in achieving these goals is paramount. As the world's second largest emitter of greenhouse gases (GHGs) and as one of the most prolific sources of fossil fuels in the world, the U.S. will need to coordinate every level of government to play its role in achieving the world's climate goals. With a currently stated national goal to cut emissions by 83 percent from 2005 levels by 2050, the U.S. has no time to waste.

To date, such coordination is sorely lacking. Departments and agencies of the federal government that are responsible for permitting fossil fuel infrastructure are pursuing a business-as-usual approach that neglects climate change as a factor in their decision-making. FERC is one such agency.

FERC is responsible for issuing permits for the construction and operation of interstate natural gas pipelines, among

other things. As the proliferation of frack and horizontal drilling has triggered an unprecedented growth in natural gas production, FERC has issued dozens of permits in recent years to expand and redirect existing pipelines, and plow new pipelines across the country to facilitate further expansion.

In the next few years, the Appalachian Basin could become the epicenter of the pipeline buildout, and FERC stands as gatekeeper to dozens of major projects yet to be permitted. These projects could unleash a massive surge in natural gas production from this region, allowing U.S. natural gas production to aggressively grow at precisely the time that the world needs to constrain fossil fuels of every kind.

At stake is the attainment of U.S. climate goals. Locking in new natural gas infrastructure, with an economic lifespan of at least 40 years, could appropriate all the U.S. emissions budget for natural gas alone. In other words, far from providing a bridge to clean energy, natural gas could undermine the transition that is required for a safe climate future.

At the core of this issue are two myths that have so far been diligently plied by the natural gas industry: 1) that gas is substantially cleaner than coal, and 2) that relentless gas production growth is intrinsic to the clean energy transition and therefore in the public interest.

*Cross-country pipe being installed.
©Samantha Malone, FracTracker Alliance*

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont'd)

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THE APPALACHIAN BASIN IS THE KEY SOURCE OF POTENTIAL U.S. GAS PRODUCTION GROWTH

The Appalachian Basin is defined by the U.S. Geological Survey as stretching from Alabama to Maine, encompassing the majority of the U.S. eastern seaboard.⁵ For the purposes of this briefing, we focus on the centers of natural gas production in the states of Pennsylvania (PA), West Virginia (WV), and Ohio (OH). We use the term Appalachian Basin to encompass the gas production in these three states.

In 2009, dry gas⁶ production from these three states was barely 1.7 Bcf/d. This is only slightly more than the capacity of just one of the larger proposed major pipelines, such as the 1.5 Bcf/d Atlantic Coast Pipeline proposed in Virginia by Dominion Resources and Duke Energy. The nearly 13-fold growth in gas production in the Appalachian Basin since 2009 has primarily come from the emergence of fracking and horizontal drilling in two key geological formations: the Marcellus and Utica.

The Marcellus formation has proved to be America's – and one of the world's – most prolific natural gas formations. Production

is primarily located in northwest West Virginia and southwestern and northeastern Pennsylvania.⁸ Dry gas production from the Marcellus grew from zero in 2006 to nearly 15 Bcf/d in 2015.⁹ In that time, nearly 18 trillion cf of dry natural gas has been extracted, along with nearly 200 million barrels of natural gas liquids (NGLs). Production could more than double to around 33 Bcf/d by the early 2030s.

The Utica formation lies beneath the Marcellus in certain parts of West Virginia and Pennsylvania but is predominantly located in eastern Ohio. Its exploitation only started to gather pace in 2013. Dry gas production has grown from zero in 2010 to nearly 2.6 Bcf/d in 2015. By the end of that year, over 1.5 trillion cf of dry natural gas and over 120 million barrels of NGLs and oil have been extracted from this formation. Gas production in the Utica could reach over 4.5 Bcf/d by the early 2020s.

In total, over 18 Bcf/d of dry gas is produced from the Marcellus and Utica formations today. Rystad Energy projects that

production will double by the early 2030s to over 36 Bcf/d, led by expansion in the Marcellus. Other formations in the region could bring the total dry gas production for the Appalachian Basin to over 37 Bcf/d.

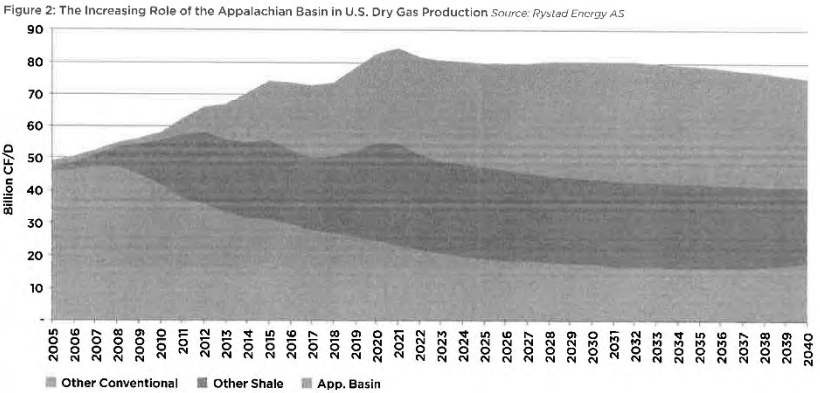
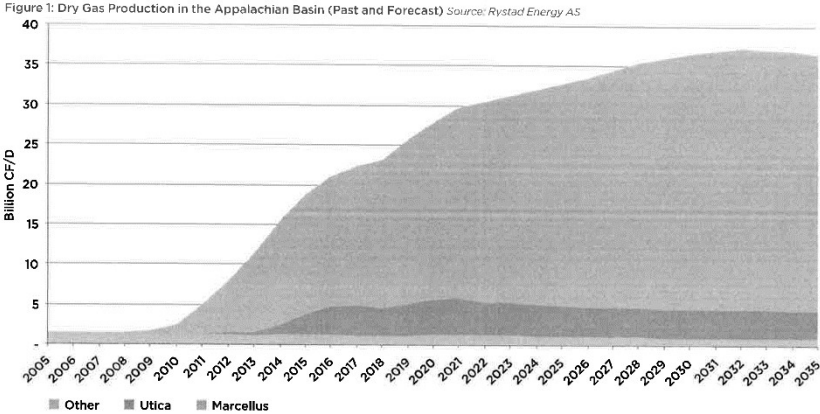
The role of the Appalachian Basin in the potential growth in U.S. gas production cannot be overstated. Figure 2 shows that the region is projected to play an increasingly dominant role in U.S. gas production in the decades ahead. In 2010, the Appalachian Basin produced just four percent of U.S. gas production. At its projected peak in the 2030s, the Appalachian Basin could be supplying around 50 percent.

This production growth cannot be realized without building the pipeline capacity to carry it to market. We calculate that around 15.2 Bcf/d of the anticipated 18.5 Bcf/d production growth cannot go ahead without the pipelines that are currently proposed and under review.

i. This report discusses the impact of dry gas production and dry gas pipelines. While some natural gas liquids (NGLs) are produced in this region, they are beyond the scope of this report. Unless otherwise stated, the figures used refer to dry gas production only. Other sources, such as the EIA Drilling Productivity Report, include data for mixed wet and dry gas production, as production at the well is a combination of these hydrocarbons. Dry gas is separated from liquids in processing plants and transported to market in dedicated pipelines. The expansion of this dry gas pipeline network from the Appalachian Basin is the subject of this report.
ii. The Marcellus formation reaches into New York and Virginia but although pipeline routes travel through these states, there is currently no plan for production in these states.
iii. All gas production data are from Rystad Energy AS.

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont’d)



THE APPALACHIAN BASIN IS THE KEY SOURCE OF POTENTIAL U.S. GAS PRODUCTION GROWTH | 11

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont'd)

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Differing Projections, Similar Conclusions

In this report, we use data from Rystad Energy's UCube database to provide a breakdown of both historical and projected production by geological formation in order to understand the role of the Appalachian Basin in the potential future of U.S. gas production. We also use EIA outlooks for national-level projections.

There are other sources that offer different projections. The future of any hydrocarbon production depends on many factors, including the size of the hydrocarbon resource in the ground, the development of extraction technology, and market prices and policies that may affect prices or costs of development. All projections are based on different assumptions of these factors and must be viewed as projections rather than predictions. Therefore, we do not endorse any particular outlook as being the most accurate, but view all of them as a guide to what could happen.

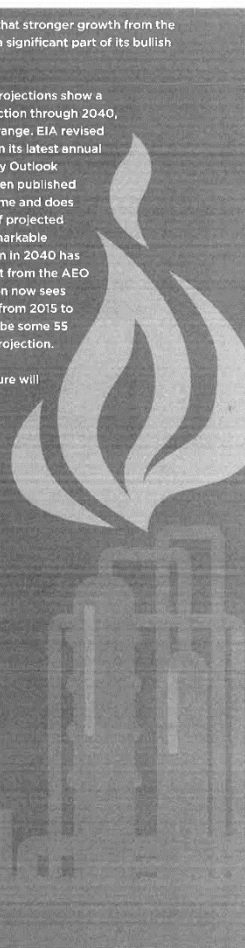
To date, production of oil and gas from U.S. shale formations, in particular gas production from the Marcellus, has repeatedly outperformed projections. Figure 3 is from BP's Annual Energy Outlook 2016 and shows the company's repeatedly revised projections for U.S. tight oil and shale gas production.

The latest projection in the chart (2016) suggests continued very steep growth with U.S. shale gas production reaching around 80 Bcf/d in 2035. This is much greater than the 63 Bcf/d that the Rystad data we have used shows as a peak in U.S. shale gas production in the 2030s. BP does not provide a breakdown

of formations, but it seems likely that stronger growth from the Marcellus and Utica accounts for a significant part of its bullish forecast.

It should also be noted that EIA projections show a steady increase in U.S. gas production through 2040, the last year of the EIA's outlook range. EIA revised up its gas production projection in its latest annual flagship report, the Annual Energy Outlook (AEO). The AEO 2016 has only been published as a limited early release at this time and does not show a regional breakdown of projected gas production. However, it is remarkable that projected U.S. gas production in 2040 has been revised up nearly 20 percent from the AEO 2015 (see Figure 4). The projection now sees gas production rising 55 percent from 2015 to 2040. Production in 2040 would be some 55 percent higher than in Rystad's projection.

No one really knows what the future will bring, but it is clear that without climate policies, U.S. natural gas production is very likely to grow substantially in the coming decades, and the Appalachian Basin is very likely to be at the heart of that growth.



COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont'd)

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Figure 3: BP Outlook 2016, Shale Play Forecasts. Source: BP p.l.c. 2016⁸

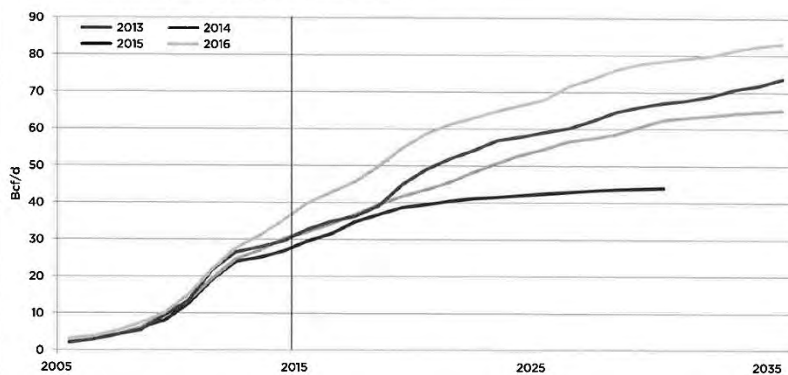
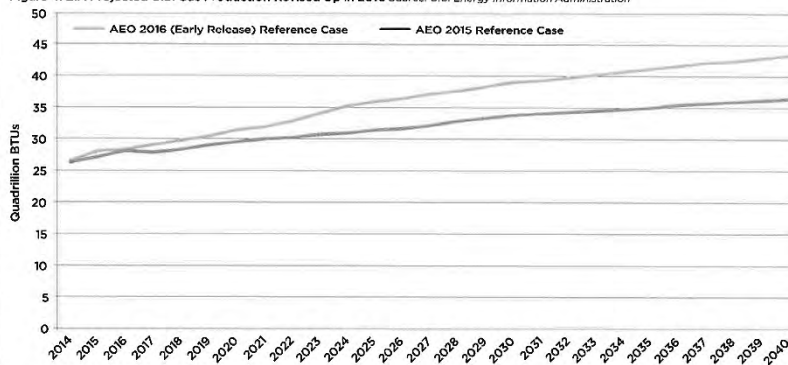


Figure 4: EIA Projected U.S. Gas Production Revised Up in 2016 Source: U.S. Energy Information Administration



THE APPALACHIAN BASIN IS THE KEY SOURCE OF POTENTIAL U.S. GAS PRODUCTION GROWTH | 13

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont’d)

THE PIPELINE RUSH WOULD UNLOCK NEW GAS

How much new capacity is proposed?

There has already been tremendous growth in gas production from the Appalachian Basin. The region was barely producing enough gas to fill one major pipeline in the first decade of the 21st century, and much of this gas was consumed locally. But since 2009, production has grown over 1,000 percent, spawning a wholesale re-plumbing of the pipeline network in the region. In the past, pipelines brought gas into the region, primarily from the Gulf Coast states of Louisiana and Texas. The main interstate pipelines came through the region on their way north, feeding distribution lines on their way.

Our analysis of the pipeline buildup is focused on the climate impact, and therefore we assess only those pipeline projects that add takeaway capacity from the Appalachian Basin. These are sometimes referred to as first mile projects. There are dozens of projects that expand the distribution capacity of the gas pipeline network, but while these broaden the reach of Appalachian Basin gas, these do not in of themselves increase the takeaway capacity from the basin. They therefore may not by themselves enable production growth, which leads to increased climate impact.

There are also proposed pipeline projects for Natural Gas Liquids (NGLs) in this region but we do not deal with these here. Dry gas constitutes the vast majority of the hydrocarbons that are projected to come from the Appalachian Basin.

In 2014 and 2015, eleven major projects, some with multiple phases, were completed, adding around 5.25 Bcf/d of takeaway capacity from the region. All of these involved reversals and/or expansion of existing pipeline systems. Some new pipe was laid, and new compression stations added, but none of these involved creating major new pipeline corridors.

In addition, two projects are currently under construction, and construction on another had started but has since been halted. The larger of the two that are still going forward is the latest expansion of the Rockies Express (REX) pipeline, called the Zone 3 Capacity Enhancement Project. This will add 800 million cf/d by early 2017. The other is a 130 million cf/d supply line that Dominion Transmission Inc. is building to feed southwest Pennsylvania supply into the Lebanon hub in Ohio. This hub supplies gas to various pipelines heading south to the Gulf Coast and west into the Rockies.

The Constitution Pipeline is a new-build project that began construction this spring

but stalled when the New York State Department of Environmental Conservation (NYSDEC) denied the project's Section 401 Water Quality Certification.⁷ The companies involved, led by pipeline giant Williams, have vowed to continue with the project.⁸ If it goes ahead, Constitution will add 650 million cf/d of new takeaway capacity from northeast Pennsylvania.

Waiting on the sidelines are 18 additional major projects that could add nearly 18 Bcf/d to the takeaway capacity from the region. Ten of these projects are expansions and/or reversals of existing pipelines (see Map 1). However, to achieve those expansions some new pipeline will be laid and several new compression stations will be built to increase pressure to enable the flow of additional gas. These ten expansion projects would add over 5.5 Bcf/d of additional takeaway capacity.

Eight of the proposed pipelines are new-build projects forging new pipeline corridors over hundreds of miles (see Map 2). These would add another 12.9 Bcf/d of takeaway capacity. Together with the Constitution Pipeline, there is over 19.1 Bcf/d of takeaway capacity hanging in the balance. Building these pipelines would enable the Appalachian Basin to expand production to its likely maximum potential (see Figure 5).

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont'd)

Table 1: Proposed Pipeline Expansions

Pipeline	Capacity (Million CF/D)	Destination	Status (FERC Docket No.)
Boardwalk Northern Supply Access	384	Texas	FERC Docket CP15-513
Spectra TEAM Gulf Markets 1	250	Texas	FERC Docket CP15-90
Spectra TEAM Gulf Markets 2	400	Texas	FERC Docket CP15-90
NFGS Northern Access 2016	497	New York & Canada	FERC Docket CP15-115
Williams Transco Atlantic Sunrise	1,700	Serves Entire Mid-Atlantic onto Florida	FERC Docket CP15-138
Spectra TEAM Adair Southwest	200	Kentucky	FERC Docket CP15-3
Spectra TEAM Access South	320	Alabama & Mississippi	FERC Docket CP15-3
NFGS Empire North	300	New York & Canada	FERC Docket CP15-115
KM Broad Run Expansion	200	Tennessee, connects to Georgia & South East	FERC Docket CP15-77
CGT WB Xpress	1,300	Connects to U.S. Gulf Coast Systems and Mid Atlantic Markets	FERC Docket CP16-38
Total Capacity	5,551		

Table 2: Proposed New-Build Pipelines

Pipeline	Capacity (Million CF/D)	Destinations	Status (FERC Docket No.)
Spectra Constitution	650	New York	Construction Stalled
CGT Leach Xpress	1,000	Gulf Coast Markets	FERC Docket CP15-514
ETP Rover	3,250	Michigan & Canada	FERC Docket CP15-93
Spectra PennEast	990	Pennsylvania	FERC Docket CP15-558
Spectra NEXUS	1,500	Michigan & Canada	FERC Docket CP16-22
Dominion Atlantic Coast	1,500	Virginia & North Carolina	FERC Docket CP15-554
EQT Mountain Valley	2,000	Virginia	FERC Docket CP16-10
CGT Mountaineer Express	750	Connects to US Gulf Coast	FERC Pre-filing
Williams Transco Appalachian Connector	1,900	Connects to Atlantic Sunrise - Mid-Atlantic and SE as far as Florida	Preliminary Evaluation
Total Capacity	13,540		

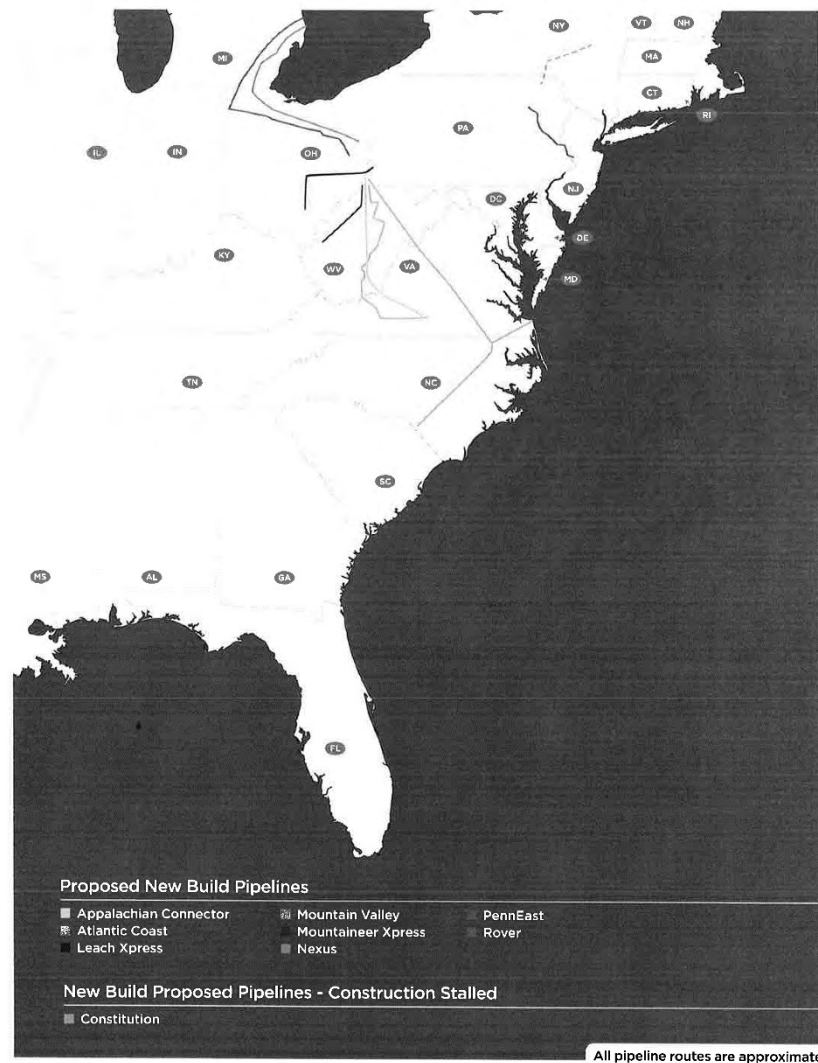
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COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont'd)

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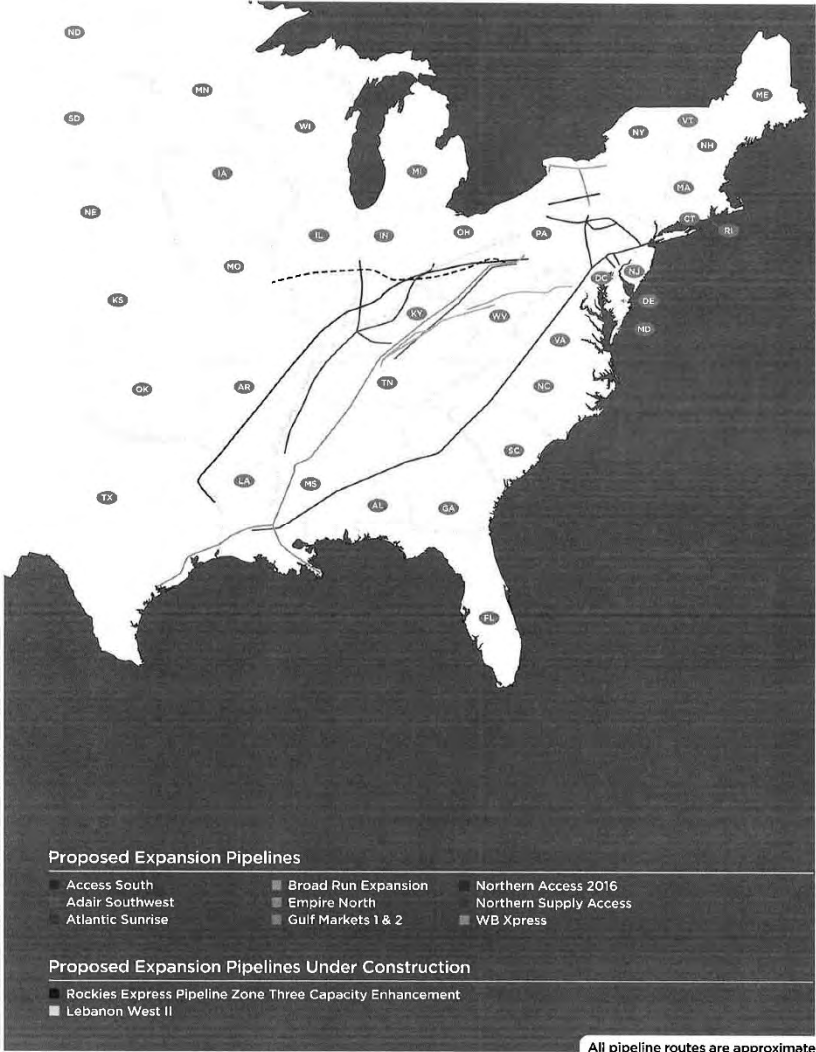
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Companies/Organizations Comments

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont’d)

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COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont'd)

ASSESSING THE CLIMATE IMPACT

A starting point for looking at the climate impact of this pipeline buildout is to estimate how much gas production is enabled by the full realization of all the proposed pipelines.

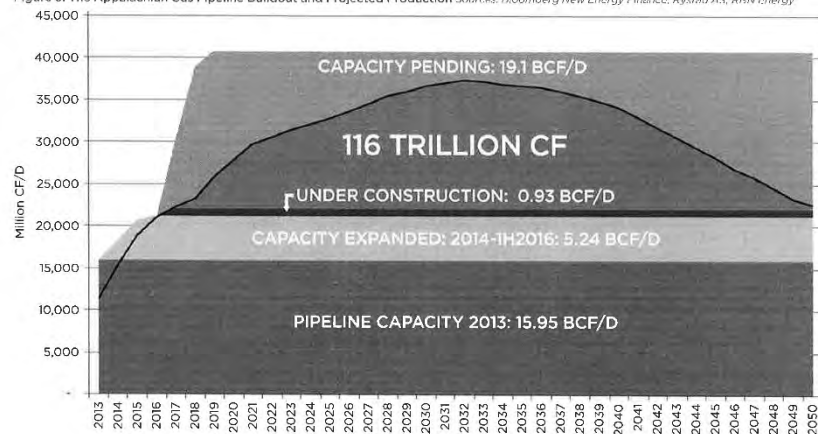
Figure 5 shows the capacity implications of the region's pipeline buildout, including pipelines that are already built, those that are currently under construction, and those yet to break ground. It also shows the Rystad Energy forecast for Appalachian

Basin gas production – in particular, the gray shaded area within the "capacity pending" area shows the total production that would be enabled by the increase in pipeline capacity from currently planned pipelines.

As the chart shows, current pipeline capacity could become full in 2017, constraining projected Appalachian Basin gas production growth to 2050 and beyond. If no new takeaway capacity is

built, production of around 116 trillion cubic feet of potential gas production from now through 2050 would be avoided. New gas drilling in the region would only occur as production from existing wells declines to free up pipeline capacity. Avoiding production of the additional gas would dent U.S. gas production growth and, as we will demonstrate in subsequent sections of this report, could help prevent the U.S. from overshooting its climate goals.

Figure 5: The Appalachian Gas Pipeline Buildout and Projected Production Sources: Bloomberg New Energy Finance, Rystad AS, RBN Energy



COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont'd)

Resistance to Pipelines

Whether these proposed pipelines are new-build projects or expansions of existing infrastructure, many are facing resistance to the appropriation of land for pipeline corridors and/or additional compression stations and other associated equipment. As Map 2 shows, proposed new-build projects are heavily concentrated in West Virginia and Virginia, and resistance is particularly strong in the Allegheny Mountains, where the projects threaten fragile mountain ecosystems, national forests, and the headwaters of the region's rivers.

The threat of eminent domain to force through these pipelines has angered many residents along these proposed routes, and growing resistance to this abuse of a law designed to appropriate land for the public good – not private profit – is increasingly threatening the realization of these plans.



*Citizens resisting the proposed Atlantic Coast Interstate Gas Pipeline through West Virginia and Virginia plant Seeds of Resistance in Nelson County Virginia, June 2016.
©Peter Aaslastad, Oil Change International and Bold Alliance.*

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont'd)

Completed pipeline installation. ©Photo by Ted Auch.

U.S. GAS PRODUCTION GROWTH IS OUT OF SYNC WITH CLIMATE GOALS

Primarily through the development of fracking and horizontal drilling, the U.S. has become one of the largest global producers of oil and gas, rivaling Saudi Arabia and Russia. The recent oil price crash has slowed growth somewhat, but the expectation of an eventual turn in the price cycle would herald a return to the frantic drilling rates seen in recent years.

This potential for further fossil fuel production growth represents a major challenge for U.S. climate policy. The U.S. cannot continue to supply increasing quantities of oil and gas to both domestic and global markets and strive to achieve the goals set by its climate change commitments.

This section examines U.S. climate goals, and the implications of the increase in U.S. natural gas production spurred by growth in the Appalachian Basin.

U.S. CLIMATE TARGETS

In 2010, the U.S. Department of State set goals for U.S. emissions reductions in its "Fifth National Communication of the United States of America Under the United Nations Framework Convention on Climate Change."⁹ The long-term target is for an emissions cut of 83 percent from 2005 levels by 2050.

This goal may not be consistent with keeping warming below 2°C, even if every country cut emissions at equal rates. Equivalent emissions reduction rates raise equity issues given that the

U.S. is responsible for the largest share of historical emissions to date. In other words, to balance the responsibility for emissions more equitably, the U.S. would likely need to cut emissions more dramatically than its current goal to play its role in achieving the Paris Agreement goal of keeping warming well below 2°C.

However, as the 83 percent emissions reduction goal is the current commitment of the U.S. government, we use it here to assess whether rising natural gas production and consumption is in sync with U.S. policy.

The emissions reduction goal set out above has guided the Obama Administration's actions on climate change ever since it was put in place. While current policies are not nearly enough to fulfill the 2050 goal of an 83 percent reduction, the 2025 goal of a 28 percent reduction, which was submitted as the U.S. Intended Nationally Determined Contribution (INDC) to the Paris Agreement process,¹⁰ may be within grasp if policies such as the Clean Power Plan (CPP) and vehicle efficiency standards (CAFE) reach their full potential.

However, cheap, abundant natural gas may lead to a lock-in of infrastructure that would undermine attainment of the more dramatic cuts required after 2025.

NATURAL GAS CONSUMPTION AND THE U.S. CLIMATE GOAL

The most commonly used energy forecast in the U.S. is the Reference Case produced

by the EIA in its Annual Energy Outlook (AEO). The EIA's Reference Case is based on a model that freezes energy policy at the time the report is produced and has a very cautious approach to technological and behavioral change. In other words, it is not meant as a forecast for how energy flows will necessarily pan out (although it is often treated as such), but rather a projection of how energy flows might look if all current policies and expectations of technology change remain static.¹¹ As the projections span 25 years, it is extremely unlikely that major changes would not take place.

However, the Reference Case serves a purpose of indicating what the future will look like should we stop innovating both technology and policy. When it comes to addressing climate change, the EIA Reference Case shows how much more we need to do to prevent catastrophe.

For the purposes of assessing whether we can expand natural gas production and consumption and still meet our climate goals, the EIA Reference Case is useful because it approximately matches growth goals of the gas industry.

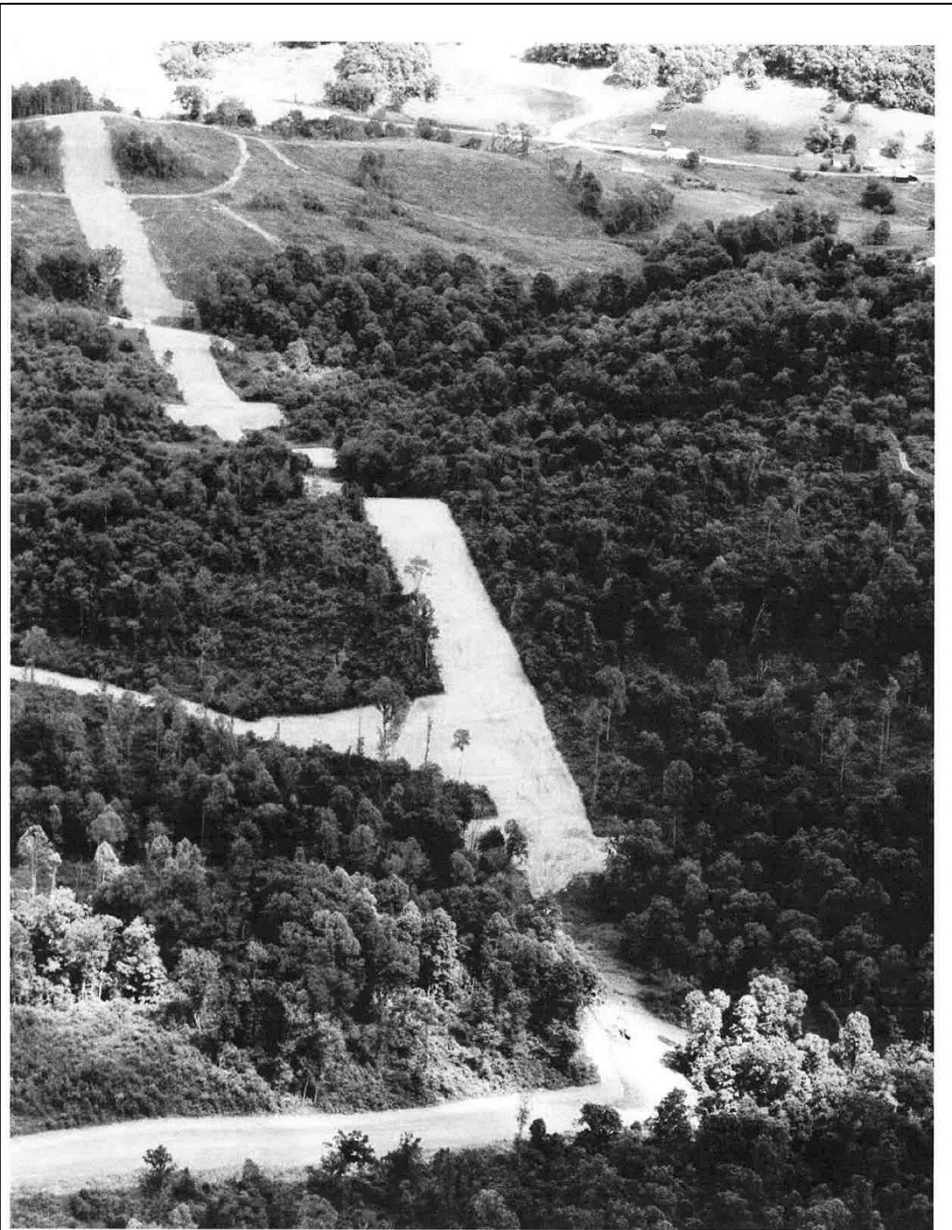
Figure 6 shows the AEO 2016 (Early Release)¹² Reference Case projections for natural gas production and consumption in the U.S. Production is expected to increase 55 percent between 2015 and 2040, while consumption is seen increasing 24 percent in the same period. The difference between production and consumption is accounted for by exports. The U.S. was a net zero

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COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont'd)

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Companies/Organizations Comments

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CO31 – Oil Change International (cont'd)

Figure 6: Projected U.S. Gas Production and Consumption in the AEO 2016 Reference Case Source: U.S. Energy Information Administration

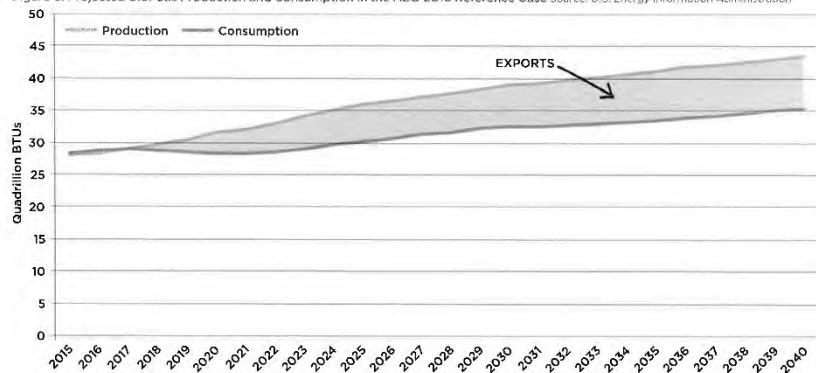
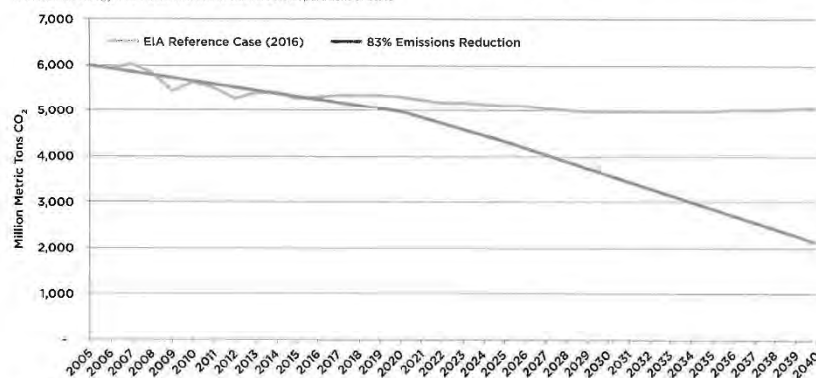


Figure 7: U.S. Energy-Related Greenhouse Gas Emissions in AEO 2016 versus U.S. Climate Goal^{iv} Source: U.S. Energy Information Administration & U.S. Department of State



exporter in 2015, but could be exporting as much as nine trillion cubic feet in 2040, according to these projections.

The Reference Case also shows that if U.S. consumption of fossil fuels does follow the trajectory that the projections suggest, U.S. emissions reductions goals will be missed by an order of magnitude. Using energy-related emissions only, the Reference Case suggests that emissions could be only around 15 percent below 2005 levels in

2040, or around four percent less than in 2015. It is worth noting that the AEO 2016 Reference Case does include the impact of implementing the Clean Power Plan (CPP), the key power sector climate policy being pursued by the current administration. The CPP is projected to reduce emissions in 2040 by around eight percent compared to business as usual. However, as Figure 7 clearly shows, the U.S. would still be dramatically off course in reaching its climate goals. The difference is stark.

Emissions in 2040 are nearly 140 percent higher in the Reference Case than they would need to be to stay on course with the 2050 U.S. climate goal.

The increase in natural gas production and consumption is not the only reason emissions in the Reference Case are so far from the U.S. climate goal. But it is one part of a wider failure to reign in fossil fuels that the Reference Case clearly illustrates.

^{iv} U.S. climate goal percentage reduction is equally applied to energy as to other GHG sources, i.e. 83% from 2005 to 2050.

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont'd)

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NATURAL GAS DOES NOT PROVIDE NEEDED CLIMATE BENEFITS

For rising natural gas production and consumption to fit into a scenario of rapidly declining GHG emissions, natural gas would need to be a significant enabler of substantial emissions reductions.

The natural gas industry claims that natural gas replaces coal, leading to reduced emissions. But there is increasing evidence that not only has the past role of natural gas in emissions reduction been exaggerated, but that future natural gas consumption growth could account for more emissions than the U.S. climate goal allows for, even if emissions from all other sources are mitigated.

To assess the climate impacts of new natural gas infrastructure, several facts should be considered:

- ❑ When methane leakage is considered, natural gas can be equally or more polluting than coal.
- ❑ Reducing methane leakage is very important, but it does not provide a license for production growth.
- ❑ Even with zero methane leakage, replacing an old coal plant with a new natural gas plant may reduce emissions in the immediate term, but will lead to a net increase in aggregate CO₂ emissions if the gas plant is still emitting CO₂ decades after the coal plant would have been retired.

THE EFFECTS OF METHANE LEAKAGE ARE SIGNIFICANT

Dry gas is almost pure methane (CH₄). When combusted, the greenhouse gas emitted is carbon dioxide (CO₂), the same as with coal and oil. In general, the CO₂ emissions associated with gas combustion are lower per unit of energy produced than with coal and oil.

But if methane is vented directly to the atmosphere without combustion, the global warming potential of that gas in the atmosphere is pound-for-pound much greater than CO₂. For this reason, methane leaks occurring during the production, processing, transportation, and storage of gas can substantially increase its climate impact.

The fifth report (AR5) of the Intergovernmental Panel on Climate Change (IPCC) updated the global warming potential of methane compared to CO₂. Two figures are most often quoted for the potential – a 100-year figure and 20-year figure – which refer to the potential of the gas to force temperature change over the given time span. Methane has a shorter life span in the atmosphere than CO₂, but a much higher impact. The AR5 put the 20-year impact of methane at 86 times that of CO₂, and the 100-year impact at 36 times.

The methane leakage rate during the production, processing, transportation,

and storage of gas is central to assessing the climate impact of gas use. Independent analysis suggests that average US conventional gas leakage are between 3.8% and 5.4 % of total production, while shale gas leaks at roughly 12%. Both rates would put the climate impact of gas on par with, or much greater than, coal.¹³

In recognition that methane leaking from the oil and gas sector is a crucial issue to be addressed, in March 2016 President Obama announced an initiative with Canada to cut methane leakage from the two countries' oil and gas sectors by 45 percent.¹⁴ If it can be implemented – the American Petroleum Institute threatened to sue¹⁵ – this initiative would be a good start to reducing the impact of existing natural gas supply.

However, although crucially important, we will see in the next section that reducing methane leakage does not provide room in the carbon budget to increase natural gas production.

CLIMATE IMPACTS OF RISING GAS PRODUCTION OUTWEIGH METHANE MITIGATION

The idea of natural gas as a 'bridge' to a low carbon future is a much-used talking point for the industry and its supporters, but study after study has examined the issue to find that increasing gas-fired power generation can only at best shave a couple of percentage points from overall emissions

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont'd)

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Companies/Organizations Comments

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont'd)

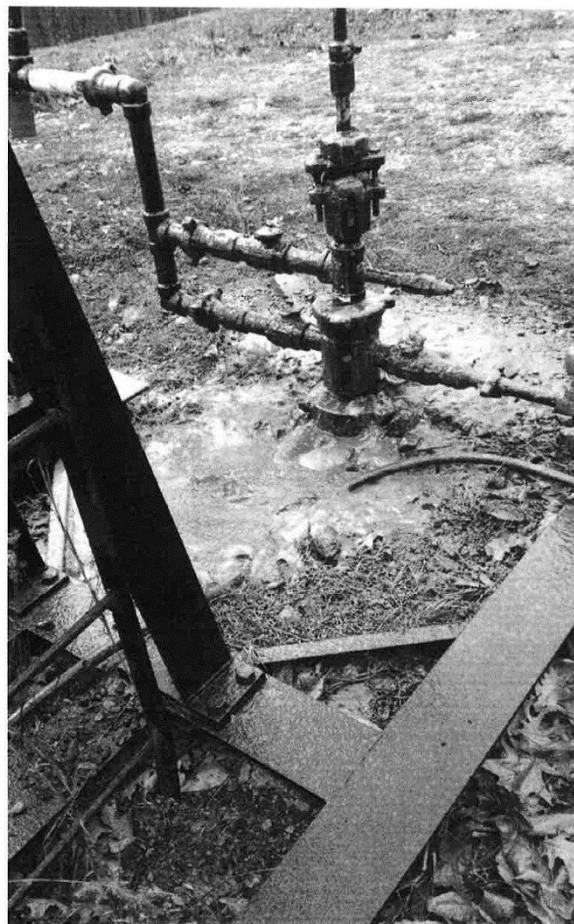
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Loyalsock State Forest, Flyover -
PA 2013. ©Pete Stern.

rates, and may undermine the transition to clean energy entirely. One of the problems is that rising gas use does not only displace coal; it also displaces zero-carbon energy.

For example, a Stanford University study published in 2013 used a variety of modeling tools to estimate the "emissions and market implications of new natural gas supplies."¹⁰ The study found that none of the six modeling systems they sampled showed a significant reduction in U.S. emissions as a result of rising gas use up to 2050. The authors concluded that "[s]hale development has relatively modest impacts on (emissions), particularly after 2020. Over future years, this trend towards reducing emissions becomes less pronounced as natural gas begins to displace nuclear and renewable energy." In general, the models used found that higher gas supplies lowered prices for gas and increased primary energy demand, leading to higher emissions in the 2050 projections than in the lower gas supply scenario.

Another study from different researchers at Stanford together with U.C. Irvine found that cumulative U.S. GHG emissions from 2013 to 2055 were a mere 2% lower in a high gas supply scenario compared to a low one.¹¹ They found that without strict climate policies, increased natural gas supply would not only reduce coal-fired generation but renewable energy generation as well. Similar to the EIA Reference Case, this leads



Contamination caused by an oil and gas well failure. ©FracTracker Alliance

to U.S. power sector emissions in 2050 that are barely less than they are today. They also found that methane leakage rates from zero to three percent made little difference to the overall result. Once again, in this study the effect of higher gas supplies is

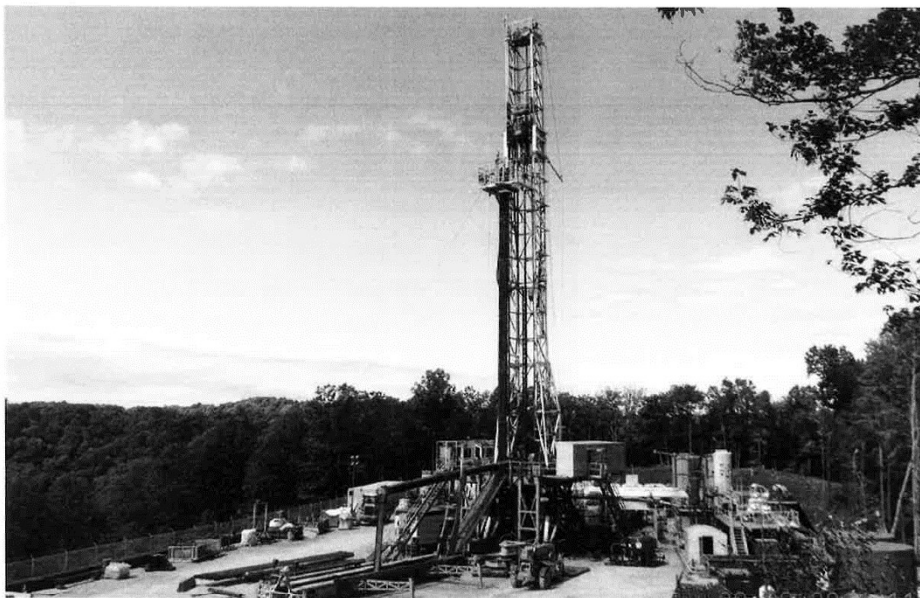
to reduce renewable energy market share and maintain unsustainable levels of CO₂ emissions.

Most recently, a study out of Oxford University examined the '2°C Capital Stock'

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont'd)

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Statoil Kuhn Well Pad, West Virginia. ©FracTracker Alliance

to see how close the world is to building the electricity generation infrastructure that, if utilized to the end of its economic life, would take the world past the 2°C goal.¹⁸ The disturbing conclusion they came to is that we will be there in 2017. Those researchers used a 50-50 chance of staying below 2°C, in the climate model simulations, which we consider highly risky given the consequences of crossing the 2°C threshold.¹⁹ The authors conclude that “[p]olicymakers and investors should question the economics of new long-lived energy infrastructure involving positive net emissions.”

The paper raised an important point about replacing coal plants with gas, particularly when the coal plant is due to retire within a decade or so. In the case of a coal plant with ten years of economic life left, shutting the coal plant early and replacing it with a gas-fired generator may cut emissions in half (assuming no methane leakage) for those first ten years. But when the gas plant’s economic life is 40 years, the cumulative

emissions from the gas plant are in fact double those from ten years of operating the coal plant. This is because the gas plant would emit half as much CO₂ per year, but for forty years rather than ten.

The nature of the climate problem is that it is the total cumulative emissions that matter. Once we have filled the atmospheric space with CO₂, there is no turning back. As we enter a period in which we have just a few decades at best to decarbonize, it is time to seriously question any investment in infrastructure that does not clearly and dramatically reduce emissions.

RIISING U.S. GAS CONSUMPTION MAKES MEETING U.S. CLIMATE GOALS IMPOSSIBLE

Using the EIA’s current Reference Case as a starting point, we calculate that emissions from projected U.S. natural gas consumption growth would more than overshoot U.S. climate goals. In other words, even if the U.S. reduced all coal and

petroleum use to zero by 2040, the U.S. would still exceed its climate goals based on natural gas emissions alone.

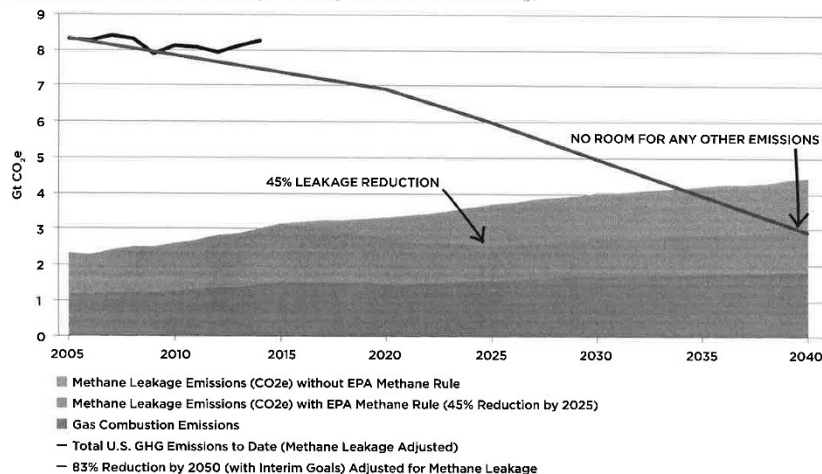
This is even more concerning in light of the fact that the projections factor in the methane leakage reduction goals recently proposed by the EPA. This means that even under reduced methane leakage rates, U.S. gas demand must decline over the next 25 years in order to meet climate goals. This is in stark contrast to both EIA projections and the ambition of the gas industry, which is focused on massive production growth primarily centered on the Appalachian Basin.

Figure 8 shows our estimate of emissions from gas consumption and methane leakage, together with the trajectory of the U.S. climate goal to cut emissions 63 percent from 2005 levels.²⁰ It is clear that methane leakage plays a very large role in the emissions associated with gas consumption and that reducing leakage can cut emissions dramatically. However, our calculations show that the rise in gas

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont'd)

Figure 8: Projected U.S. GHG Emissions from Gas Usage & Leakage vs. U.S. 2050 Climate Target Sources: U.S. Energy Information Administration, Environmental Protection Agency, and the Intergovernmental Panel on Climate Change³⁸



consumption alone projected by the EIA would lead to emissions from gas that would surpass the current long-term U.S. climate target by 2040, even after accounting for methane leakage cuts. This ignores the emissions from the production (and consumption) of exported gas.

Even if natural gas were the only source of greenhouse gas emissions in 2040 (and there were zero emissions from coal, oil, cement, and all other sources), the U.S. would still blow its carbon budget. This makes it clear that the growing use of gas is out of sync with U.S. climate goals.

About Figure 8:

We used leakage rates of 3.6%, which is the low end of estimates of gas leakage in production from Howarth 2015. Those rates are then reduced 45% under the EPA rule, which we treat as phased in on a straight line from 2015 to 2025.

We have adjusted the EPA's GHG totals to be comparable with the natural gas emissions, by replacing its (low) estimates of methane leakage from natural gas production. As well as understating the volumes (compared to other recent assessments), the EPA used the 100-year global warming potential (GWP) of methane, which is much lower than the 20-year GWP because though potent, methane is short-lived.

We have used the 20-year GWP because whereas CO₂ accumulates in the atmosphere over the long-term, the impact of methane is felt in the short term; according to the latest climate science, the impact of short-lived GHGs is related more closely to their annual emissions than their cumulative emissions - and is most significantly felt at the time of peak CO₂ concentrations. In this respect the shorter-range GWP is the relevant measure.

(For further discussion see IPCC SAR WG1 sec 3.2.5.4, p.1108, http://ipcc.ch/pdf/assessment-report/ar5/wg1/WGIAR5_Chapter12_FINAL.pdf and sec 8.7.1.12, pp.711-712, http://ipcc.ch/pdf/assessment-report/ar5/wg1/WGIAR5_Chapter08_FINAL.pdf.)

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont'd)

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RENEWABLE ENERGY IS READY

As renewable energy evolves, natural gas-fired power generation increasingly competes not only with coal, but with renewable energy as well. If the abundance of natural gas locks in natural gas power capacity that renewable energy could have filled, the net increase in GHG emissions is vast. As the world looks for ways to reverse emissions growth and move as rapidly as possible towards zero carbon, building new gas capacity where zero-carbon technology is possible is a clear disaster for our climate.

The idea that we need to increase gas-fired generation now because renewable energy is not yet ready is rapidly losing what little validity it ever had. In many parts of the United States and the world, renewable energy is today the lowest cost and lowest impact means to add generation capacity to our electricity system.²¹ There is nothing standing in the way of building the renewable energy capacity we need to sustain our electricity needs except the entrenched interests of the natural gas industry.

The past decade has seen an accelerating transformation of the renewable energy sector, and innovation and evolution in the sector is far from over. In the coming decade, we can only expect greater economies of scale and more transformational technology.

The rapid growth in first wind, then solar, and now efficiency and battery storage, suggests an imminent transformation of our energy landscape. There is now little doubt that the future will be powered by clean energy. We now need to accelerate the transformation in line with our climate goals.

Solar: The U.S. solar energy sector grossed over \$22.6 billion in 2015, a 21 percent increase over 2014, and 174 percent greater than in 2011.²² This revenue growth is all the more remarkable given that costs have declined 80 percent since 2008.²³ Installed solar capacity totaled 27 GW in 2015, and is expected to grow at least fourfold by 2022.²⁴ Small-scale solar could attract around \$10 billion of investment per year over the next 25 years in the U.S. alone.²⁵

Globally, the amount of electricity produced by solar power has doubled seven times since 2000.²⁶ As Tom Randall at Bloomberg Business puts it, "(t)he reason solar-power generation will increasingly dominate: It's a technology, not a fuel. As such, efficiency increases and prices fall as time goes on."²⁷

Wind: U.S. wind enjoyed revenue growth of 75 percent in 2015 despite tax structure uncertainty that was finally resolved at the end of the year. Costs have fallen 50 percent since 2009.²⁸ Onshore wind is at cost parity with new-build gas in many parts of the country and is set to reach cost parity in all parts of the country by 2025.²⁹

The CEO of wind generator giant Vestas recently told investors in London that the next wave of growth for the sector will be in 'repowering' retiring equipment with new more powerful and efficient turbines.³⁰ This signals a maturing industry set to increase market share through technology improvements.

Efficiency and Flattening Demand: Increasing energy efficiency is reducing the demand for electricity in America. Bloomberg New Energy Finance (BNEF) recently reported that, "The past five years in the US have seen a fundamental decoupling between electricity demand, on the one hand, and population and GDP, on the other. Looking across the next 25 years, we anticipate this trend to continue." The BNEF New Energy Outlook 2016 projects that U.S. electricity demand will likely peak in 2022, even with robust electric vehicle growth providing one of the few remaining drivers of power demand growth. This means that new generation capacity will in most cases replace retiring capacity, providing an opportunity to dramatically reduce emissions through switching from coal and gas to renewable energy.

Storage and Batteries: The U.S. energy storage sector grew tenfold in 2015, generating over \$730 million in revenues.³¹ All indications are that energy storage is poised to change the energy sector forever. Primarily driven by demand for electric

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont'd)

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vehicles, lithium-ion battery costs fell 65 percent from 2010 to 2015.¹² Further cost declines and performance improvements are widely expected, with some estimating a further 60 percent cost decline by 2020.¹³

The next areas of market penetration are likely to be utility-scale storage as well as residential- and commercial-scale applications for both supporting solar generation and balancing demand from the grid. Tesla's PowerWall battery is likely to be just one of many products on the market designed for storing energy for use in buildings by the early 2020s. The company's 'Gigafactory' is soon to be followed by several others already under construction in the U.S. and China. According to Navigant Research, global new installed energy storage systems for renewable energy integration power capacity is expected to grow from 196.2 MW in 2015 to 12.7 GW in 2025, a 65-fold increase in ten years.¹⁴

BNEF projects exponential growth in what it calls 'behind-the-meter' storage - batteries supporting solar energy systems and demand balancing in homes and commercial buildings. Globally, this use of batteries could grow from 400 megawatt-hours today to 760 gigawatt-hours by 2040.¹⁵

Clean Energy Jobs: The clean energy sector is also breaking barriers when it comes to

Solar voltaic panels. ©Associated Press



COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont'd)

job creation. The International Renewable Energy Agency reported that 2015 saw clean energy jobs surpass oil and gas for the first time. The global clean energy workforce grew 5 percent in 2015 to reach 8.1 million workers, and is expected to triple to 24 million by 2030.³⁶

AVOIDING LOCK-IN

Looking ahead, it is increasingly clear that renewable energy will be the least-cost option for new generation capacity, with costs continuing to decline while the cost of gas-fired power increases. In other words, expanding gas-fired power today threatens to lock in an increasingly expensive source of power when cheaper, cleaner renewable energy will be available to meet our energy needs. The latest data and projections from BNEF illustrate this point.

According to BNEF's New Energy Outlook 2016, wind and solar power are already competitive with low-priced gas in certain markets in the U.S., where both renewable resources are abundant and state policies are favorable.³⁷

However, as we move into the next decade, the unsubsidized cost of clean power across the country will become cheaper than new-build gas power, which requires new capital, but it will not yet be cheaper than the cost of existing gas-fired power plants where capital has already been sunk.³⁸ This demonstrates the danger of locking in more gas-fired power than is optimum in the coming decade.

Existing power plants are in a position to reduce their selling price to compete, even if it means making a long-term loss on capital. This is because once capital is sunk, it is better to keep operating as long as revenue covers operating costs. Any additional revenue generated above operating cost reduces the loss on capital. Therefore, new utility-scale renewable energy projects will face stiff competition from existing gas-fired power plants until installation capital costs become low enough that they can undercut existing gas plants and still provide a return on capital.

As natural gas prices are likely to rise over time (gas being a finite resource), renewable energy plants will eventually reach a point when they will price out even existing

plants. However, when it comes to meeting climate goals, it is imperative to keep in mind the urgency of the problem and the danger of locking in polluting infrastructure now.

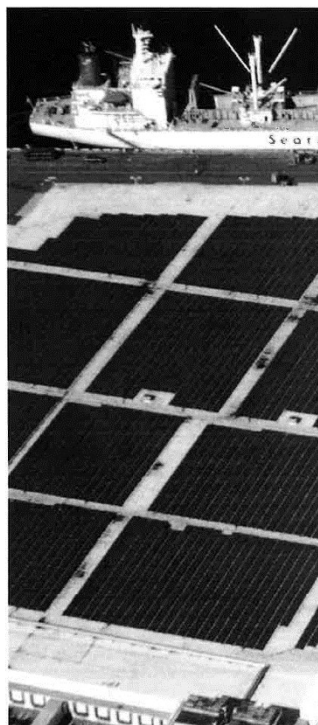
As gas-fired power plants and pipelines built today generally have a design life of around forty years, gas infrastructure built over the next decade could be operating in the 2050s and beyond. It is imperative that we avoid locking in emissions today that we cannot afford to emit in the later part of the infrastructure's economic lifespan.

INTERMITTENCY, BASELOAD, AND STORAGE ARE NOT BARRIERS TO RENEWABLE ENERGY GROWTH

Much is made by fossil fuel proponents of the intermittency of wind and solar and the need for some breakthrough in energy storage before we can give up on fossil fuels and substantially increase levels of renewable energy generation. These solutions are sometimes said to be decades away. These arguments do not reflect either the reality of renewable energy today or where it is heading.

Wind and solar energy provided 6.2 percent of total power generated in the U.S. in the past year.³⁹ All renewable generation, including wind, solar, geothermal, biomass, and hydro, hit close to 15 percent of generation.⁴⁰ A 2012 report by the National Renewable Energy Laboratory that extensively examined high-penetration renewable energy scenarios for the U.S. found that by better managing existing dispatchable power and storage capacity, the U.S. grid can handle as much as 50 percent wind and solar penetration and still keep the grid balanced.⁴¹

Advances in grid management are reducing intermittency issues associated with increasing wind and solar penetration. Wind and solar tend to have complimentary cycles of power availability. Solar power obviously tracks the sun in peaking around the middle of the day. Offshore wind tends to log higher generation during the day as well, whereas onshore wind tends to ramp up around dusk and peaks during the night. Greater penetration of diverse renewable energy technologies is a solution to intermittency rather than a source of it.



One analyst explains this using the Law of Large Numbers, in which a larger number of variables—in this case weather and diurnal dynamics at widely dispersed locations—tend to result in less volatility across the whole.⁴² Sophisticated algorithms, similar to those used to manage online advertising, are increasingly being used to predict wind and solar dynamics and facilitate grid management in areas of high renewable energy penetration.⁴³

The increasing ability to manage grid dynamics with high renewable energy penetration has also undermined another standard talking point of fossil fuel proponents: that renewable energy cannot provide reliable baseload power, which can only be supplied by fossil fuel and nuclear

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont'd)

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Solar voltaic panels. ©Associated Press

plants. Earlier this spring, top executives at the world's largest grid operator, China State Grid Corp., told a stunned audience of fossil fuel executives at an industry conference in Houston that, "coal-fired generators could only serve as 'reserve power' to supplement renewables", and that "[t]he only hurdle to overcome is 'mindset'. There's no technical challenge at all."⁴⁴

Evidence from China and Australia shows that coal is indeed increasingly serving as reserve power. Some coal plants in those countries are running at barely 50 percent utilization, and in some cases even less.⁴⁵ Grid operators are increasingly using thermal power plants, where operating costs are relatively high due to fuel costs,

to supplement other sources rather than as baseload. Sven Teske, an analyst with the Institute for Sustainable Futures in Sydney states that "[b]ase load is not a technical concept, it is an economic concept and a business concept of the coal industry that is no longer feasible."⁴⁶ According to Teske, the focus of grid operators will move toward renewable energy, flexible generation, demand management, and energy efficiency.

These factors point to the ability of the U.S. electricity system to absorb increasing levels of renewable energy penetration before a substantial increase in storage will be needed. Nevertheless, the development of affordable storage solutions is happening at a rapid pace. As detailed above, both

utility-scale and 'behind-the-meter' storage solutions are set to exponentially increase their market penetration over the next decade. The age of affordable power storage is upon us.⁴⁷

Essentially, the issue of how much renewable energy can be absorbed into the grid has been solved. It is now up to the industry to invest in genuine clean energy and for government to forge policies that support the speediest transition possible.

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont'd)

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CONCLUSION AND RECOMMENDATIONS

The development of new and expanded gas pipelines out of the Appalachian Basin could unlock significant new flows of natural gas. These pipelines would drive an increase in U.S. gas production that would be incompatible with achieving stated climate goals.

Enabling U.S. gas demand to follow the current projection in the EIA Reference Case (2016) would lead to emissions from gas alone that would surpass the U.S. emissions goal by 2040. In other words, the current trajectory of gas production and demand is out of sync with the nation's climate goals and must be constrained.

Data presented in this report shows that the vast majority of projected gas production growth would likely come from the Appalachian Basin, but this can only happen if the pipeline projects listed in this report go ahead. That should not be allowed to happen.

The surge in gas-fired power generation that would accompany this production growth is not an inevitable or needed feature of our nation's future power market. Clean energy technologies are surging ahead at this time and are projected to become a leading source of energy in the coming decade. Our electricity grid is set to be transformed into a system based on diverse and flexible generation sources,

storage solutions, and advanced grid management. Total power demand is set to decrease even as electric vehicles grow to become a major new source of demand. Now is the time to question the need and impact of new fossil fuel infrastructure and plan an energy future that is in sync with climate science.

When President Obama made the historic decision to deny the Presidential Permit for the Keystone XL pipeline, he did so because, in his words: "America is now a global leader when it comes to taking serious action to fight climate change. And frankly, approving this project would have undercut that global leadership. And that's the biggest risk we face – not acting."⁴³

Not acting to constrain gas production and consumption to within science based climate limits is a major risk we face. This and future administrations have the ability to apply the same standard to gas infrastructure what was applied to the Keystone XL pipeline. That means applying a climate test to these proposed gas pipelines and all proposed fossil fuel infrastructure. A climate test would assess the need for new fossil fuel infrastructure against science-based climate goals.

The challenge to meet the Paris Agreement's goals of keeping average global warming well below 2°C and

pursuing a 1.5°C target cannot be met if a business-as-usual policy continues to permit an expansion of fossil fuel supply. For this reason, every government agency should apply a climate test if it is faced with any decision that could increase fossil fuel supply. FERC, which authorizes the construction and expansion of interstate natural gas pipelines, cannot be exempt from this requirement.

Recommendations:

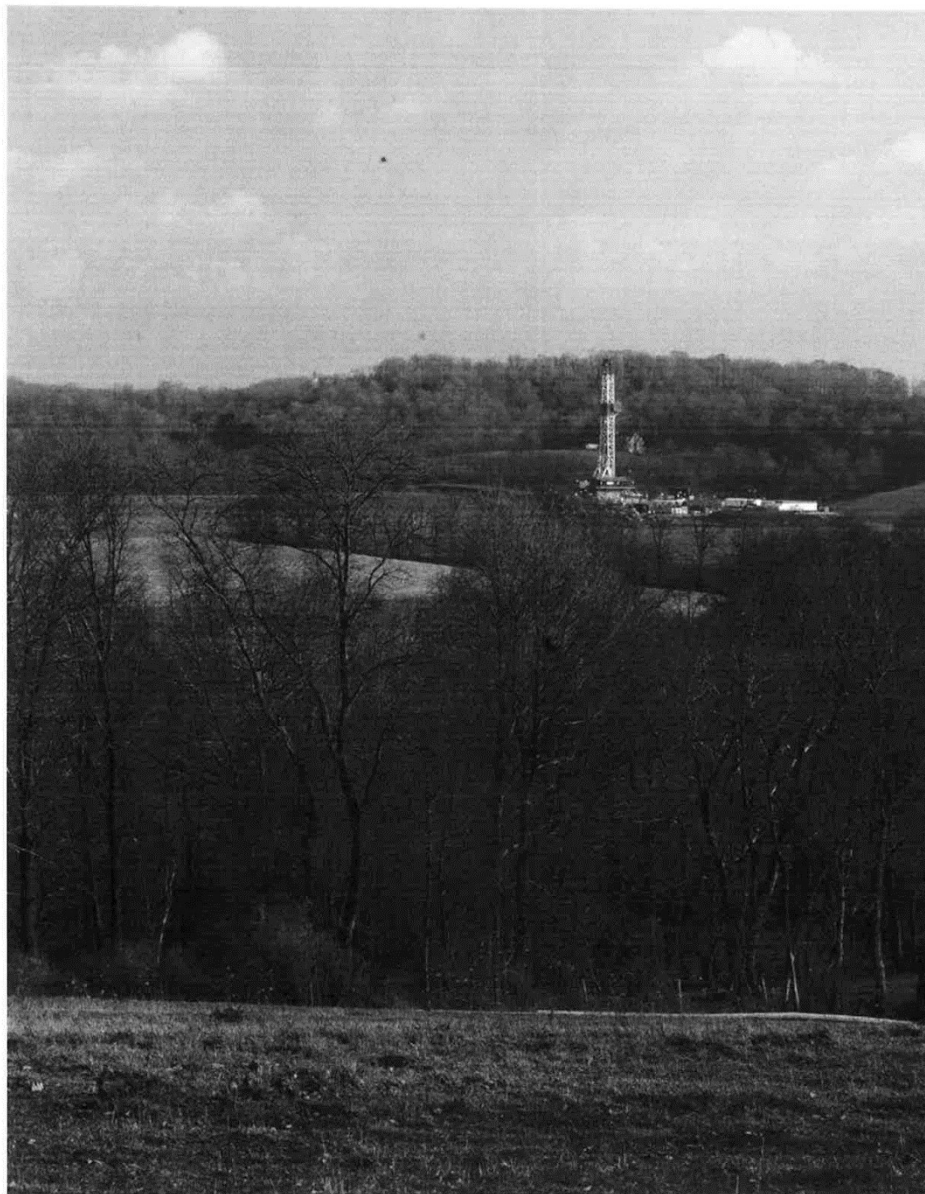
- ❑ All federal government agencies and departments, including FERC, should apply a climate test in the permitting processes of all fossil fuel infrastructure, including Programmatic Environmental Impact Statements.
- ❑ No new natural gas pipeline projects should be considered unless they can pass a climate test. The climate test should be applied to all currently pending and future pipeline applications.
- ❑ The EIA should provide detailed guidance in the form of alternative cases in its Outlook reports for U.S. fossil fuel supply and demand under various climate goals, including the nation's long-term climate goal, a 2°C path, and a 1.5°C path.

Rig PA. ©Schmerling, FracTracker Alliance

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont'd)

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Companies/Organizations Comments

COMPANIES/ORGANIZATIONS COMMENTS

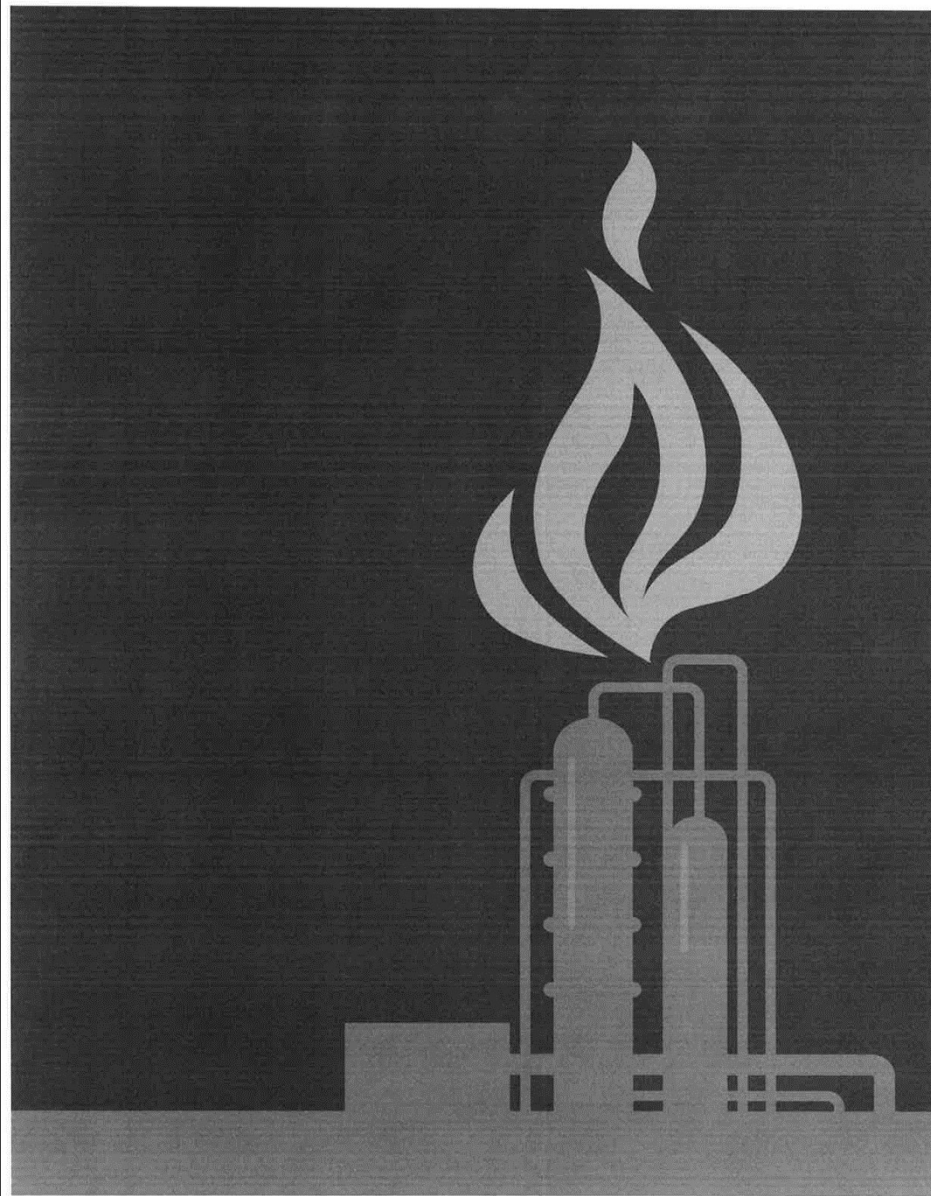
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COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont'd)

R-442

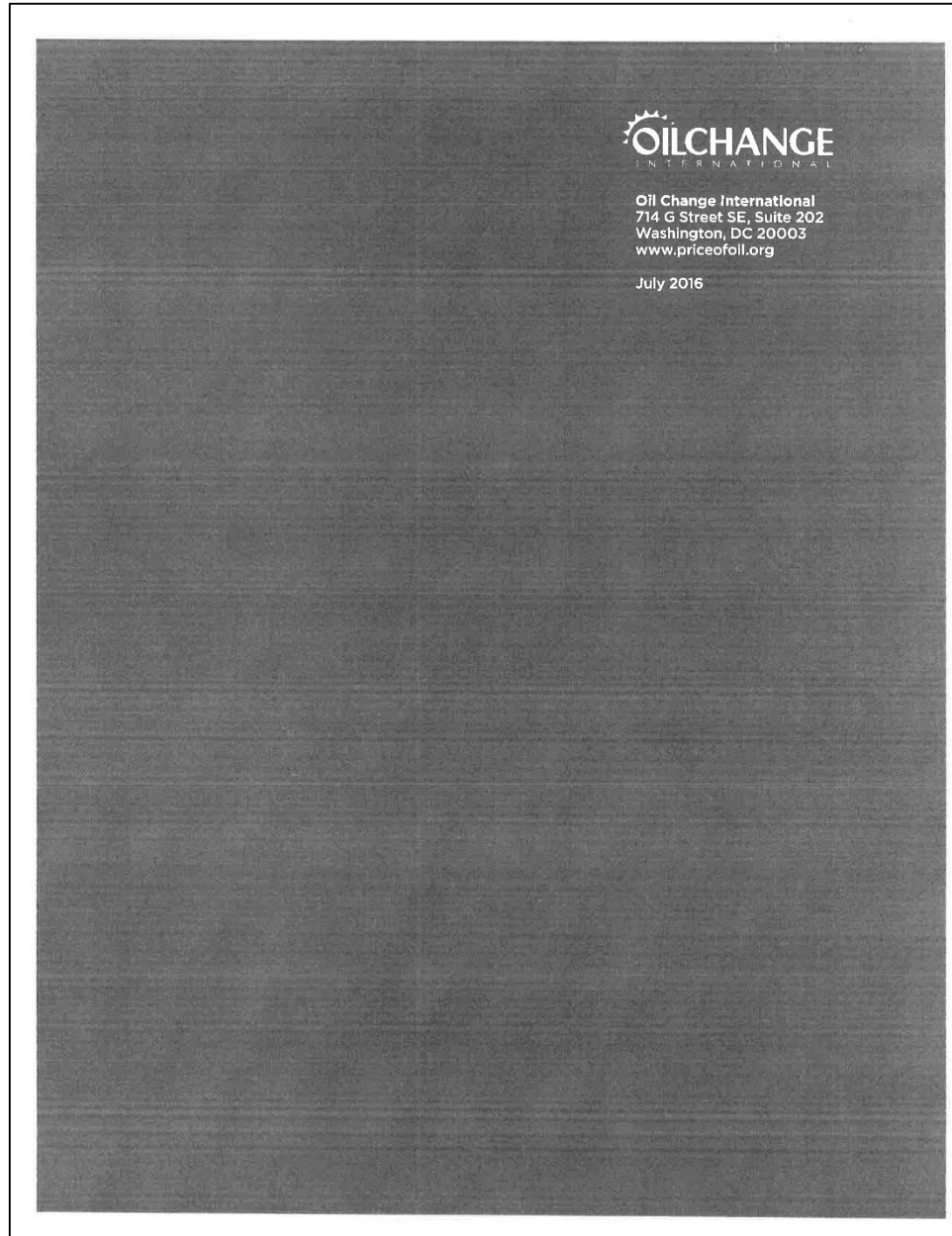


Companies/Organizations Comments

COMPANIES/ORGANIZATIONS COMMENTS

CO31 – Oil Change International (cont'd)

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Companies/Organizations Comments

COMPANIES/ORGANIZATIONS COMMENTS

CO32 – Anthony Wayne Youth Foundation

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August 8, 2016

Nathaniel J. Davis, Sr., Deputy Secretary
Federal Energy Regulatory Commission
888 First Street North East, Room 1A
Washington, D.C. 20426

Dear Mr. Davis:

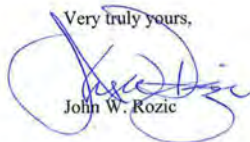
I represent the Anthony Wayne Youth Foundation, an Ohio non-profit corporation that was organized in 2006. The primary mission of the Anthony Wayne Youth Foundation (AWYF) is to facilitate youth enrichment programs for children of the Anthony Wayne area of Lucas County, Ohio, in a healthy and safe environment. The AWYF, in cooperation with the Village of Whitehouse and the Metroparks of the Toledo Area, is developing and operating the Blue Creek Recreation Area in Whitehouse, Ohio. The AWYF provides development, organization, and resources for multiple youth sports activities at Blue Creek and in the Anthony Wayne area.

CO32-1 In a letter dated March 20, 2016, addressed to Matt Stanfield, City of Toledo, Division of Environmental Services, Mr. Todd Frenndt, on behalf of the AWYF and the children participating in the many outdoor activities, expressed serious concern with regard to the proposed NEXUS Waterville Compressor Station. A copy of that letter is enclosed for your reference.

CO32-2 At the regular meeting of the AWYF Board of Trustees held on Thursday, May 26, 2016, the Trustees considered and acted upon a resolution concerning the proposed Waterville Compressor Station. A copy of the resolution also accompanies this letter. You will see that the AWYF Board of Trustees, acting in the interests of the health and safety of the thousands of participants in AWYF activities, unanimously opposes the Waterville Compressor Station. I would respectfully ask that you accept and consider the resolution of the AWYF Board of Trustees.

Please contact me at your convenience if you have any questions or require additional information. Thank you very much for your consideration.

Very truly yours,



John W. Rozic

JWR:slr

CO32-1 See the response to comment CO8-17.

CO32-2 FERC encourages cooperation between NEXUS and Texas Eastern and state and local authorities; however, state and local agencies, through the application of state and local laws, may not prohibit or unreasonably delay the construction or operation of facilities approved by FERC. Any state or local permits issued with respect to jurisdictional facilities must be consistent with the conditions of any authorization issued by FERC. For more information please see section 1.5 of the EIS.

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COMPANIES/ORGANIZATIONS COMMENTS

CO32 – Anthony Wayne Youth Foundation (cont'd)

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ANTHONY WAYNE YOUTH FOUNDATION

P.O. Box 2832 • Whitehouse, OH 43571-0832 • info@awyf.org

Anthony Wayne Area
Baseball Softball Association



Anthony Wayne Junior
Generals Baseball Club



Anthony Wayne
Youth Football League



Anthony Wayne
Junior Cheer



Anthony Wayne
Youth Soccer League



Anthony Wayne
United Soccer Club



Anthony Wayne Junior
Generals Basketball



Anthony Wayne
Youth Lacrosse



Anthony Wayne Junior
Travel Basketball



March 20, 2016

Matt Stanfield
City of Toledo
Division of Environmental Services
348 S. Erie Street
Toledo, Ohio 43604

Dear Mr. Stanfield:

I am the President of the Board of Trustees of the Anthony Wayne Youth Foundation. The Anthony Wayne Youth Foundation (AWYF) is a non-profit corporation that was organized in 2006. The primary goal of the AWYF is to provide youth recreational activities to children of the Anthony Wayne area in a fun, healthy and safe environment. To achieve that goal, the AWYF has undertaken the development, maintenance, and operation of the Blue Creek Recreation Area, which is a large, beautiful, open green space located in Whitehouse, Ohio. The mission of the AWYF is to facilitate the operation of youth enrichment programs by providing support, funding, and resources to all member activities, where they relate to the programs, education, and facilities, with a primary focus on active recreation.

The Blue Creek Recreation Area, located in the heart of the Anthony Wayne Community, is enveloped in a natural setting designed and ideal for active and passive recreation. The recreation area includes over 250 acres of developed and undeveloped property. Amenities include fields for soccer, football, lacrosse, baseball and softball. The recreation area also includes a multi-use bike path, sledding hill, fishing quarry, and acres of green space, as well as ample parking. The current and future development of the Blue Creek Recreation Area is intended to make it the single best recreational location in Western Lucas County.

Since its founding in 2006, the AWYF has raised and invested nearly \$1,500,000.00 for capital improvements at the Blue Creek Recreation Area. Those funds came from grants, corporate sponsors and individual donors. The investment amount includes a grant of over \$600,000.00 received by the AWYF from the State of Ohio. Infrastructure improvements at Blue Creek made possible by the grants and donations include development of fields for football, lacrosse, soccer, baseball and softball; earthmoving and grading; installation of underground water and sanitary lines, drainage tiles, and irrigation; installation of electric service and conduit for future development; and development of ancillary areas. Plans have been prepared for the

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CO32-1
(cont'd)

COMPANIES/ORGANIZATIONS COMMENTS

CO32 – Anthony Wayne Youth Foundation (cont'd)



ANTHONY WAYNE YOUTH FOUNDATION

P.O. Box 2832 • Whitehouse, OH 43571-0832 • info@awyf.org

Matt Stanfield
March 20, 2016
Page 3

CO32-1
(cont'd)

because of the number of games and number of participants, other games occur at locations throughout the Anthony Wayne area. In addition, the numerous teams of the member activities conduct practices on a daily basis in fields and backyards throughout the community. Adult coaches and community members commit over 25,000 volunteer hours each year to the various member activities of the AWYF.

The Blue Creek Recreation Area is located within the two mile impact area of the proposed Waterville compressor station. Other sports facilities and practice areas, such as fields and backyards, are located well within the one mile radius of the proposed compressor station. Obviously, as President of the AWYF, and as a parent and resident of the Anthony Wayne community, my primary concern is the health and safety of all of the thousands of children and adult volunteers who participate in the outdoor activities organized by the AWYF. The environment and air quality, of course, have the greatest impact on all of the participants in athletic events and recreational activities. Can you assure me that the operation of the proposed Waterville Compressor Station will not adversely affect any of those participants?

The next regular meeting of the AWYF Board of Trustees will be held on Thursday, March 24, 2016. At that meeting, the Trustees will consider and act upon a resolution with regard to the proposed NEXUS Gas Transmission Waterville Compressor Station. I will forward a copy of the resolution to you after it is adopted. While I understand that the deadline of the Ohio EPA for written comments is March 21, 2016, I would respectfully ask that you accept and consider the resolution of the AWYF when you receive it.

Thank you very much for your consideration.

Very truly yours,


Todd R. Frendt

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R-446

COMPANIES/ORGANIZATIONS COMMENTS

CO32 – Anthony Wayne Youth Foundation (cont'd)

R-447

ANTHONY WAYNE YOUTH FOUNDATION

RESOLUTIONS OPPOSING THE CONSTRUCTION OF THE PROPOSED NEXUS HIGH-PRESSURE NATURAL GAS PIPELINE AND COMPRESSOR STATION IN THE CITY OF WATERVILLE AND WATERVILLE TOWNSHIP, OHIO

Whitehouse, Ohio
May 26, 2016

WHEREAS: DTE Energy Company, Enbridge, Inc., and Spectra Energy Partners, as the lead developers, have proposed the construction of a new high-pressure natural gas transmission pipeline through the City of Waterville, Ohio, and adjacent areas and the construction of a natural gas compressor station in Waterville Township, Ohio, known as the NEXUS Gas Transmission Proposed Project of which the Waterville compressor station is a component part; and

CO32-3 | **WHEREAS:** The proposed high-pressure natural gas transmission pipeline and Waterville compressor station pose serious threats to the health, safety and welfare of residents of the City of Waterville, Waterville Township and surrounding communities of the Anthony Wayne area of Lucas County, Ohio, because of the risks of leaks, ruptures, explosions, and fire

CO32-4 | and because of emissions into the air by the operation of the compressor station of numerous and dangerous chemicals which will result in environmental contamination, air pollution, loss of air quality, and severely impact the health and welfare of residents, causing personal injury and death; and

CO32-5 | **WHEREAS:** The proposed pipeline and compressor station will provide no direct or indirect benefit to the residents of the City of Waterville, Waterville Township, or the surrounding Anthony Wayne communities by failing to supply natural gas to local customers but, instead, will merely serve to pass natural gas supplies through the City of Waterville and Waterville Township to end-users in Canada; and

WHEREAS: The Anthony Wayne Youth Foundation ("AWYF") is a non-profit corporation which was organized in the State of Ohio in 2006 and which operates in the Anthony Wayne community, including the City of Waterville and Waterville Township; and

WHEREAS: The AWYF organizes and provides facilities and opportunities for competitive and recreational sports activities and contests for the children of Waterville Township and the Anthony Wayne area in a healthy and safe environment; and

WHEREAS: The mission of the AWYF is to facilitate the operation of youth enrichment programs by providing support, funding, and resources to all member activities of the AWYF with a primary focus on active recreation; and

CO32-3 See the response to comment CO8-17.

CO32-4 See the response to comment CO8-17.

CO32-5 Section 1.1 provides a discussion of the purpose and need for the Projects.

COMPANIES/ORGANIZATIONS COMMENTS

CO32 – Anthony Wayne Youth Foundation (cont'd)

R-448

WHEREAS: In order to provide facilities for all member activities, the AWYF has undertaken the development, maintenance and operation of the Blue Creek Recreation Area which is a large, beautiful, open green space located in Whitehouse, Ohio, adjacent to Waterville Township, Lucas County, Ohio; and

WHEREAS: Since its founding in 2006, the AWYF has raised and invested nearly \$1,500,000.00, including a grant of over \$600,000.00 from the State of Ohio, for capital improvements at the Blue Creek Recreation Area; and

WHEREAS: The AWYF organizes and manages youth sporting activities and events on a competitive and practice basis for children participating in baseball, basketball, cheerleading, football, lacrosse, soccer and softball; and

WHEREAS: Over 3,000 children ages 5 through 18 of the Anthony Wayne community participate each year in one or more of the programs of the AWYF and children from neighboring and other communities participate in games and tournaments within the Anthony Wayne community; and

WHEREAS: Daily outdoor competitions and practices occur during the months of March through November each year at the Blue Creek Recreation Area and at other locations throughout Waterville, Waterville Township, Whitehouse, and the Anthony Wayne community; and

WHEREAS: Over 2,000 games and countless practice sessions are scheduled and played each year by teams of all of the member activities of the AWYF; and

WHEREAS: Adult coaches and community members commit over 25,000 volunteer hours each year to the youth activities organized by the AWYF; and

CO32-6 | **WHEREAS:** The Blue Creek Recreation Area is located within two miles of the proposed Waterville Compressor Station and other sports facilities and practice areas utilized by participants in activities of the AWYF are located throughout Waterville Township and the Anthony Wayne area in closer proximity to the proposed compressor station; and

WHEREAS: The AWYF is concerned with and promotes the health and safety of all of the thousands of children and adult volunteers and spectators who participate in the numerous outdoor activities organized by the AWYF; and

WHEREAS: The environment and quality of the air at the Blue Creek Recreation Area and in Waterville Township and throughout the Anthony Wayne area will have the greatest impact on the ability and desire of all of the children and adults who participate in outdoor athletic events and recreational activities and competitions, and will have long-term affects on the health and welfare of all children and participants.

CO32-6

See the response to comment CO8-17.

Section 4.13.1 describes specific safety measures NEXUS would implement along the pipeline and at compressor stations.

COMPANIES/ORGANIZATIONS COMMENTS

CO32 – Anthony Wayne Youth Foundation (cont'd)

CO32-6
(cont'd)

NOW THEREFORE: The Board of Trustees of the Anthony Wayne Youth Foundation hereby adopts the following resolutions:

BE IT RESOLVED: That the Anthony Wayne Youth Foundation affirmatively states its opposition to the proposed NEXUS Gas Transmission Waterville Compressor Station because the proposed location will severely and adversely affect the health, safety and welfare of the children and adults who participate in all of the activities of the Anthony Wayne Youth Foundation; and

BE IT FURTHER RESOLVED: That a copy of this Resolution shall be filed with officials of the City of Waterville, Ohio, Waterville Township, Ohio, Lucas County, Ohio, the Ohio House of Representatives, the Ohio Senate, the Congress of the United States, the Federal Energy Regulatory Commission, DTE Energy, Enbridge, Inc., and Spectra Energy Corporation; and

BE IT FURTHER RESOLVED: That all formal actions of the Board of Trustees of the Anthony Wayne Youth Foundation for the adoption of these Resolutions were taken in an open meeting of the Board of Trustees of the Anthony Wayne Youth Foundation; and

BE IT FURTHER RESOLVED: These Resolutions were passed by the unanimous vote of the members of the Board of Trustees of the Anthony Wayne Youth Foundation.

5/26/18
Date

5/26/2016
Date

Todd R. Fendt
President
[Signature]
Secretary

R-449

COMPANIES/ORGANIZATIONS COMMENTS

CO33 – Killbuck Watershed Land Trust

R-450

Randall A. Carmel, Wooster, OH.
 Randall Carmel, President
 Robert Stutzman, Vice President
 Killbuck Watershed Land Trust
 135 S. Market St.
 P.O. Box 1114 Wooster, OH 44691

Nathaniel J. Davis, Sr., Secretary Federal Energy
 Regulatory Commission 888 First Street NE,
 Room 1A Washington, DC 20426

RE: NEXUS Gas Transmission, LLC
 Docket No. CP 16-22-000

Dear Secretary Davis,

Thank you for the opportunity to comment on the proposed NEXUS Gas Transmission Pipeline re-route proposed to pass through Wayne County Ohio.

The Killbuck Watershed Land Trust (KWLT) is a small non-profit organization that conserves land by designing, holding, and maintaining land easements. Its mission is to promote awareness about land conservation and engage the community to encourage the preservation and protection of the natural environment. KWLT currently has just over 8800 acres in conservation easement. This includes an agricultural easement on the 313.921-acre Mellinger Farm of the Ohio State University in Plain Township, Wayne County, Ohio, which is crossed by the proposed pipeline.

The Mellinger Farm is currently used for agricultural research by the Ohio Agricultural Research and Development Center (OARDC) located in Wooster, Ohio. Scientists working with the Ohio State University have been using the rich farm land of Wayne County to conduct research for many decades. This research has lead to many improvements in agriculture that are used to improve production, storage, and marketing of farm products in Ohio, the United States, as well as in impoverished countries around the world.

CO33-1 In fact, the pipeline will bisect farmland on the Mellinger Farm that is currently being used for crop diversity research. This research is directly funded by USDA federal grants. The current research is dependent on the production of a diversity of crops being grown on soils that have not been disturbed. The extent of soil disturbance that would be caused by pipeline development on this farm will make soil research impossible and disrupt or permanently end current soil projects.

CO33-2 The future use of this land parcel for research will be in jeopardy as a result of soil disturbance associated with pipeline construction. The changes to the soil profiles can alter productivity and the ability of scientists to work on this farm. In this instance the impacts to soil structure are not just for a few years. In addition, access issues related to pipeline development and maintenance will negatively impact the ability to conduct research, and the production of farm products. The further use or construction of research facilities on this farm may not be possible at this site (by OARDC) due to pipeline construction and maintenance.

The easement that is currently being held and maintained by KWLT states that utility development is permitted for agricultural purposes and to benefit the use of the land for agriculture. It is questionable as to whether pipeline development is legal on this parcel.

CO33-1 See section 3.3.3 for a discussion of the potential impacts of the City of Green Route Alternative on Mellinger Farm. Based on our review, we did not find the City of Green Route Alternative provides a substantial environmental advantage when compared to the corresponding segment of the proposed route and did not recommend that it be incorporated as part of the Projects.

Prior to construction, NEXUS shall file with the Secretary an *Agricultural Impact Mitigation Plan (AIMP)* detailing construction and restoration measures to be implemented on the NGT Project to address agricultural issues unique to Ohio and Michigan. For construction and restoration measures in Ohio, NEXUS shall consult with the Ohio Department of Agriculture (ODA) on construction procedures to be used in agricultural land in Ohio and shall file with the Secretary any measures that result from coordination with the ODA. Any comments received from ODA shall also be filed with the Secretary.

Prior to construction, NEXUS shall file with the Secretary a 5-year post-construction monitoring program to evaluate crop productivity in areas impacted by the construction of the Project.

CO33-2 See response to comment CO33-2.

COMPANIES/ORGANIZATIONS COMMENTS

CO33 – Killbuck Watershed Land Trust (cont'd)

R-451

CO33-3 As a conservation organization, KWLT, is concerned that the impacts of another pipeline to agricultural and residential land in Wayne County is excessive and unprecedented. There are currently two other pipeline proposals (Utopia and Rover Pipelines) moving forward that parallel each other very closely through two townships (Salt Creek and Paint Townships) in the county. This presents the increased possibility of accidents that could be potentially hazardous with the routing of three pipelines in close proximity and crossing one another.

CO33-4 In addition, the impacts to local agriculture will increase as lateral pipelines will be needed to meet obligations to the communities that need the gas for commercial development in and near the cities of Wadsworth and Green in Summit and Medina Counties. This type of commercial development is not needed in the agriculturally rich farmlands of Wayne County, and makes the City of Green Route alternative a poor choice when the gas transmission is not needed along the proposed route through Wayne County. The redundant construction of lateral pipelines will have a very negative impact on farmland production as well as the loss of property values of an equal number of residential property owners in Wayne County.

CO33-5 The citizens of Summit and Medina counties have had nearly two and a half years to study the impacts of this proposed pipeline and make comments. The citizens of Wayne County were not notified of this proposal until mid-July. This is not enough time for the affected communities to study the environmental and economic impacts of the NEXUS re-route (City of Green Route Alternative). This is not enough time for Wayne County citizens and scientists to study the impact of yet another pipeline.

CO33-6 Some of the richest farmland in the State of Ohio is located in the proposed re-route through Wayne County. This farmland is dependent on healthy soils and a minimum of disturbance to the soil structure. The City of Green reroute means an increase in the length of the pipeline and the probability of more lateral gas lines to service the communities of Summit and Medina Counties that have expressed a need for the gas. This decision to reroute the gas line through Wayne County unnecessarily impacts the citizens and farmers of Wayne County.

Therefore, we are submitting this as a serious concern about the negative impact of the NEXUS pipeline reroute on federally funded agriculture research by the Ohio State University, on farmland production, on the unnecessary longer rerouting and lateral gas lines that will further impact our community, the safety of locating three pipelines in close proximity (and crossing), and on our citizen's right to know and actively participate in decisions that impact our local resources and quality of life.

Respectfully,

Randall Carmel, President Killbuck Watershed Land Trust

CO33-3 See section 4.13 for a general discussion of natural gas pipeline safety. We note that the Utopia Pipeline Project is not a natural gas pipeline project, rather, the Utopia pipeline intended to transport previously refined or fractionated products.

CO33-4 Presently, there are no planned lateral pipelines associated with the Projects. In the EIS, we required all alternatives to serve NEXUS' 6 definitive receipt and delivery points. The City of Green Route Alternative would allow these points to be served without additional lateral pipelines. We did not, however, require that the alternatives serve potential future delivery points at NEXUS' 13 tee-tap locations. If service to these locations becomes required, between one and four laterals would be required on the City of Green Route Alternative. See section 1.1.1 and 3.3.3 for additional discussion regarding this issue.

Prior to construction, NEXUS shall file with the Secretary an *Agricultural Impact Mitigation Plan (AIMP)* detailing construction and restoration measures to be implemented on the NGT Project to address agricultural issues unique to Ohio and Michigan. For construction and restoration measures in Ohio, NEXUS shall consult with the Ohio Department of Agriculture (ODA) on construction procedures to be used in agricultural land in Ohio and shall file with the Secretary any measures that result from coordination with the ODA.

CO33-5 Comment noted.

CO33-6 Comment noted.

COMPANIES/ORGANIZATIONS COMMENTS

CO34 – Oregon Clean Energy, LLC

OREGON CLEAN ENERGY, LLC

Three Charles River Place
63 Kendrick Street
Needham, MA 02494

August 26, 2016

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, D.C. 20426

RE: NEXUS Gas Transmission FERC Docket No. CP16-22-000

Dear Ms. Bose,

Oregon Clean Energy, LLC is developing an 859 megawatt (MW) combined-cycle natural gas-fired turbine facility, the Oregon Clean Energy Center ("OCEC" or "Project"). OCEC is located in Oregon, Ohio and is nearing construction completion. Utilizing two natural gas turbines and one steam turbine it will provide electricity to approximately 700,000 homes. The power plant's output will be fed into the PJM wholesale electricity market, which – according to several studies – is expecting 12,000-MW of coal plant retirements in the near future.

OCEC is intended to be dispatched as a base load facility. The Project will cost approximately \$875 million dollars to build and will create over 500 on-site construction jobs and over 800 indirect construction jobs totaling over 1.5 million man hours. The Project is scheduled to reach commercial operation by mid-2017 at which point it will create 25 on-site permanent, high wage jobs.

CO34-1 The NEXUS pipeline project will provide additional access to cleaner burning natural gas in the region. More specifically, the NEXUS preferred route includes access to important future development markets that will play a critical role in energy growth in Northern Ohio in the decade ahead. The natural gas delivered by NEXUS Gas Transmission could help better ensure operational reliability and reduce price volatility by providing access to lower priced natural gas. New pipeline facilities such as NEXUS will better enable domestic natural gas production from Appalachia to reach markets here in Ohio and in the U.S. Midwest.

The Oregon Clean Energy Center supports the NEXUS pipeline and we urge the Federal Energy Regulatory Commission to approve this important project.

Sincerely,



Lucas Misong
Authorized Signatory, Oregon Clean Energy, LLC

CO34-1 Comment noted.

R-452

COMPANIES/ORGANIZATIONS COMMENTS

CO35 – Cleveland Museum of Natural History

natural areas/cleveland museum of natural history

1 West Chestnut Street, University Circle • Cleveland, Ohio 44106-1707
(216) 231-4600
WWW.CMNH.ORG

Rebuttal to Comments from FERC on Presumption of Minimal Impact from Pipeline Placement Adjacent to Singer Lake on Endangered Aquatic Insects and Endangered Aquatic Plants
Dr. James K. Bissell, Director of Natural Areas and Curator of Botany
August 19, 2016

CO35-1

In the Federal Energy Regulatory Commission report addressing the impact of placing a pipeline adjacent to the North Basin Pond of the Museum's Singer Lake Preserve, I strongly disagree with the statements on page 4-108 that presume minimal impact on the rare aquatic plants and state-endangered dragonflies within the lake.

The open water within the 1.25-mile Singer Lake Basin is classified as Poor Fen, a globally rare type of habitat. NatureServe currently ranks this habitat as G3 (vulnerable) within North America. Poor Fen lakes are distinguished by their relatively alkaline water. They have a very limited distribution, in contrast to the many lakes in Canada and the northeastern United States that have water with a much greater acidity (lower pH).

The relatively high pH in Singer Lake's North Basin Pond depends on continuous groundwater flow from the deep sand and gravel adjacent to the lake basin. I am very concerned that the drop in elevation of the proposed pipeline north of Singer Lake could intercept the current groundwater flow and divert the inflow of this water to the north, downslope and away from the lake basin.

Two of the endangered deep-water plants within the Singer Lake Basin, spotted pondweed (*Potamogeton pulcher*) and swaying bulrush (*Schoenoplectus subterminalis*), are no longer present within any other glacial lakes in Ohio. At the last Ohio Rare Plant Meeting in February 2016, spotted pondweed was elevated from threatened to endangered status because all other populations in Ohio are no longer extant. The North Basin Pond at Singer Lake is also the only known population of swaying bulrush within Ohio. The Williams County population in northwestern Ohio has not been observed since 1988.

Singer Lake Basin supports 73 species of dragonfly, the largest number of all the glacial lakes and natural ponds within the state of Ohio. All three of the state-endangered dragonfly species within the North Basin Pond spend five years as nymphs before emerging as adults. Adequate water levels are crucial during this portion of their development. Several other rare dragonflies within the North Basin Pond also have multiple-year life spans, including the Elfin Skimmer. The North Basin Pond is relatively shallow; any diversion of the groundwater flow into it could have a disastrous impact on these dragonfly species during drought years. Dragonflies that spend a shorter time as nymphs, such as Green Darner, can breed in ponds that dry up periodically, because their nymph lifespan is measured within weeks in a single season instead of multiple years.

CO35-1

Section 4.4.3.1 provides a discussion of impacts associated with the Singer Lake Bog. Based on the construction and mitigation measures described in this section and a review of the issues raised by the City of Green, FERC does not anticipate that wetland hydrology and existing flows would be adversely impacted by construction of the NGT Project.

COMPANIES/ORGANIZATIONS COMMENTS
CO35 – Cleveland Museum of Natural History (cont'd)

In closing, I want to reiterate my opposition to placing this pipeline adjacent to the Museum's Singer Lake Preserve. This habitat is one of the last of its kind in Ohio. Compromising its integrity puts the survival of more than 50 endangered, threatened or rare species at risk.

COMPANIES/ORGANIZATIONS COMMENTS

CO36 – Executive County of Summit

Ilene Shapiro, Akron, OH.
August 18, 2016

Mr. Nathaniel J. Davis, Sr., Deputy Secretary Federal Energy
Regulatory Commission
888 First Street NE, Room 1A Washington, DC
20426

Re: Docket CP16-22

Dear Deputy Secretary Davis:

Please accept this letter of comment regarding the Nexus Pipeline proposed by Spectra Energy & DTE Energy to be constructed from Kensington, Ohio to Dawn Hub in Ontario, Canada. As you know, the proposed route for the pipeline includes travel through the southern part of Summit County, including the cities of Green and New Franklin, two of our fastest growing communities.

Summit County has a strong history of supporting economic development. We have incentivized numerous business development projects including Goodyear Tire & Rubber Company's World Headquarters and Bridgestone America's Research and Technical Center in Akron, Ohio. We have partnered with numerous other communities to support their economic development efforts understanding that economic growth in our communities makes them stronger and more attractive for further development and provides the resources necessary for sustainability for the County.

Summit County has been fully supportive of the natural gas industry and the great economic benefit it has brought to the State and our sister counties and we understand that transmission of those resources is a necessity. We do, however, have some very serious reservations regarding the proposed route and the negative economic and environmental impact the route will have on the cities of Green and New Franklin. A study by Cleveland State University, which has been forwarded to you, found that the 50 year impact to the City of Green alone would be over \$120 million affecting not only the City's resources and prospects for development, but the schools and their resources as well. This would also be a significant loss for the County.

The Cities of Green and New Franklin have the best opportunities for new commercial, industrial and residential growth in the County. They have the most available green space for development and they have been diligent in creating land use plans that provide for a diverse economic development strategy to wisely use their green spaces for sustainable growth while protecting their environmental assets. This is a significant area for business development.

The environmental impact of the proposed pipeline can also not be overlooked. There are several areas of high quality wetlands included in the proposed pipeline route. The Singer Lake Bog supports 34 rare plant species with several of those species known only in one other location in Ohio and one species known only in the Singer Lake Bog area. The City of Green has invested funds to protect the Bog and its endangered species in partnership with the Cleveland Museum of Natural History.

The City of Green has proposed an alternate route which would bypass Summit County and have a lesser impact on environmental areas and population centers. We strongly support the proposal and believe that it will be the better option for sustainable environmental and economic development along our southern corridor.

CO36-1 As discussed in section 3.3.3 and 4.10.9, we did not find the economic analysis by Cleveland State University compelling.

CO36-2 Section 4.4.3.1 provides a discussion of impacts associated with the Singer Lake Bog. Section 4.8 discusses impacts to special status species.

COMPANIES/ORGANIZATIONS COMMENTS

CO36 – Executive County of Summit (cont'd)

Thank you for accepting this letter of comment. Please let us know if there is any information you need regarding the County and our views on this development. We know that this is not an easy decision for the Federal Energy Regulatory Commission to make but we do believe that there is an alternative to the proposal which makes good sense for all involved.

Sincerely,

Irene Shapiro, Executive County of
Summit

COMPANIES/ORGANIZATIONS COMMENTS

CO37 – EnviroScience

Nathaniel J. Davis, Sr., Deputy Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 20426

September 29, 2016

Deputy Secretary Davis;

I have been an environmental consultant for over 23 years at EnviroScience (ES), Inc. and currently hold the position of President and Chief Operating Officer. Because of my profession, I have extensive experience with linear projects and have completed various biological assessments at over 10,000 sampling locations throughout the United States. My experience ranges from projects on small tributary streams to managing the water and sediment sampling during the BP Deepwater Horizon Oil Spill, and I am currently acting as the ES Project Manager for the National Aquatic Resource Assessment contract for the United States Environmental Protection Agency (USEPA). I also am a resident of the City of Green, Summit County, Ohio. On behalf of the City of Green, I would like to make several comments on the Draft Environmental Impact Statement (EIS) that was prepared by FERC as a requirement of the National Environmental Policy Act (NEPA).

In consideration of my comments, EnviroScience and I are not against the Oil and Gas Industry in any way. EnviroScience assists Class I railroads, the oil and gas industry, and departments of transportation to complete large linear projects throughout the U.S. Additionally, we also have **experience in FERC re-licensing throughout the Midwest.** Nevertheless, I have several concerns about the NEXUS project, particularly regarding the speed at which the project is moving, and what appears to be a lack of detail that is typically associated with projects of this nature. I have only reviewed the proposed corridor as it transects the City of Green, Summit County, Ohio and have identified what I believe to be **shortcomings in meeting the requirements of the NEPA process and FERC review.** Considering that I have only reviewed a small segment of a large linear project, I am even more concerned knowing the length of the project and the amount of survey work that was required along other parts of the proposed route.

Being part of many large projects that have required Environmental Impact Statements, I am concerned about the lack of information that is available to the public and the City of Green for review. Evaluating impacts to natural resources is one of the most important steps in the EIS and NEPA process. One of the functions of the NEPA process is to evaluate different alternatives to determine which has the least impact to natural resources as well as the public. Currently, it is impossible for the assessment of potential natural resource impacts to be completed from a public perspective. The Biological Assessment of the project is unavailable and stamped as *"Contains Privileged Information – Do Not Release"*. **Based on my experience and knowledge of the project, there are most definitely concerns regarding eagle nest surveys, Eastern Massasauga, bats, freshwater mussels, Blandings Turtle and the Spotted Turtle throughout the project area as well as concerns for the fragile ecosystem found at Singer Lake Preserve.** Without review of these specific survey documents, it is impossible for the public and the City of Green to have substantial comments on potential impacts to natural resources in their community. As you are likely aware, many of these species are Federally listed and any



CO37-1 FERC's BA has been provided to the FWS on October 20, 2016 and is included in the final EIS.

R-457

CO37-1

COMPANIES/ORGANIZATIONS COMMENTS

CO37 – EnviroScience (cont'd)

R-458

potential impacts must go through Section 7 Coordination with the United States Fish and Wildlife Service (USFWS). Once the Biological Assessment (BA) is submitted, USFWS must render a Biological Opinion (BO) regarding whether the species of concern will be impacted, if it meets the recovery plan for that species, if an incidental take permit will be granted, and what mitigation will be necessary.

CO37-2 Although we cannot make specific comments on impacts to listed species because the documentation is not publicly available, I would like to ask if all of the surveys were completed during the 2016 field season during the approved survey window. Mist net surveys for bats must be completed between May 15th and August 15th and the Eastern Massasauga survey window extends into October. Typically, USFWS will not initiate Section 7 consultation if the surveys are not completed for the project as a whole. How is the review window of the DRAFT EIS closing before all survey data is submitted, accepted and evaluated as to which alternative has the least impact? This again supports my contention that the speed at which the DRAFT EIS is being reviewed is not consistent with the NEPA process. Additionally, if mitigation for listed species will be required by USFWS, will there be consideration that impacts in the City of Green be mitigated in the City of Green?

CO37-3 I have similar comments in regards to wetland impacts. Recognizably, most impacts associated with a project such as the NEXUS Pipeline would be considered "temporary". However, there will be permanent impacts in segments that include the clearing of trees in wetlands. Typically, these impacts are often mitigated as there is a loss of resources due to the initial clearing and on-going impacts due to maintenance of the easement. **Similar to the Biological Assessments, the DRAFT EIS mentions a "Conceptual Mitigation Plan" for wetland impacts that is unavailable for review by the public.** Considering that the City of Green is a rapidly growing area, storm water issues and water storage are a great concern. This includes wetlands which are natural features that help store and slow down water flow during large precipitation events. I feel that wetland impacts in the City of Green, as well as other cities along the proposed route, should be mitigated in coordination with the municipality and within their corporate boundaries. Mitigation for wetland impacts within the City of Green should be located within the watershed and within the City.

CO37-4

I have specific concerns regarding the proposed Route through Ariss Park. In review of the DRAFT EIS, I did not see that NEXUS or FERC recognized the historical use of the property or completed the due diligence that is typical of most DRAFT EISs.

Environmental Design Group (EDG) completed a Phase 1 ESA at the site for the City of Green: "Phase 1 Environmental Assessment, City of Green, Ariss Property 2520 Wise Road" dated January 12, 2005. EDG recommended additional Phase II ESA activities to evaluate site impacts and the future development of what is now known as Ariss Park. In 2008 KU Resources conducted a Phase II Environmental Assessment of the Former Ariss Property at 2250 Wise Road, Akron, Ohio for the City of Green. It should be noted that the Phase I and Phase II were completed specifically for the area that the City was planning to develop and incorporated the construction activities that were to be used. This did not include excavation or soil disturbance in the area of the proposed pipeline.

KU Resources indicated that the former site utilization included commercial mining and quarrying operations (i.e. coal and clay) from approx. 1890 through mid-1940s on portions of the site. The formerly mined areas were subsequently utilized as a solid waste facility that principally accepted

CO37-2 Threatened and endangered species surveys have been completed. Results from these surveys are discussed in section 4.8.

CO37-3 The wetland mitigation strategies are still being discussed between the applicant, USACE, MDEQ, and OEPA. Mitigation would include the purchase of wetland mitigation credits from established wetland mitigation banks, the use of an in-lieu fee program, or a combination of the two. In the final EIS, we are recommending that the final Wetland Mitigation Plans are filed prior to construction, including and comments and required approvals from the USACE, MDEQ, and OEPA, as applicable.

CO37-4 See response to comment CO37-03.

COMPANIES/ORGANIZATIONS COMMENTS

CO37 – EnviroScience (cont'd)

industrial rubber waste and drums from approx. 1946 to 1960. Wastes were frequently burned in several pits on site.

Previous environmental investigations were conducted at the site by Ohio EPA circa October 1995 as a result of the former industrial landfill operations on the property. Ohio EPA's environmental investigations were conducted on site principally in response to citizenry complaints and as part of a federal pre-remedial commitment between the Ohio EPA and the U.S. EPA. Ohio EPA's data collection efforts consisted of sampling of soil, groundwater, sediment and surface water from areas within and surrounding the limits of waste placement.

The Ohio EPA data is difficult to assess based on the absence of strict documentation (e.g. Site mapping). KU Resources tentatively identified an area where Ohio EPA may have secured samples from the site. However, this is a crude approximation based on preliminary estimation from the field notes contained in the Ohio EPA files. Below is a summary of Ohio EPA sampling efforts.

- In September 1995, Ohio EPA sampled 5 water supply wells in the vicinity of the site. No COC was detected with the exception of 1 VOC toluene at 2463 Wise Road at a concentration of 0.007 mg/L. This concentration is below the U.S. EPA's Maximum Contaminant Level (MCL) for toluene, which is 1.0 mg/L.
- On September 30, 1996 completed an Integrated Assessment Report for the Site.
 - Seven potable groundwater wells were sampled and analyzed in September 1996. In general analysis included volatile organic compounds (VOC), semi volatile organic compounds (SVOC), and metals. The report concluded that each of the off-site wells contained metals and/or cyanide above MCLs established for public drinking water supplies. A low concentration of the pesticide 4,4-DDT (DDT) was reported from a well at 2421 Wise Road; however, the concentration was below its respective MCL.
 - Five soil samples were collected on site at depths ranging from 0.5 feet to 8.0 feet below ground surface. It is suspected that these samples were collected from within the landfill areas. **Ohio EPA report indicated "significant" concentrations of various metals, pesticides, and SVOC were detected.**
 - Lead was detected in three (3) samples collected at 0.5 and 4.0 feet below ground surface at concentrations exceeding the Ohio VAP Generic District Contact Standards (GDSCS) for commercial/industrial land use. The commercial land use GDSCS for lead is 1,800 mg/kg.
 - A single VOC, tetrachloroethene (perchloroethene or "PCE"), was detected in one (1) sample at a depth of 3 to 4 feet below ground service. The detected concentration (78 mg/kg) was reported to be below the Ohio VAP residential and commercial GDSCS.
 - The detection limits for the samples analyzed for the SVOC, benzo(a)pyrene were elevated above the Ohio VAP Commercial GDSCS, which is 6.30 mg/kg.
 - Pesticide concentrations were reported below Ohio VAP residential GDSCS, where available.
- In December 1997 and September 1998 Ohio EPA conducted additional soil and groundwater sampling investigations. Four (4) soil borings in which two (2) soil samples and one (1) groundwater sample were submitted for laboratory analysis from the area

COMPANIES/ORGANIZATIONS COMMENTS

CO37 – EnviroScience (cont'd)

around the former landfill. Samples were submitted for analysis of VOC, SVOC, and metals.

- o No VOC or SVOC were detected in the soil samples with the exception of methylene chloride and acetone, which are common laboratory decontamination artifacts. Metals in soils were within typical Ohio ranges. Arsenic levels of 10.4 and 14.1 mg/kg exceeded the residential Ohio VAP GDCS of 6.8 mg/kg.
- o The groundwater sample was obtained from a shallow depth of 15-20 feet below ground surface from an open boring. The sample results suggest no VOC or SVOC constituents detected with the exception of methylene chloride and acetone, the presence of which strongly suggests laboratory contamination.

As part of the Phase II, KU Resources evaluated the area specifically proposed by the City of Green for redevelopment. As mentioned previously, this did not include the area of the proposed pipeline nor did it include the excavation or disposal of soil in the vicinity of the proposed pipeline. Below is a summary of the Phase II activities conducted by KU Resources.

- Soil analyses included 11 samples for analysis of VOC, 8 samples for PAH, 5 soil samples for SVOC, 7 soil samples for analysis of polychlorinated biphenyls (PCBs), and 11 soil samples for select metals analysis (arsenic, barium, cadmium, chromium, lead, mercury, nickel, and zinc).
 - o No Soil VOCs, SVOCs, PAHs, or PCBs were detected above the analytical detection limits.
 - o Metals – Analytical results revealed detectable concentrations of arsenic, barium, chromium, lead, nickel, and zinc.
- In addition, 2 soil samples were submitted for pesticides and herbicides.
 - o No pesticides or herbicides were detected with the exception of one herbicide compound (Dinoseb) at a concentration of 0.0095 mg/kg, which is slightly above the analytical detection limit of 0.0017 mg/kg.
- Groundwater samples were collected from 3 of the soil boring locations and submitted for laboratory VOC analysis.
- Sediment and Surface Water sampling activities: limited sediment and surface water data were obtained by Ohio EPA from the former mine pond on the east side of the Site. Sediment samples exceeded Aquatic Life Tier I Criteria, Tier II Values and Screening Values for Drinking and Non-Drinking Water screening for various metals including arsenic and lead. Surface water samples indicate elevated lead levels above MCLs.
- EnviroScience (2007) also obtained a sediment and surface water sample from the approximated center of the pond. Sediment sample analysis included VOC, PAH, PCBs, dioxin, pesticides, and herbicides. Surface water sample analyzed for the same parameters with the exception of PCBs.
 - o No detectable VOC, PAH, PCB, pesticides, or herbicide concentrations above analytical detection limits.
 - o No metals detected in the surface water sample
 - o Sediment sample – detected arsenic, barium, chromium, and lead – all concentrations below the residential Ohio VAP GDCS.

COMPANIES/ORGANIZATIONS COMMENTS

CO37 – EnviroScience (cont'd)

KU Resources recommendation to the City of Green was that data suggests that soils used for cut and fill should be limited to the redevelopment area and not secured from areas outside the proposed redevelopment area without further evaluation. Once again, this evaluation did not include the area of the proposed pipeline or the activities that are proposed.

CO37-5 Given the above historic information of the Ariss Property, I do not feel that the DRAFT EIS addressed these concerns or more importantly even recognized the potential for environmental issues. Recognizably, the data sets have quite a bit of variation depending on where there was sampling completed and who completed it. Either way, the variation of results and documentation of known constituents of concern warrant further investigation by NEXUS specific to their project. **A Phase I and II should be conducted specific to the pipeline project on this property and be consistent with Rule 13 and coordinated with Ohio EPA.** The cut and cover nature of the pipeline installation in this area can potentially allow documented constituents of concern to migrate from the area if present. **NEXUS not completing their own Phase II investigation of the area specific to their activity is a concern of public health and safety to the citizens of the City of Green as well as those workers installing the pipeline that could be exposed to potential constituents of concern.**

CO37-6 Lastly, I do feel that NEXUS should strongly consider adopting the Green Alternate Route proposed by the City of Green which was recognized by FERC as a viable alternative. From my professional experience, pipelines and other linear projects have less impact to natural resources and the public when they are constructed in less populated areas. I understand that studies on alternative routes cost time and require financial resources. However, my experience is that routes in rural areas often result in significantly less mitigation, less permit requirements and decreased impacts to the community while producing a better project.

Respectfully,

Jamie Krejsa

President / Chief Operating Officer

CO37-5 Ariss Park is discussed in section 4.9.7.3. The draft EIS discusses previous comments concerning contamination at this location, as well as proposed mitigation measures.

CO37-6 As discussed in section 3.3.3, the City of Green Route Alternative is recognized as a viable alternative in the EIS.

COMPANIES/ORGANIZATIONS COMMENTS

CO38 – EnviroScience

20160829-5144 FERC PDF (Unofficial) 8/29/2016 10:04:50 AM
Excellence In Any Environment

August 29, 2016

Mr. Nathaniel J. Davis, Sr., Deputy Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 20426

Re: Docket # CP16-22

Deputy Secretary Davis:

I am a wetland scientist with a B.S. in Biology from the University of Toledo and a Ph.D. in Environmental Science from The Ohio State University. My undergraduate and graduate research were completed in wetland systems, and I have been working as an ecological consultant since 1999. I grew up in the City of Green, graduated from Green High school, and am familiar with the area. During my career as a wetland consultant, I have delineated many wetlands throughout the state, and also have experience delineating and assessing wetlands in other states, such as Virginia and Florida. I have attended Ohio EPA trainings on many wetland and stream assessment methods, including the Ohio Rapid Assessment Method v. 5.0 (ORAM), the Vegetative Index of Biotic Integrity (VIBI), Amphibian Index of Biotic Integrity (AmphIBI), the Qualitative Habitat Evaluation Index (QHEI) and the Primary Headwater Habitat (PHVH) protocol. I have completed these types of functional assessments on many wetlands and streams, and have over a decade of experience in their use. I am currently the Task Order Leader for Task Order 23- National Wetland Condition Assessment Training and Logistics. In this role, I conduct technical training on the protocols at regional trainings throughout the country, and visit field crews to make sure that they are completing the surveys according to the procedure in the Field Operations Manual.

I visited six wetlands along the proposed NEXUS pipeline route in July 2016, accompanied by Wayne Wiethe and Chrissy Lingenfelter from the City of Green. At each of these wetlands, I walked through or around the wetlands to gather information and complete ORAM scoring to evaluate the quality of the wetlands. The ORAM is a six-metric tool which assesses the wetland based on its size (Metric 1), upland buffers and surrounding land uses (Metric 2), hydrology (Metric 3), habitat alteration and development (Metric 4), whether the wetland is known to be a bog, fen, or other high-quality habitat (Metric 5), and plant communities, interspersions, and microtopography (Metric 6). These scores are summed, for a maximum possible score of 100, and are used to place the wetland into one of three functional categories: low quality wetlands (Category 1), moderate quality wetlands (Category 2) and high quality wetlands (Category 3). As stated above, I have completed hundreds of ORAMs on wetlands throughout the state, and have been trained by John Mack, the principal author of the ORAM, in proper completion of the forms.

The following wetlands were evaluated using the ORAM: Wetland A15-71, located south of Wise Road; Wetland AWB-SU-3, located in Ariss Parks; Wetland C15-104, located at the North Canton Transfer property; Wetland C15-106, located at the North Canton Transfer property; Wetland C15-122, located at the Akron-Canton Airport Lot 21; and Wetland A14-122, located immediately downstream of Nimisila Reservoir. Of these six wetlands, four were Category 2 wetlands, while two were Category 3 wetlands, the highest functional category.



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COMPANIES/ORGANIZATIONS COMMENTS

CO38 – EnviroScience (cont'd)

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Wetland A15-71 is a large (estimated at 70 acres) emergent/scrub-shrub wetland located south of Wise Road. A perennial stream passed through the wetland, and the emergent portion of the wetland was dominated by the invasive species *Phalaris arundinacea*. Wetland A15-71 scored 58 on the ORAM, classifying it as a Category 2 wetland.

Wetland AWB-SU-3 is a forested wetland approximately 3 acres in size, located in Ariss Park. It scored 53.5 on the ORAM, classifying it as a Category 2 wetland. The proposed route would affect 0.36 acres of the wetland during construction. The wetland would then be bisected, with 0.23 acres of it permanently converted from forested wetland to nonforested.

CO38-1 Wetland C15-104 is an approximately 12-acre forested wetland with an open water component located north of the North Canton Transfer facility. It scored 73.5 on the ORAM, which classified it as a Category 3 wetland. The proposed route would impact 0.37 acres of this wetland during construction, and permanently convert 0.15 acres from forested to nonforested. This wetland should be avoided during the construction process.

Wetland C15-106 is an approximately 3-acre emergent/scrub-shrub wetland located northwest of the North Canton Transfer facility. It was more degraded than Wetland C15-104, and scored 42 on the ORAM, classifying it as a Category 2 wetland.

Wetland C15-122 is an approximately 3.2-acre young forested wetland located in the Akron Canton airport lot 21. It scored 47 on the ORAM, classifying it as a Category 2 wetland.

CO38-2 Wetland A14-122 is a large (approximately 38-acre) emergent wetland south of Nimisila Reservoir. It is fed by precipitation, groundwater, the perennial Nimisila Creek, and a smaller intermittent tributary. It scored 65 on the ORAM, classifying it as a Category 3 wetland. The proposed route would impact 2.5 acres of this wetland. This wetland should be avoided during the construction process.

CO38-3 Based on my professional experience, I find it hard to believe that the proposed project does not transect any Category 3 wetlands across the entire state of Ohio. It is my understanding that the NEXUS consultant that completed the ORAMs is from Maine, and it is unclear if they have received any formal training on the ORAM from Ohio EPA or how many years of experience that they have in completing ORAMs. Based on my observations of the wetlands, it appears that they underscored and undercategorized the ORAM scores for the wetlands within the City of Green and most likely across the state. In addition, they stated that they found a plant in wetland C15-106 (New York ironweed, *Vernonia noveboracensis*). New York ironweed has been extirpated from the state and its last known record from the state was in Gallia County in 1892. Gallia County is located approximately 140 miles south of Summit County. This leads me to believe that the quality of the delineations and categorizations are suspect and should go through quality assurance and quality control before they are approved.

CO38-4 It is also very troubling that the mitigation plan for the project has not been made public, and apparently, has not even been developed at this point. A mitigation plan is a common requirement for all permit-requiring activities, and NEXUS should have provided some additional information rather than just stating that they will use in-lieu fee to mitigate impacts within the state of Ohio. If in-lieu fee is used, mitigation for wetland impacts from

CO38-1 Wetland C15-104 scored a 48.5 which is a Category 2 wetland. The factors that most influenced this wetland to be categorized as 2, not 3, include reduced scoring on the following metrics: invasive species cover (20%); disturbances such as ATV trails through the wetland, clear cutting, shrub/sapling removal, stormwater inputs, drain tiles, and filling/grading; previous land use practices (agriculture); and surrounding land use (old field and urban/industrial).

CO38-2 Wetland A14-122 scored a 50 which is a Category 2 wetland. The factors that most influenced this wetland to be categorized as 2, not 3, include reduced scoring on the following metrics: invasive species cover (25-75%); disturbances such as utility rights-of-way, and mowing from adjacent residential properties; and low value surrounding land use (residential).

CO38-3 While New York ironweed was identified, it was only noted, and was not used to perform the dominance test or prevalence index on the USACE Wetland Determination Forms, nor was it counted on the ORAM forms.

Furthermore, one possibly misidentified plant does not discount the validity of the wetland delineations that were performed. NY ironweed and giant ironweed (*Vernonia gigantea*) are well-known to hybridize, thus hard to distinguish, and do occur in near-by Lake County, Ohio (ODNR 1998). Additionally, there is no data that the species is extirpated, ODNR 1998 notes that it's last record was in Gallia County, and is otherwise unreported throughout the rest of the state (USDA 2016).

ODNR 1998:

http://naturepreserves.ohiodnr.gov/portals/dnap/pdf/Rare_Plant_Abstracts/Vernonia_noveboracensis.pdf

USDA Plants Database:

<http://plants.usda.gov/core/profile?symbol=VENO>

CO38-4 See response to comment CO37-03.

COMPANIES/ORGANIZATIONS COMMENTS

CO38 – EnviroScience (cont'd)

R-464

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CO38-4 (cont'd) | this pipeline should be completed within the local watersheds (12-digit Hydrologic Unit Code), and not sent to a distant corner of the Tuscarawas River watershed (8-digit Hydrologic Unit Code) where it cannot provide replacement for the functions and values at the impact location.

All of the biological surveys have been classified as privileged and confidential, denying the public the opportunity to determine how the studies were completed, whether the appropriate protocols were followed, and what the results of the studies were. These studies should be released for public review.

CO38-5 | In the Draft EIS, topsoil separation is only specified for agricultural areas, and residential areas, and non-saturated wetlands. Topsoil develops extremely slowly, and topsoil separation should be completed on the entire route, both upland and wetland, to prevent impacting the soils for years to come. Topsoil separation in all wetlands is required in pipeline projects in Ohio, and should be completed for all wetlands on the pipeline route. Replacing topsoil allows the existing seed bank to be used as a source of plant recolonization, and reduces the probability of invasion by exotic invasive plant species. Placing subsoil at the top of the trench replaces the nutrient-rich soil with poorer soil with less nutrients and organic matter, which is a contributing factor to increased invasion by exotic invasive plant species. This comments applies to the entire project, regardless of which routes are selected.

The pipeline will act as a long-term route for invasive species to migrate into areas with low amounts of invasives. This is a strong concern for the forested wetlands in particular, as sunny, mowed corridors area often dominated by reed canary grass, common reed, or purple loosestrife, and the edges of the corridors are often sources of invasion by glossy buckthorn and other woody invasive species. Additionally, two years of invasive species management is not sufficient to keep invasive species from spreading in these pipeline corridors, particularly when vehicle traffic, especially mowers, spread seeds from one area to another.

CO38-6 | The pipeline trench may impact groundwater flow towards sensitive areas, particularly Singer Lake Bog and other wetlands. It does not seem that NEXUS has made any examination of the groundwater table, particularly the shallow groundwater table, in these areas. Groundwater flow should be measured and monitored between the pipeline and Singer Lake Bog to determine whether this trench will impact the water flows, rather than merely stating that it will not affect the wetland.

CO38-7 | The Green Alternative Route affects significantly fewer wetland resources than the proposed route. It is interesting that FERC spent several paragraphs discussing the disadvantages of the route, but only one discussing the advantages of the route in reducing impacts to wetlands and other sensitive natural areas.

CO38-8 | FERC was right to recommend that NEXUS complete additional study on minimizing the impacts on the Green Alternative Route, and should allow the public additional time to comment on NEXUS's evaluation of the Green Alternate Route. NEXUS seems to have chosen its route without much consideration of the natural resources, and I am concerned that they will not complete sufficient due diligence to reduce impacts on the Green Alternate Route so that they can continue with their initial route. I am concerned that NEXUS will complete only a

- CO38-5 The FERC *Plan* indicates that either full work area or from the trench plug subsoil applicable to cultivated or rotated croplands and managed pastures, residential areas, hayfields and other areas at the landowner's request. NEXUS addresses topsoil segregation similarly in section 3.5.3.1 of its *E&SCP*, indicating that ditch plus spoil side or full right-of-way topsoil segregation as illustrated in Figure CW-2 will be used. The criteria for the choice of topsoil stripping is not specified. The Ohio Specifications recommend full right-of-way topsoil stripping to maintain soil quality and minimize impacts due to rutting and compaction when the soil is trafficked when wet in Section 3D (p. 5). At NEXUS' discretion, full right-of-way topsoil stripping as discussed and illustrated in its *E&SCP* could apply to prime agricultural cropland that is yearly tilled and in row crops and small grains. The choice between topsoil stripping in actively managed hayland or pasture would depend on the specific situation and the sensitivity of the soils to rutting/compaction when wet.
- CO38-6 Invasive species monitoring is discussed in section 4.5.4 and the applicants' ISMPs.
- CO38-7 Section 4.4.3.1 provides a discussion of impacts associated with the Singer Lake Bog. Based on the construction and mitigation measures described in this section and a review of the issues raised by the City of Green, FERC does not anticipate that wetland hydrology and existing flows would be adversely impacted by construction of the NGT Project.
- CO38-8 Comment noted.

COMPANIES/ORGANIZATIONS COMMENTS

CO38 – EnviroScience (cont'd)

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cursory review of the Green Route Alternative in order to conclude that their original route is preferred.

In conclusion, I urge FERC to recommend and NEXUS to select the Green Route Alternative due to its reduced environmental impact.

Sincerely,



Michael A. Liptak, Ph.D.
Certified Senior Ecologist (ESA)

COMPANIES/ORGANIZATIONS COMMENTS

CO39 – League of Women Voters of Wayne County

20160826-0043 FERC PDF (Unofficial) 08/26/2016

ORIGINAL

August 23, 2016

Alexandra Davis, President
League of Women Voters
of Wayne County
428 N. Bever Street
Wooster, Ohio 44691

FILED
SECRETARY OF THE
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FEDERAL ENERGY
REGULATORY COMMISSION

Nathaniel J. Davis, Sr., Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 20426

Re: NEXUS Gas Transmission, LLC
Docket No. CP 16-22-000

Dear Secretary Davis,

Thank you for this opportunity to comment on the NEXUS Gas Transmission pipeline re-route proposed to pass through Wayne County Ohio.

The League of Women Voters, a non-partisan political organization encourages informed and active participation in government, works to increase understanding of major public policy issues, and influences public policy through education and advocacy. Since the 1970's the LWV has been studying, among other things, matters related to air and water quality and land use, subjects that apply directly to the NEXUS pipeline case.

- CO39-1 | Wooster, Ohio, our county seat, is home to the Ohio Agricultural Research and Development Center. For decades world renowned scientists and researchers associated with The Ohio State University have been conducting experiments on this rich farm land and sharing their findings across this county and around the world to impoverished nations helping to improve the production and storage of grain and animal products needed to nourish the human race. In consultation with local land and water resource conservationists we have been informed that once local soils are disturbed they cannot be restored to their original quality. Taking an underground pipeline through this important farmland is not advisable.
- CO39-2 | In addition, the proposed route will likely pass near two local nature preserves, The Wilderness Center on our southeast border with Stark County and Spangler Park on the western edge of the city of Wooster. These two nature areas provide both recreational and educational opportunities for local residents to explore the unique features of these natural habitats. Also close by in the southwest corner of the county is a wetlands, affectionately referred to as the "Shreve Swamp", which is home to many varieties of amphibians, water fowl and migratory birds.
- CO39-3 | Equally important, is the possibility that the pipeline will pass near or through the Killbuck watershed, a major water source for both Wayne and Holmes County residents.

- CO39-1 | See section 3.3.3 for a discussion of the potential impacts of the City of Green Route Alternative on Mellinger Farm (the research farm managed by The Ohio State University's Ohio Agricultural Research and Development Center). Based on our review, we did not find the City of Green Route Alternative provides a substantial environmental advantage when compared to the corresponding segment of the proposed route and did not recommend that it be incorporated as part of the Projects.
- CO39-2 | See section 3.3.3 for a discussion of the potential impacts of the City of Green Route Alternative on the Wilderness Center and Wooster Memorial Park/Spangler Park. Based on our review, we did not find the City of Green Route Alternative provides a substantial environmental advantage when compared to the corresponding segment of the proposed route and did not recommend that it be incorporated as part of the Projects.
- CO39-3 | See section 3.3.3 contains a general discussion of potential impacts on hydrology and watersheds. Based on our review, we did not find the City of Green Route Alternative provides a substantial environmental advantage when compared to the corresponding segment of the proposed route and did not recommend that it be incorporated as part of the Projects.

R-466

COMPANIES/ORGANIZATIONS COMMENTS

CO39 – League of Women Voters of Wayne County (cont'd)

20160826-0043 FERC PDF (Unofficial) 08/26/2016

League of Women Voters - Page 2

CO39-4

Given these important resources, the LWV respectfully requests an opportunity for the citizens of our county to more carefully study the environmental impact of the NEXUS re-route proposal before a decision is made to move forward. Unlike our neighbors in Summit and Medina Counties who have had more than two years to organize and study local issues the original route posed to their residents, our local LWV Board first learned of this proposal on July 21, upon receipt of a notice about a series of meetings sponsored by the Wayne County Farm Bureau for their members. Three of the Farm Bureau meetings were held in Wooster on August 2, 3, and 4 for the purpose of informing local farm families about the FERC hearings for public comment on the NEXUS pipeline proposal scheduled in locations outside of Wayne County on August 16, 17 and 18. We are unaware of any other public information meetings or notices offered to the general population of Wayne County regarding this NEXUS pipeline proposal. Therefore, we submit that this is a serious abridgment of our citizen's right to know and actively participate in decisions impacting our local resources and quality of life.

Respectfully,



Alex Sandra Davis, President
League of Women Voters
of Wayne County

CC: League Women Voters Ohio
Wayne County Commissioners

CO39-4

Comment noted.

R-467

COMPANIES/ORGANIZATIONS COMMENTS

CO40 – Sierra Club

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**SIERRA
CLUB**

August 29, 2016

Nathaniel J. Davis, Sr., Deputy Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 20426

Dear Mr. Davis,

The comments submitted in the accompanied Excel file are pursuant to the proposed Nexus Pipeline (Docket #16-22-000). These comments are submitted on behalf of the Sierra Club members. The comments are directed specifically at the Draft Environmental Impact Statement (EIS).

CO40-1

Regarding the public hearing for the draft EIS. Shortly before the beginning of the scheduled public hearings for the Draft EIS, FERC issued a statement describing the process for the hearings. There would be no formal informational presentations by FERC, and public testimony would be taken individually in separate rooms in the presence of a court reporter and a FERC official. Consequently, there would be no opportunities for the general public, including landowners recently notified due to route changes, to receive information about the project from FERC or from the public commentary of others. This left many members of the general public with little information to prepare written or spoken comments prior to the August 29 deadline.

These practices are contrary to the EPA Environmental Justice guidelines, as stated in section 4.10.10 of the Draft EIS:

The EPA states that Environmental Justice involves meaningful involvement so that:

- (1) potentially affected community residents have an appropriate opportunity to participate in decisions about a proposed activity that would affect their environment and/or health; (2) the public's contributions can influence the regulatory agency's decision; (3) the concerns of all participants involved would be considered in the decision-making process; and (4) the decision-makers seek out and facilitate the involvement of those potentially affected (EPA, 2011).*

FERC should extend the deadline for comments, schedule more hearings in Michigan and Ohio, and return to the plenary session format to better address the concerns of all citizens.

Cheryl Johncox
Organizer Dirty Fuels Campaign

CO40-1

The draft EIS was the information that the public was requested to use to prepare their comments and was publicly available prior to the comment sessions. Also, see response to comment CO12-01.

COMPANIES/ORGANIZATIONS COMMENTS

CO40 – Sierra Club (cont'd)

EXAMPLE FORM LETTER

(reconstructed by FERC staff)

CO40-2 Please accept this letter in opposition to the NEXUS gas transmission pipeline. Regarding the Draft Environmental Impact Statement, the pipeline and related infrastructure construction would cause irreversible damage to thousands of acres of forests, wetlands, and fields. Relevant to this issue is the June 2014, decision by the U.S. Court of Appeals for the District of Columbia, Delaware Riverkeeper Network, et al. v. Federal Energy Regulatory Commission, Tennessee Gas Pipeline Company, which noted FERC's responsibility to consider cumulative impacts. FERC should consider the cumulative impacts of the entire length of the Nexus pipeline and the activities that produce the gas to be transported through the pipeline. As part of its environmental review, FERC should estimate the greenhouse gas impacts from the production, transport, and usage of the gas, including methane leakage from the production sites, the pipeline and compressor stations, and the CO2 releases from increased burning of natural gas.

CO40-3

CO40-2 Potential impacts and minimization measures to wetlands and forests are presented in the final EIS in sections 4.4.2 and 4.5.2, respectively.

CO40-3 See the response to comment FA2-40.

COMPANIES/ORGANIZATIONS COMMENTS

CO40 – Sierra Club (cont'd)

Original petition not included due to formatting errors. Petition included 1,320 signatures stating their opposition to the NEXUS Project.

COMPANIES/ORGANIZATIONS COMMENTS

CO41 – Ohio Farm Bureau

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*Forging a partnership between farmers and consumers.
•Working together for Ohio's farmers•*

August 29, 2016

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 1st Street NE, Room 1A
Washington, DC 20426

Re: Docket Nos. CP16-22-000, CP16-23-000, CP16-24-000 and CP16-102-000

Dear Ms. Bose:

The Ohio Farm Bureau Federation ("OFBF") is pleased to provide comments on the Federal Energy Regulatory Commission ("FERC" or "Commission") draft Environmental Impact Statement ("EIS") on Docket Numbers CP16-22-000, NEXUS Gas Transmission, LLC; CP16-23-000, Texas Eastern Transmission, LP; CP-16-24-000, DTE Gas Company and CP16-102-00 for the Vector Pipeline L.P. projects.

Background

On July 8, 2016 FERC staff issued a draft EIS for the projects. The document details FERC's understanding and assessment of the potential environmental effects of construction and operation of the projects in accordance of the National Environmental Policy Act (NEPA).

Moreover, Commission staff explained that some route alternatives suggested during scoping would affect landowners that have not been part of the agency's initial 2015 environmental scoping process. The public notice detailing release of the draft EIS was also used as a letter notifying parties impacted by the *City of Green Route Alternative*, *Chippewa Lake C Route Variation*, and *Reserve Avenue Route Variation* of their ability to comment on the draft EIS. Accordingly, Commission staff asked that landowners and community stakeholders participate in public comment meetings scheduled August 10 – 18, 2016 and/or file written comment by U.S. mail or eComment at www.ferc.gov. The notice advised that to ensure consideration for all comments on the proposal and in the Final EIS, it was important that the Commission receive all input on or before August 29, 2016.

Statement of Interest

OFBF is a member organization whose mission is to forge partnerships between producers and consumers. The organization is proud of its extensive policy development process. Members and volunteer leaders in local communities identify concerns, create policies and initiate action plans to address them on local, state and national levels.

Next to labor, energy is the largest single cost input for many farm, small business and industrial operations. Consumers living in rural, suburban and urban neighborhoods are looking for opportunities to control their energy costs, too. Farmers understand how effective development and installation of interstate and associated utility pipeline infrastructure could benefit their local communities and neighbors.

Similarly, farmers have invested in no-till cultivation, crop rotation, subsurface drainage, organic farm certification and installation of USDA – NRCS approved conservation practices to protect natural resources and enhance agricultural production. Many farm families have witnessed how ineffective planning has impacted crop production and/or animal husbandry operations years after a pipeline project is completed. Farmland should be considered valuable local infrastructure, too.

280 N. High Street • P.O. Box 182883 • Columbus, OH 43218-2883
Phone: 614.249.2400 • Fax: 614-249-2200 • Web site: www.ofbf.org

R-471

COMPANIES/ORGANIZATIONS COMMENTS

CO41 – Ohio Farm Bureau (cont'd)

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OFBF and its member county Farm Bureaus feel that effective plans allowing for pipeline development while ensuring that impacted farms, rural residents and community facilities are made whole after a project is complete are vital. Farm Bureau has been involved with a variety of stakeholders working on pipeline projects. Our activities include work with the following parties:

- **Landowners and Community Stakeholders:** Since September 2013 OFBF and its member county Farm Bureaus have sponsored over 230 *Energy Infrastructure Issues Briefings* where the NEXUS and other pipeline development projects were discussed. Information presented during these programs include:

- Energy market trends showing how and why a variety of energy infrastructure development projects are impacting communities throughout Ohio.
- Types of pipeline projects and how to identify which federal, state and/or local agencies have jurisdiction on their development.
- How to participate and provide input in public and regulatory hearings.
- How to work/communicate and record meeting results with pipeline company subcontractors and personnel.
- Identifying, advocating and addressing individual landowner concerns and conditions that need to be protected and addressed as part easement/lease agreements.
- Explaining how, when and under what conditions eminent domain provisions could be used.
- Access to independent consultants, engineers and land improvement contractors to help with contract negotiations, repair/remediation strategies, economic and environmental assessments.
- Identifying and retaining legal counsel to interpret legal documents, negotiate agreements and address concerns.

Over 15,000 participants including farmers, rural residents, business leaders, government officials, utility representatives, energy developers and other stakeholders attended these local programs. Moreover, over 1700 phone calls requesting information and further assistance were addressed.

- **Energy Service Providers:** OFBF and county Farm Bureau leaders have held several meetings directly with NEXUS. On the state level, OFBF has worked with the developer's engineers and public policy representatives to help them understand and appreciate the specific characteristics of Ohio farmland. Issues concerning land use, soil types, natural resource protection, drainage infrastructure, compaction damage, conservation practices and other issues concerning repair/remediation of farm ground were explored. OFBF referred NEXUS to the Ohio Department of Agriculture (ODA), Ohio Department of Natural Resources (ODNR), county Soil and Water Conservation Districts (SWCD) and Ohio State University Extension (OSUE) for additional research and technical support. OFBF worked with NEXUS on preliminary drafts of materials concerning agricultural ground repair/remediation and subsurface drainage infrastructure repair. Many of these recommendations can be found in draft EIS Sections 4.2, Soils; 4.3, Water Resources; 4.4, Wetlands; 4.9.5, Land Use – Agricultural Areas and in Appendix K-5, *Agricultural Drain Tiles and Irrigation Systems Crossed by the NGT Project*.
- **Land Improvement Contractors:** As part of preliminary discussions with OFBF, NEXUS expressed the need to explore and better appreciate effective repair/remediation strategies concerning pipeline construction on Ohio Farmland. OFBF referred the company to Land Stewards, LLC (LS) and to members of the Ohio Land Improvement Contractors Association (OLICA) for assistance.
- **Legal Referrals:** OFBF and county Farm Bureaus have created an *Attorney Referral List* with over a dozen legal counsel that could be retained by farmers and their neighbors to address the myriad of easement negotiations and legal concerns associated with energy infrastructure development. OFBF works with several of these law firms to continue education/outreach and legal assistance initiatives. Another benefit of the list is creation of a network between Farm Bureau members and the legal community that is being used to address key issues impacting landowners in specific pipeline development projects, including NEXUS.
- **Local Government:** OFBF and county Farm Bureaus are conducting issues briefings at the request of several county and township governments impacted by pipeline development, including the

COMPANIES/ORGANIZATIONS COMMENTS

CO41 – Ohio Farm Bureau (cont'd)

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NEXUS Project. These programs go into more detail that the *Energy Infrastructure Issues Briefings* discussed above. They focus on helping local governments establish better dialogue with energy developers, and how local government can get better involved in the state and/or federal evaluation and approval process.

NEXUS EIS Comments

Farm Bureau's policy and outreach efforts give the organization a unique perspective concerning energy infrastructure development and the projects. Accordingly, we ask that Commission staff consider the following points as they create the final EIS for the projects:

- R-473
- CO41-1 • **Identification and Treatment of Agricultural Ground/Farmland:** The United States Department of Agriculture (USDA) defines *Prime Farmland* as ground that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops. When soil quality, growing season, water management and acceptable farming methods are taken into consideration, the ground can produce economically sustained high yields of crops. Along with ground used in Ohio to produce cash grains and forage, other ground used for forestry, pastureland, orchards, Christmas tree, vineyard and nursery practices should all have primary designation as agricultural or *Prime Farmland*, too.

Similarly, another classification, *Open Land* could include areas that are primarily used in some type of agriculture. Standards should be revised to ensure that these open areas are properly classified when used in any type of farming practice detailed above.
 - CO41-2 • **Creation of an All-Encompassing Agriculture Impact Mitigation Plan:** OFBF supports adoption and use of an *Agricultural Impact Mitigation Plan* for all farmland impacted by the projects in Ohio. This plan should incorporate all recommendations, references and conclusions identified in draft EIS Sections 4.2, Soils; 4.3, Water Resources; 4.4, Wetlands, 4.9.5, Land Use - Agricultural Areas, as well as the *Agricultural Drain Tiles and Irrigation Systems Crossed by the NGT Project* as referenced as Appendix K-5.

Moreover, this *Agricultural Impact Mitigation Plan* should include guidelines for inclusion of repair/remediation strategies and inspection procedures reflecting the following points:
 - CO41-3 • **Incorporation of Ohio Standards:** OFBF supports FERC staff comparing provisions of the Ohio Department of Agriculture's *Ohio Pipeline Standard and Construction Specifications* to EIS materials that should be incorporated into an *Agricultural Impact Mitigation Plan*. OFBF has worked with ODA, the Ohio Federation of SWCDs, OLICA, OSUE and other interested parties on updating these standards on a continual basis since 1998. The most recent edition of the standards was published in December 2015.

If any provisions of the standard could be used to strengthen the effectiveness of the EIS plan, they should be included. An updated copy of these guidelines can be found on the ODA website at: <http://www.agri.ohio.gov/divs/SWC/docs/PIPELINE%20STANDARD.pdf>.
 - CO41-4 • **Landowner Input and Flexibility in Creating Repair/Remediation Strategies:** OFBF appreciates the Commission staff's work exploring agricultural ground and drain tile repair/remediation requirements as they pertain to other interstate pipeline construction projects impacting farmland in Ohio and surrounding states, as well as NEXUS.

We encourage FERC to maintain an evolving policy where prior to construction, an energy developer, in this case NEXUS, should commit to hire local drain tile contractors to install/repair drain tiles that are damaged or need to be rerouted due to construction activities. Upon completion of construction, NEXUS should provide information on encountered, severed, and/or damaged drain tile lines to the landowner, the local county Soil and Water Conservation District and FERC. Records on damages and corrective repairs should be kept by NEXUS, the landowner and each government agency for future reference.

- CO41-1 Prime farmland is defined as consisting of soils classified as those best suited for production of food, feed, forage, fiber, and oilseed crops. Prime farmland is discussed in section 4.2.1.1. Specialty crops are discussed in section 4.9.5.1.
- CO41-2 Prior to construction, NEXUS shall file with the Secretary an *Agricultural Impact Mitigation Plan (AIMP)* detailing construction and restoration measures to be implemented on the NGT Project to address agricultural issues unique to Ohio and Michigan.
- CO41-3 NEXUS and Texas Eastern will implement their *Erosion and Sediment Control Plan (E&SCP)*, which is based on FERC's *Upland Erosion Control, Revegetation, and Maintenance Plan (Plan)* and Wetland and Waterbody Construction and Mitigation Procedures (Procedures). FERC's *Plan* and *Procedures* are a set of construction and mitigation measures that were developed in collaboration with other federal and state agencies and the natural gas pipeline industry to minimize the potential environmental impacts of the construction of pipeline projects in general.

Prior to construction, NEXUS shall file with the Secretary an *Agricultural Impact Mitigation Plan (AIMP)* detailing construction and restoration measures to be implemented on the NGT Project to address agricultural issues unique to Ohio and Michigan. For construction and restoration measures in Ohio, NEXUS shall consult with the Ohio Department of Agriculture (ODA) on construction procedures to be used in agricultural land in Ohio, including the Pipeline Standards and Construction Specifications, and shall file with the Secretary any measures that result from coordination with the ODA.
- CO41-4 Impacts on drain tile systems are addressed in section 4.9.5.4 and in NEXUS' *Drain Tile Mitigation Plan* (appendix E-3).

COMPANIES/ORGANIZATIONS COMMENTS

CO41 – Ohio Farm Bureau (cont'd)

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- CO41-5 • **Agricultural Inspector Classification and Authority:** NEXUS should be required to have one inspector classification to govern all aspects of construction impacting agricultural ground. This includes treatment of soils and subsurface drainage/field tile infrastructure. Along with other environmental inspectors working on the project, all qualified agricultural inspectors must be given *stop work authority*. This authority will be used when conditions impacting soil integrity, compaction, drainage and other mitigation/repair procedures detailed in the Agriculture Impact Mitigation Plan and/or a landowner easement are not being performed; potentially producing long term or permanent damage to soil and/or drainage systems.
- CO41-6 • **Time Associated with Mitigating Overall Construction Impact:** OFBF has concerns on references in the EIS stating that *most impacts on soil will be temporary and short term*. While there is debate over the extent of time required for soil remediation, most experts agree that it will take years for repair and full restoration to be considered complete. FERC should establish a minimum standard where impacted ground is considered repaired/remediated when production yields on land found within a right of way construction zone are identical to production yields on ground running parallel to the right of way and outside the construction zone. Adhering to this basic guideline should require soil monitoring activities in at least a 5 – 7 year time frame. This should include provisions for extending the monitoring period and having NEXUS provide additional repair/remediation activities if there is still production lag or impact.
- CO41-7 Many areas of Ohio have pipelines that have been in operation for close to a century. While farmers, businesses, residents and local governments are compensated for the *initial* impacts of pipeline installation, more needs to be done to address additional needs that will develop years and decades into the future. In many cases, farmers, businesses, homeowners and local governments will have to bear the full cost to install new drainage infrastructure and/or perform regular care, maintenance and upkeep in designated pipeline right of ways.
- CO41-8 Effective pipeline easements establish long term working relationships between landowners and energy service providers. Accordingly, both parties have a vested interest in making sure that drainage facilities, land features, public roadbeds, community facilities and pipeline are protected. Accordingly, a special pipeline maintenance fund should be created where farms, businesses, residents and/or local governments are compensated by energy service providers when future maintenance activity is performed to address the needs of both parties.
- CO41-9 • **Impact Beyond the Right of Way:** The majority of farms in north central and northwestern Ohio are systematically drained. The Great Black Swamp and similar areas were transformed into residential and agricultural land through systematic drainage ditches and subsurface tiling that has been in operation for over a century. Along with cropland, road ballasts and on-site waste management systems rely on this network.
- Temporary plugging and/or undiscovered damage to drainage systems in any pipeline right of way could have a domino effect impacting farms, businesses and residents well beyond the construction area. Accordingly, the overall project will not only impact initial acres within the right-of-way, but many additional acres beyond this reach. Careful consideration needs to be given to these interrelationships prior to construction in rural communities.
- **Community Dialogue and Outreach:** Energy development projects are advancing rapidly. The need for sharing environmental, economic, social and logistic concerns means that many community stakeholders will need to act at a pace faster than most regulatory agencies operate. Collaborative efforts involving government officials at the local, state and federal levels, energy service providers, utilities, economic development and environmental groups, social services and community stakeholders are vital.
- CO41-10 As part of its work with landowners and community stakeholders as detailed above, OFBF received many positive comments on FERC's program format for its public comment meetings scheduled August 10 – 18, 2016. Farm Bureau members participating in the meetings reminded OFBF staff

CO41-5 Environmental inspection and compliance monitoring are discussed in section 2.5.

CO41-6 Soil impact mitigation, compaction mitigation, and crop yields are discussed in section 4.2.2.

Prior to construction, NEXUS shall file with the Secretary a 5-year post-construction monitoring program to evaluate crop productivity in areas impacted by the construction of the Project. NEXUS shall include in the program a commitment to file with the Secretary quarterly reports for a period of 5 years following construction documenting any crop-related problems and describing any corrective action taken to remedy those problems.

CO41-7 Impacts on drain tile systems are addressed in section 4.9.5.4 and in NEXUS' *Drain Tile Mitigation Plan* (appendix E-3).

CO41-8 Comment noted.

CO41-9 Impacts on drain tile systems are addressed in section 4.9.5.4 and in NEXUS' *Drain Tile Mitigation Plan* (appendix E-3).

COMPANIES/ORGANIZATIONS COMMENTS

CO41 – Ohio Farm Bureau (cont'd)

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CO41-10
(cont'd)

and county volunteer leadership that landowner responsibility to prepare testimony was not lessened, and their ability to get involved in the process was enhanced. Many Farm Bureau members commented that they liked the ability to discuss issues and have general questions answered by FERC staff members prior to delivering testimony. Similarly, many citizens are naturally uncomfortable with speaking in front of larger groups; the ability to deliver their specific testimony and comments on an individual basis addressed many of these concerns. All look forward to seeing their comments posted as a matter of public record in these proceedings.

While many Farm Bureau members welcomed this new format, these members made some constructive suggestions for improvement. Many have concerns about the timing and consequent efforts employed in notifying landowners and other community stakeholders potentially impacted by the *City of Green Route Alternative*, *Chippewa Lake C Route Variation*, and *Reserve Avenue Route Variation*.

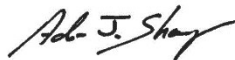
Farm Bureau members feel a much more extensive outreach process needs to be used to help these communities get involved. Their suggestions include:

- Better written communication including special public notices in local newspapers within the route alternative or variation areas, as well as U.S. Mail materials in a format for citizens that do not have access to computers, e-mail and/or the Internet.
- Access to detailed maps that could better define the study corridor identified as part of any route alternative or variation, as well as better identify all landowners that could be affected.
- Scheduling public comment meetings in locations offering better access to persons in route alternative or variation areas.
- Setting a definite deadline earlier in the process where all route alternatives and variations are investigated and decided upon. In short, many communities along the original NEXUS route have had close to 18 months to be involved in the process. Many along route alternatives and variations feel that they have only a matter of days to address issues. Farm Bureau members, their neighbors and local government leaders are left wondering what is their legal recourse in addressing their issues.

Farm Bureau staff, local volunteer leaders and members have welcomed the opportunity to work with Federal Energy Regulatory Commission staff and NEXUS Gas Transmission, LLC representatives to discuss environmental, socioeconomic, community outreach, cultural resources, as well as cumulative impacts. We look forward to keeping you apprised of our activities and working with all parties involved in FERC Docket Numbers CP16-22-000, CP16-23-000, CP16-24-000 and CP16-102-000.

Thank you for your time and consideration.

Sincerely,



Adam Sharp
Executive Vice President
Ohio Farm Bureau Federation

CC: Frank Burkett III, President, OFBF
Yvonne Lesicko, Vice President, Public Policy, OFBF
Brandon Kern, Senior Director, Policy Outreach, OFBF

CO41-10 Comment noted.

COMPANIES/ORGANIZATIONS COMMENTS
CO41 – Ohio Farm Bureau (cont'd)

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Dale Arnold, Director, Energy, Utility and Local Government Policy, OFBF

COMPANIES/ORGANIZATIONS COMMENTS

CO45 – Ohio State University

R-477

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THE OHIO STATE UNIVERSITY

Administration & Planning
Planning & Policy

2000 McKinstry Power Plant
2000 McKinstry Power
2000 McKinstry Power

1000 McKinstry
1000 McKinstry

August 29, 2016

Nathaniel J. Davis, Sr.
Deputy Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 20426

Re: NEXUS Gas Transmission Project – Docket Number CP16-22-000

Dear Mr. Davis:

I am writing you with regard to that certain Notice of Availability of the Draft Environmental Impact Statement for the Proposed NEXUS Gas Transmission Project and Texas Eastern Appalachian Lease Project, dated as of July 8, 2016 (the "FERC Notice"), whereby The Ohio State University (the "University") was notified of alternative routes for the project based upon being an affected landowner.

This letter sets forth the University's objection to the proposed alternative route known as the City of Green Route Alternative (the "Route Alternative") presented in the draft EIS. The University makes no comment as it relates to the project as a whole, and the comments provided herein are only in connection with the Route Alternative.

CO45-1

The Route Alternative crosses two separate areas of land owned by the University. The first is known as the Mellinger Research Farm, which is located at 6855 West Old Lincoln Way, Wooster, Ohio 44691 ("Mellinger Farm"). The second is known as the Beef and Sheep Research Unit, which is located at 5743 Fredericksburg Road ("Fredericksburg Farm"). Mellinger Farm is more than 300 acres in size and was established by the Mellinger family nearly 200 years ago. In 2002, Mellinger Farm was gifted to the University for development of a long-term research, education and demonstration program for integrated systems of forestry, crops and livestock. The Fredericksburg Farm is also used for long-term agricultural research purposes, but is primarily a production farm to support the University's beef cattle and sheep research efforts.

As a land-grant university founded in 1870 under Congress's Morrill Act of 1862, one of the University's primary missions is to perform agricultural research on its unique land holdings. This research benefits the citizens of Ohio and across the United States. The Mellinger and Fredericksburg Farms are integral parts of this work. Since 2014, the Mellinger Farm has been the site of a USDA National Institute of Food and Agriculture (NIFA) research program studying the scientific, economic, and social aspects of a transition from a monoculture crops operation to diversified cropping system. Dr. Casey Hoy, Director of Agroecosystem Management Program is the Principal Investigator.

CO45-1

See section 3.3.3 for a discussion of the potential impacts of the City of Green Route Alternative on Mellinger Farm (the research farm managed by The Ohio State University's Ohio Agricultural Research and Development Center). Based on our review, we did not find the City of Green Route Alternative provides a substantial environmental advantage when compared to the corresponding segment of the proposed route and did not recommend that it be incorporated as part of the Projects.

COMPANIES/ORGANIZATIONS COMMENTS

CO45 – Ohio State University (cont'd)

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CO45-2 In addition, the University has carefully installed over 60 acres of specialized subsurface drainage systems to improve Mellinger Farm's suitability for replicated research projects. The proposed Route Alternative would cross directly through the center of this USDA NIFA research area, destroying those improvements and the research that is currently taking place.

CO45-3 The Route Alternative for the pipeline would also make future research of the kind conducted at both Mellinger Farm and Fredericksburg Farm very difficult, if not impossible. This is because after soil is disturbed by pipeline construction, its natural structure is destroyed, making it useless for replicated agricultural crops research. Furthermore, continued future intrusions onto the farms for pipeline monitoring and maintenance of the easement area would create significant potential for contamination and interference with active research protocols and would prevent the University from being able to invest in additional research infrastructure in the proposed pipeline easement areas. This would clearly diminish the sites' usefulness for purposes associated with the University's land grant mission and hinder its ability to appropriately serve farmers and agricultural producers in the state.

When looked at in its entirety, the types of damage that would be done by allowing the Nexus pipeline to cross Mellinger Farm and Fredericksburg Farm cannot reasonably be quantified and it isn't possible to simply recreate the work elsewhere. With this in mind, we urge you prevent the Nexus pipeline from ruining these important public assets.

CO45-4 Beyond the negative research impacts mentioned above, Mellinger Farms is also subject to an Agricultural Easement Agreement entered into with the Ohio Department of Agriculture. In the USDA's 1997 Census of Agriculture, it found that Ohio had lost one-third of its total agricultural land, and the State of Ohio therefore delineated a conservation policy to preserve and promote agricultural land. Accordingly, included within the Mellinger Farms Agricultural Easement is a restriction on any industrial or commercial activity. Allowing the installation of the Nexus pipeline across Mellinger Farm would clearly be in conflict with the goals of the Easement and with State of Ohio policies that call for the preservation of agricultural land.

CO45-5 We would also like to bring to your attention the cumulative impact on agricultural research at the University due to multiple developers using University land for pipeline development. This is the third notice from FERC received by the University in recent months, with the proposed ET Rover pipeline already poised to negatively impact a good portion of the Fredericksburg Farm. As mentioned above, the disruption to these research areas, including to the soil and other pristine elements of the land, cannot be measured in dollars and cannot be repaired through measures after the fact.

While the University appreciates many of the benefits that pipeline projects can bring, the cumulative effect of multiple pipelines on its research farms would unreasonably diminish its ability to fulfill its mission as a land grant institution and would impede its continued efforts to support the agricultural producers of Ohio. The agriculture and food processing related industries rely on the research that the University conducts to better serve the people of Ohio and together are the largest contributor to Ohio's economy. Please do not allow the Nexus pipeline to disrupt this beneficial partnership.

CO45-2 See response to comment CO45-01.

CO45-3 See response to comment CO45-01.

CO45-4 See response to comment CO45-01.

CO45-5 See response to comment CO45-01.

COMPANIES/ORGANIZATIONS COMMENTS

CO45 – Ohio State University (cont'd)

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Finally, as an instrumentality of the State of Ohio, the University is limited in its authority under State law to grant easements in the use of its land. The Ohio General Assembly has only provided authority to the University, through the Ohio Department of Administrative Services, to grant easements on university land when the purpose is compatible with the uses and needs of the University. In such instances, the term of the easement is limited to a period not to exceed twenty-five years.

Please note that this letter is being delivered without prejudice to any rights the University may have, and the University expressly reserves all of its rights, powers, privileges and remedies as may be provided at law or in equity.

Sincerely,



Peter L. Jenkins
Director of Real Estate
The Ohio State University

c: Jay Kasey, Senior Vice President of Administration and Planning
Lonnie King, Dean of The College of Food, Agriculture, and Environmental Sciences
Keith Myers, Associate Vice President of Planning and Real Estate
Dr. David Benfield, Associate Vice President of Agricultural Administration
Ken Scaife, Assistant to the Director of OARDC - Agricultural Operations

COMPANIES/ORGANIZATIONS COMMENTS

CO46 – Wayne County Agriculture Success Team Members

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Agriculture Success Team

428 West Liberty Street
Wooster, Ohio 44691
330.287.5400

August 29, 2016

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426-0001

RE: NEXUS Gas Pipeline / Docket Number – CP 16-22-000

Dear Ms. Bose:

The Wayne County Ag Success Team is an assemblage of local agricultural field experts, educators, government officials and economic development practitioners that convene monthly to discuss the state of the county's chief industry. The organization formulates strategies and solutions in order to address specific issues confronting agricultural producers and make system-wide improvements to the vast agricultural network.

Ag Success has monitored the progress of NEXUS, providing feedback to those charged with negotiating the terms of the pipeline. In addition, the organization has supported efforts to educate the farming community on their individual rights as property owners, and more specifically, the potential impact of the pipeline on their business and livelihood. Most recently, the group discussed the NEXUS reroute proposed by the City of Green, for which we firmly stand in opposition.

Wayne County has the third largest agricultural economy in all of Ohio. The total value of agricultural products generated from the 1,928 farms in the area exceeds \$380 million. The original route submitted by NEXUS to the Federal Energy Regulatory Commission (FERC) poses minimal impact to Wayne County's agricultural industry by comparison to the reroute. The City of Green's proposed corridor will traverse more than 35 miles of our county's rural landscape, disrupting countless family farm operations and reducing countywide crop production. Furthermore, should the planned T-taps remain in place in the Rittman and Doylestown area, an additional 40 miles of mostly agricultural land will be disrupted, increasing the environmental impact of the project and posing unnecessary hardships to additional property owners.

Additionally, this green alternative goes through the largest Amish community in the state, which is in Wayne County's Paint, Salt Creek and Franklin Townships. These communities already have two pipelines. They consist of small farmers. The three pipelines going through can decimate these farms and make them economically unviable.

Agriculture Success Team Members:

Ann Obrecht (Chairperson), Adam Liston, Bob Hange, Brian Gwin, Casey Hoy, Chris Finney, David Rohrer, Duane Wood, Fred Myers, John Anderson, John Fitzpatrick, Mike Amstutz, Roger Baker, Rory Lewandowski, Shawn Starlin, Tom Stockdale

CO46-1 The wetland crossing for feature A16-2 is 0.1 mile southeast the Nimisila Reservoir at MP 41.2, and is classified as a Category 2 wetland per ORAM scoring protocols.

CO46-2 See section 3.3.3 for a discussion of potential impacts of the City of Green Route Alternative on Amish farms. Based on our review, we did not find the City of Green Route Alternative provides a substantial environmental advantage when compared to the corresponding segment of the proposed route and did not recommend that it be incorporated as part of the Projects.

R-480

COMPANIES/ORGANIZATIONS COMMENTS

CO46 – Wayne County Agriculture Success Team Members (cont'd)

20160829-5282 FERC PDF (Unofficial) 8/29/2016 4:01:46 PM



Agriculture Success Team

428 West Liberty Street
Wooster, Ohio 44691
330.287.5400

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
Page 2
August 29, 2016

CO46-3

Wayne County is a proud agricultural community that places high value on protecting and preserving its agricultural assets. The County boasts the most Agricultural Security Areas (ASA) in the state. The ASA program is aimed at promoting the retention of agriculture by providing protection from urban and suburban development. While this program can prohibit road, water and sewer extension due to jurisdiction, natural gas pipelines are exempt from ASA protections.

We urge FERC to approve the original NEXUS submission. Furthermore, we would ask that FERC require NEXUS to uphold the Ohio Department of Agriculture Pipeline Standards in order to minimize the impact in our community and to ensure a recovery of our most value asset, our agricultural land.

Sincerely,

Wayne County Agriculture Success Team Members:

Ann Obrecht (Chairperson), Adam Liston, Bob Hange, Brian Gwin, Casey Hoy, Chris Finney, David Rohrer, Duane Wood, Fred Myers, John Anderson, John Fitzpatrick, Mike Amstutz, Roger Baker, Rory Lewandowski, Shawn Starlin, Tom Stocksdale

Agriculture Success Team Members:

Ann Obrecht (Chairperson), Adam Liston, Bob Hange, Brian Gwin, Casey Hoy, Chris Finney, David Rohrer, Duane Wood, Fred Myers, John Anderson, John Fitzpatrick, Mike Amstutz, Roger Baker, Rory Lewandowski, Shawn Starlin, Tom Stocksdale

CO46-3

Comment noted.

R-481

COMPANIES/ORGANIZATIONS COMMENTS

CO46 – Wayne County Agriculture Success Team Members (cont'd)

KU Resources recommendation to the City of Green was that data suggests that soils used for cut and fill should be limited to the redevelopment area and not secured from areas outside the proposed redevelopment area without further evaluation. Once again, this evaluation did not include the area of the proposed pipeline or the activities that are proposed.

Given the above historic information of the Ariss Property, I do not feel that the DRAFT EIS addressed these concerns or more importantly even recognized the potential for environmental issues. Recognizably, the data sets have quite a bit of variation depending on where there was sampling completed and who completed it. Either way, the variation of results and documentation of known constituents of concern warrant further investigation by NEXUS specific to their project. **A Phase I and II should be conducted specific to the pipeline project on this property and be consistent with Rule 13 and coordinated with Ohio EPA.** The cut and cover nature of the pipeline installation in this area can potentially allow documented constituents of concern to migrate from the area if present. **NEXUS not completing their own Phase II investigation of the area specific to their activity is a concern of public health and safety to the citizens of the City of Green as well as those workers installing the pipeline that could be exposed to potential constituents of concern.**

Lastly, I do feel that NEXUS should strongly consider adopting the Green Alternate Route proposed by the City of Green which was recognized by FERC as a viable alternative. From my professional experience, pipelines and other linear projects have less impact to natural resources and the public when they are constructed in less populated areas. I understand that studies on alternative routes cost time and require financial resources. However, my experience is that routes in rural areas often result in significantly less mitigation, less permit requirements and decreased impacts to the community while producing a better project.

Respectfully,


Jamie Krejsa

President / Chief Operating Officer

COMPANIES/ORGANIZATIONS COMMENTS

CO47 – Sierra Club

R-483

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Nathaniel J. Davis, Sr., Deputy Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 20426

Dear Mr. Davis,

The comments submitted below are pursuant to the proposed Nexus Pipeline (Docket #16-22-000). These comments are submitted on behalf of the Sierra Club Michigan Chapter (109 E Grand River Avenue, Lansing, MI 48906). The comments include two sections, one directed at FERC's ultimate public convenience and necessity determination, and one directed specifically at the Draft Environmental Impact Statement (EIS).

Nancy Shiffler
Chair, Michigan Beyond Natural Gas and Oil Committee

August 29, 2016

Section I: Evidence of Public Convenience And Necessity.

This section looks at the decision FERC must make in determining whether to issue a Certificate of Public Convenience and Necessity. The recent FERC decision on Dockets CP 13-483-000 and CP 140492-000 (p. 12) summarizes the guidance stated in the Certificate Policy Statement: *"The Certificate Policy Statement explains that in deciding whether to authorize the construction of major new pipeline facilities, the Commission balances the public benefits against the potential adverse consequences. The Commission's goal is to give appropriate consideration to the enhancement of competitive transportation alternatives, the possibility of overbuilding, subsidization by existing customers, the applicant's responsibility for unsubscribed capacity, the avoidance of unnecessary disruptions of the environment, and the unneeded exercise of eminent domain in evaluating new pipeline construction."*

Consequently, it is useful to consider the public convenience and necessity side of the balance to provide the context for reviewing the Draft EIS.

Market Pull is Limited

The draft EIS states: *"the need for the Project originates from an increase in demand for natural gas in the region for electric generation, home heating, and industrial use, coupled with a decrease of imports of natural gas to the region by traditional supply sources, mainly western Canada and the Gulf Coast. The Projects would meet this need by importing natural gas to the region from newly available sources, mainly the Appalachian Basin."* Most of this statement is basically incorrect, considering:

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CO47-1 The purpose of and need for the Project are discussed in section 1.1.

CO47-1

COMPANIES/ORGANIZATIONS COMMENTS

CO47 – Sierra Club (cont'd)

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Demand for electricity and natural gas in Michigan and the DTE service territory has declined and is predicted to continue to decline in the future. From 2000 to 2015, Industrial gas usage actually declined the most (26%). Electric generation accounted for only 21% of all gas consumed in Michigan in 2015.

<http://www.eia.gov/electricity/monthly/>

http://www.eia.gov/dnav/ng/ng_sum_lsum_dcu_SMI_a.htm

In recent MPSC rate cases, DTE Electric stated that they expect their electric sales to decline at a 2% annual rate. DTE predicts Industrial demand will decline by a larger 4% per year. DTE stated that they do not plan to build a new gas electric plant until 2022.

DTE Gas said they forecast declining natural gas sales for all rate classes - including

Residential - due to energy efficiency.

<http://efile.mpsc.state.mi.us/efile/docs/18014/0002.pdf>

Demand for natural gas has increased in Ohio. However, all but one of the new Ohio gas plants are planned along the Ohio River, far from the Nexus pipeline.

<http://marcellusdrilling.com/2016/04/list-of-7-announced-natgas-fired-electric-plants-planned-in-ohio/>

Plus, Nexus has no firm commitments in Ohio and FERC stated, "we do not consider the 13 [Nexus] tee-tap sites to be essential." (Nexus DEIS, p.1-4)

There no longer is a Dawn Hub price premium and Ontario has an alternative source of Marcellus gas through New York pipelines. Demand for gas in Ontario is expected to rise very slowly with substantial production of electricity coming from hydro and growing renewable energy share.

<http://www.ferc.gov/market-oversight/mkt-gas/midwest/ngas-mw-vr-pr.pdf>

We Are Overbuilding Pipelines.

The US Department of Energy (DOE), in a report from February 2015, stated that only 54% of current US pipeline capacity is being used, and better utilization could reduce the need for new pipelines.

Michigan has the largest gas storage in the U. S.; it would not need pipeline capacity beyond existing pipelines to prepare for proposed conversions of some coal plants to natural gas. In January 2016, electric generation accounted for only 14% of total gas usage in Michigan

http://www.eia.gov/dnav/ng/ng_sum_lsum_dcu_SMI_m.htm

Marcellus and Utica gas is already flowing to this region through existing pipelines and new pipeline reversals. There is no shortage of gas in the region as evidenced by record high natural gas storage levels and relatively low prices. <http://www.eia.gov/naturalgas/weekly/?src=email>

According to RBN Energy: "Neither the Northeast, the Midwest nor Ontario (nor all these areas combined) will need nearly enough gas to absorb all the production flowing out of Marcellus/Utica wells and gas processing plants." (<https://rbenergy.com/too-much-pipe-on-my-hands-marcellus-utica-takeaway-capacity-to-the-midwest-canada/>).

Top management at Energy Transfer (Rover) and key energy analysts are questioning the need for both Rover and Nexus because they essentially are duplicates. Analysts report there appears to be less demand for gas in the region than originally anticipated.

<https://www.snl.com/InteractiveX/article.aspx?CIDID=A-37402136-13106&KPI.T=4>

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CO47 – Sierra Club (cont'd)

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There is increasing evidence and concern that we are reaching a state of overbuild in pipeline infrastructure (<https://www.snl.com/InteractiveX/article.aspx?edid=A-35872577-11048&Printable=1>). Many natural gas pipelines already flow into Michigan and inflow capacity has actually increased 15% from 2000 to 2015 to 10 Bcf/d. During the same time, natural gas usage in Michigan has declined 9%. If both Nexus (1.5 Bcf/d) and Rover (1.3 Bcf/d) are built in Michigan, this would increase Michigan inflow capacity by 2.8 Bcf/d while gas demand is declining. Considerable underutilized capacity will most likely be the result. (EIA-StatetoStateCapacity.xls, http://www.eia.gov/dnav/ng/ng_sum_lsum_dcus_SMI_a.htm). Pipeline overbuild has a major environmental impact because it unnecessarily damages or destroys thousands of acres of the environment and property. Overbuilding is evidence of a lack of public need; if there is a lack of public need, then eminent domain is inappropriate.

Financial Stability of the Project is Questionable.

In Michigan, DTE is attempting to have a considerable share of Nexus costs subsidized by their captive customers. The state Attorney General's office expressed their concerns to the Michigan Public Service Commission (MPSC) that the Nexus agreement is an **affiliate transaction** between DTE Electric and the unregulated DTE Pipeline Company, a 50% owner of Nexus. This will result in the improper subsidization of DTE Pipeline Company by DTE ratepayers and is against the MPSC Code of Conduct: "There is a strong likelihood, as currently structured and proposed, that the NEXUS agreement will result in the improper **subsidization** of DTE Pipeline Company by DTE Electric's ratepayers, who will be bearing the burden of a net loss for the vast majority of the NEXUS contract." (<https://efile.mpsc.state.mi.us/efile/docs/17920/0116.pdf>, p.21)

The Michigan Attorney General and the ANR Pipeline Co. also claim that Nexus did not adequately consider alternative pipelines. Plus, the AG finds the DTE analysis "shows very clearly that the additional NEXUS pipeline capacity costs exceed any potential benefits from lower gas prices through the year 2024. Any significant savings, if they materialize, would not start until 2030." (<https://efile.mpsc.state.mi.us/efile/docs/17920/0116.pdf>, p.18), (<https://efile.mpsc.state.mi.us/efile/docs/17691/0141.pdf>)

DTE had to increase their commitment to Nexus, to quote DTE, "in order to ensure that the project has sufficient customer commitments to justify proceeding with construction." This additional take will most certainly reduce or eliminate take from competitive and existing pipelines such as ANR. Plus, it will lock DTE ratepayers into 20-year Nexus contracts at the expense of other supply and energy alternatives. (<https://efile.mpsc.state.mi.us/efile/docs/17920/0065.pdf>)

It appears unlikely that Nexus will be able to fully fund itself with so little capacity fill. Nexus capacity is only 56% filled, with a large share of this DTE. DTE Electric says they will not be able to use all their Nexus capacity until 2024. Also, consider that some shippers, and most likely Nexus' largest shipper Chesapeake, have renegotiated with other pipeline companies for lower volumes and fees. (<https://efile.mpsc.state.mi.us/efile/docs/17920/0065.pdf>)

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CO47 – Sierra Club (cont’d)

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Section II: Comments Regarding the Draft EIS

Given FERC’s role of balancing “public convenience and necessity” against potential adverse impacts, we have a number of concerns after reviewing the Draft EIS.

The Draft EIS Dismisses Viable Information for the No-Build Alternative.

The Draft EIS is further flawed because of its failure to consider alternatives other than modes of fuel transport, such as a cleaner fuels and energy conservation alternative. This is exemplified in the dismissive tone in the section 3.1 discussion of the no-action alternative, which ends with this statement:

“Authorizations related to how markets would meet demands for electricity are not part of the applications before the Commission and their consideration is outside the scope of this draft EIS. Therefore, because the purpose of the Projects is to transport natural gas, and the generation of electricity from renewable energy resources or the gains realized from increased energy efficiency and conservation are not transportation alternatives, they are not considered or evaluated further in this analysis.”

The Draft EIS does not adequately account for the role of energy conservation and efficiency and the use of renewable energy in reducing market demand. The Draft EIS argues that if Nexus were not to be built, other natural gas companies would propose new pipelines with the same environmental consequences. However, that argument does not account for current and future reductions in market demand that would result in sufficient capacity in existing pipelines to address market needs. With the trends in improved technology and reduced costs for renewables and efficiency, one would expect them to play a greater role in the near term and, thus, play an important role in consideration of alternatives.

FERC must, according to NEPA, demonstrate why “No Action” will not meet a demonstrated “Need.” Consequently, the “No Action” alternative must be fully analyzed, and FERC’s refusal to do so requires a much better justification than is currently provided in the Draft EIS. FERC must both account for the negative consequences of taking “No Action,” and demonstrate that this particular permit for this particular project will outweigh these negatives.

FERC Is Providing Incomplete Information To Landowners Regarding Acquisition Of Easements.

FERC is providing implicit pressure, which it frames as encouragement, to landowners to settle with the company rather than going through eminent domain proceedings. However, it neglects to tell them that FERC uses the proportion of negotiated right-of-way agreements as an indicator favoring approval of the project, putting a thumb on the scale that balances public need with adverse impacts. Formal FERC policies on acquisition of right of way are biasing the decision in favor of construction of Nexus. FERC reduces mitigation to a private agreement between landowners and the pipeline company.

We note this statement from Notice of Intent and echoed in your “What Do I Need to Know” handbook for landowners:

“If you are a landowner receiving this notice, a pipeline company representative may contact you about the acquisition of an easement to construct, operate, and maintain the planned pipeline facilities. The

CO47-2 As discussed in section 1.1 of the EIS, the purpose of the Project is to transport natural gas. Renewable energy sources or the gains realized from increased energy efficiency and improved technology are not transportation alternatives; therefore, they are not considered in the EIS.

CO47-2

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CO47 – Sierra Club (cont'd)

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company would seek to negotiate a mutually acceptable agreement. However, if the Commission approves the Project, that approval conveys with it the right of eminent domain. Therefore, if easement negotiations fail to produce an agreement, a condemnation proceeding could be initiated where compensation would be determined in accordance with state law."

We also note this statement from FERC's Certificate Policy Statement (1999) [not provided directly to landowners]:

"[T]he Company might minimize the effect of the project on landowners by acquiring as much right-of-way as possible. In that case, the applicant may be called upon to present some evidence of market demand, but under this sliding scale approach the benefits needed to be shown would be less than in a case where no land rights had been previously acquired by negotiation."

And this from Order Clarifying Statement of Policy (2000) [also not provided to landowners]:

"The Policy Statement encouraged project sponsors to acquire as much of the right-of-way as possible by negotiation with the landowners and explained how successfully doing so influences the Commission's assessment of public benefits and adverse consequences."

CO47-3 | FERC should provide landowners on the original route and on any alternative routes a clear explanation of the NEPA requirements and how FERC interprets landowner agreements in its decision process. Having failed to do this for this specific project, FERC should not assume that completed agreements minimize the impact on landowners when weighed against supposed public benefits.

FERC' Public Hearing Process Stifles Public Information and Participation

CO47-4 | On August 4, 2016, shortly before the beginning of the scheduled public hearings for the Draft EIS, FERC issued a statement describing the process for the hearings. There would be no formal informational presentations by FERC, and public testimony would be taken individually in separate rooms in the presence of a court reporter and a FERC official. Consequently, there would be no opportunities for the general public, including landowners recently notified due to route changes, to receive information about the project from FERC or from the public commentary of others. This left many members of the general public with little information to prepare written or spoken comments prior to the August 29 deadline.

We also note that the decision to hold the only Michigan hearing in Tecumseh, some 30 miles from the lower income areas of the Ypsilanti sections of the proposed route, is contrary to the EPA Environmental Justice guidelines, as stated in section 4.10.10 of the Draft EIS:

The EPA states that Environmental Justice involves meaningful involvement so that:

(1) potentially affected community residents have an appropriate opportunity to participate in decisions about a proposed activity that would affect their environment and/or health; (2) the public's contributions can influence the regulatory agency's decision; (3) the concerns of all participants involved would be considered in the decision-making process; and (4) the decision-makers seek out and facilitate the involvement of those potentially affected (EPA, 2011).

CO47-3 Comment noted.
CO47-4 See responses to comments CO12-01 and CO40-01.

COMPANIES/ORGANIZATIONS COMMENTS
CO47 – Sierra Club (cont'd)

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FERC should extend the deadline for comments, schedule more hearings in Michigan, and return to the plenary session format to better address the concerns of all citizens.

Land Use Impacts, Both Short-Term and Long-Term, Are Adverse.

Impact on Soil. FERC has received a number of comments from farmers expressing concerns about the impact on soil structure from construction of the pipelines. The primary concern is the long-lasting impact on soil productivity, which farmers have already noticed from previous rights-of-way construction, as well as potential damage to drain tiles (see for example the comments submitted by Paul Wielfaerth of Lenawee County, Michigan). It has also been noted in other parts of the Midwest, for example in reports from testimony concerning a pipeline proposal in Iowa in 2015 (<http://amestrib.com/news/bakken-pipeline-may-damage-soil-conditions-generations>): “If fertility is reduced, whether it’s due to contaminated top soil, disruption of water movement within the soil, change in soil temperature due to the presence of the pipeline or any of the other possible issues that Fenton believes could come from the pipeline’s construction, it could mean significant damage to the local farmland, agricultural industry and yield farmers get from their crops.” Multiplied by the many miles of the Nexus pipeline traveling through farmlands (47% of the affected pipeline acreage) and added to the cumulative impact of other proposed pipelines in Ohio and Michigan, the effect on agricultural production could be significant both locally and regionally.

CO47-5 | Given the potential long-term impacts on productivity, the description of the monitoring and mitigation process is inadequate. The Draft EIS should be treating this soil productivity issue not as a short-term impact, but rather as a long-term or permanent impact to be monitored and corrected over several years. The process for correcting problems needs to be spelled out. What redress do farmers have if Nexus refuses to correct a documented problem or has insufficient financing to complete it? The landowner should not have to resort to litigation to seek redress for documented losses.

Impact on Forested Lands. As stated in the Draft EIS, “Construction of the NGT Project would result in the loss of approximately 332.2 acres of upland forest and 43.1 acres of forested wetlands, and construction of the TEAL Project would result in the loss of approximately 29.7 acres of upland forest and 0.1 acre of forested wetlands. The impacts of forested habitat loss are considered long-term due to the amount of time required for the forested habitat to return to its previous state, often taking decades. ... The NGT Project would permanently convert 146.3 acres of upland forest and 29.4 acres of forested wetland, while the TEAL Project would convert 4.9 acres of upland forest.”

CO47-6 | While acknowledging the long term or permanent impacts of the Nexus project on forested areas, the Draft EIS takes a dismissive view of the overall impact on forest habitat. For example, it claims that the impact in Michigan would be minimal because half of Michigan’s acreage is in forestland, ignoring the fact that most of that acreage is in the northern part of the state and represents different forest types. The analysis should instead look at the impact on the remaining forest types in the southeastern part of the state.

CO47-7 | Forest and Agricultural Management Programs. The Draft EIS notes that the Nexus route would cross lands participating in conservation easements or various Conservation Reserve Programs and acknowledges the need for further analysis to determine how the pipeline would affect the land’s continued participation in these programs. However, the primary remedy seems to be the reimbursement of the landowner to compensate for any penalties or lost tax abatements. There should

CO47-5 | Section 4.0 describes the impact duration and significance. Soil impact mitigation is discussed in section 4.2.2.

CO47-6 | Forested impacts are discussed in section 4.5.2. Vegetation communities of special concern or value are discussed in section 4.5.1.1.

CO47-7 | Comment noted.

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CO47 – Sierra Club (cont'd)

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CO47-7
(cont'd)

also be consideration for altering the pipeline route to avoid these lands. There should be no reason to assume that the "public value" of the pipeline supersedes the "public value" (and personal value on the part of the land owner) of these conservation programs.

CO47-8

Wildlife. We note that finalizing the Wildlife section is incomplete pending the submission of reports from other state and federal entities and the completion of plans from Nexus. Since these reports may not arrive until on or after the August 29 public commentary deadline, the public is limited in how it can comment. We do concur with the emphasis on avoiding the clearing of bat, massasauga, and migratory bird habitat during the breeding and nesting season; however, the variations in start and end dates for the protected time frames for each species may create the potential for violations if not carefully monitored.

CO47-9

Water Crossings. In its discussion of the use of Horizontal Directional Drilling (HDD) for water crossings, Nexus identifies three sites "as high risk of experiencing difficulty during construction, including the Sandusky River (MP 145.9), Maumee River (MP 181.6), and Huron River (MP 250.9). Each of these rivers is designated as sensitive for fish, recreation, and/or historic values." FERC has requested an assessment of the use of the HDD method for these sites prior to the end of the comment period. We concur that such an assessment should be done, but note that this will provide little or no time for public commentary.

The Draft EIS also notes that Nexus was unable to characterize the risk for four of the HDD sites: the Nimistla Reservoir (MP 41.1), Tuscarawas River (MP 48.1), West Branch of the Black River (MP 92.4), and the U.S. Highway 12/RACER site (MP 254.3). We are particularly concerned about the U.S. 12/RACER site, the former Willow Run Power Train Plant, which is being administered under RCRA. As noted on page 4-164, numerous assessments have identified PCBs, VOCs, and possibly the presence of benzene, mercury, and other pollutants. The location of these contaminants should be carefully assessed, and the potential for contamination of the drilling fluids, with further dispersal during disposal or in inadvertent returns to the surface.

CO47-10

Water Usage. The Nexus project would require approximately 70.1 million gallons of water for hydrostatic testing, HDD crossings and construction of above ground facilities, with 96% coming from surface water sources. Permitting for the withdrawal would be under the jurisdiction of OEPA in Ohio and MDH&Q in Michigan. Because of the quantity of water involved, Michigan withdrawals should be assessed with the state's Water Withdrawal Assessment Tool.

Lack of Reasonable Comment Period on Pending Reports

CO47-11

FERC maintains that all of the described impacts could be sufficiently mitigated if FERC's proposed 47 conditions are carried out. However, many of the conditions involve the submission by Nexus of additional information and plans, including reports from other federal, state, or local entities. In many cases these are required to be filed "prior to the end of the draft EIS comment period." It is unlikely that there will be sufficient time for adequate public commentary on any of these required reports. In practical terms, this suggests that the DEIS is an incomplete document. Provision of supplemental information contemporaneously with the mandatory public comment period means the public is commenting on an incomplete document, even as FERC states that the information would not materially alter the DEIS conclusions. That's a suspect and unwarranted conclusion particularly if the effect of the provided information causes FERC to order rerouting of the pipeline.

CO47-8

The final threatened and endangered survey reports and their findings have been incorporated into section 4.8.

CO47-9

The high-risk HDD site assessments were submitted prior to the end of the DEIS comment period and have been incorporated into the EIS.

CO47-10

NEXUS would be required to obtain all applicable environmental permits. If required by the MDEQ permitting process, NEXUS would use the state's Water Withdrawal Assessment Tool.

CO47-11

In most instances where additional information was requested prior to the end of the comment period, we were able to make a conclusion on the significance of an impact with the information available at the time the draft EIS was published. The recommendation that additional information be provided for the final EIS was in an effort to reduce the significance of the impact, not to introduce new, previously undisclosed impacts. The information we required the applicants to provide prior to the end of the comment period was put into the public record at the time it was filed and, therefore, was available for the public to review and comment before the final EIS was issued (i.e., the final EIS is not the first time the public has access to this information).

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CO47 – Sierra Club (cont'd)

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The draft EIS states that, "We do not expect that the applicants' responses would materially change any of the conclusions presented in this draft EIS." [The draft EIS states that these are needed primarily to update information; we suggest that the same diligence should be applied in updating the 2010 unemployment figures.] This statement is rather disconcerting given that at least some of the information requested, such as completion of missing risk analysis data for some HDD sites, has the potential to alter procedures or routes. FERC should ensure a time frame for additional comments to be submitted following the receipt of these reports.

Safety Requirements May Not Fully Account For The Potential Impact Radius

Spectra Energy Partners (which partners with DTE in the Nexus application) submitted a petition to the Pipeline Hazardous Materials Safety Agency (PHMSA -- Docket Number -2016-0009). The petition seeks a waiver of the requirement to odorize gas in pipeline sections passing through densely populated Class 3 IICAs when more than 50% of the downstream segments are also densely populated. In this case, the final 7 miles of the proposed pipeline, with a possibility of extending it to the final 20 miles. The 20-mile extension would include the pipeline segments passing Willis and Whitaker Roads near Lincoln Consolidated schools, within 400 feet of three elementary schools. Odorization is a last line-of-defense safety measure, which allows immediate detection of and response to a leak by those actually in proximity to the leak. The company's concern is the cost of blending odorized gas with non-odorized sources at the pipeline terminus. Their petition proposes a series of additional design, materials, construction, and monitoring measures to reduce the risk of a leak in the designated sections. If, in fact, these measures provide an additional margin of safety when the gas is not odorized, we would question why they are not also used in other Class 3 segments that do not fall under the 50% downstream rule.

Any enterprise of this sort is admittedly based on risk management rather than absolute avoidance of risk, but risk estimates are small comfort to those living within an impact radius. For this reason, we argue that the pipeline should be routed to avoid human-occupied buildings within the radius of impact. We stress that the potential for adverse impacts in these situations far outweighs the very weak argument for public need for this project.

Green House Gases and Impacts on Climate Change Are Not Addressed Adequately.

While we were pleased to see FERC is finally following EPA and CEQ guidelines to calculate GHG emissions as part of the NEPA process, we still find the Draft EIS included the following statement:

"Currently, there is no standard methodology to determine how a project's relatively small incremental contribution to GHGs would translate into physical effects on the global environment."

Yet the EPA has consistently stated in its comments on EIS reviews that there is sufficient relationship and predictability of the GHG impacts to include them in environmental reviews. While dismissing the impact of the Project on global emissions as unmeasurable and negligible, the FERC's Draft EIS, in several places, shows no reluctance to note the lower CO2 emissions from burning natural gas compared to other fossil fuels as a benefit of the Project. The logic here seems to be contradictory, slanting in favor of the project.

FERC should take notice of the recently released Harvard study (Turner, et al., *Geophys. Res. Lett.*, 43, 2218-2224, doi:10.1002/2016GL067987), which reports satellite data showing a 30% increase in U.S. methane emissions from 2002-2014, with the trend being largest in the central part of the country.

CO47-12

The DOT makes a determination on whether to grant any waiver of its regulations. However, based on the pipeline incident statistics presented in section 4.13 of the EIS, we continue to find that natural gas transmission pipelines present a low likelihood of incident and are considered a safe and reliable means of transporting natural gas, regardless of population density.

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CO47 – Sierra Club (cont’d)

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including Pennsylvania, West Virginia, Ohio and Michigan. The study concludes that, “*This large increase in U.S. methane emissions could account for 30-60% of the global growth of atmospheric methane seen in the past decade.*”

Although the Harvard study does not attribute the increase to a specific source, the trend coincides with the increase in natural gas production in those areas. Recent studies have also indicated that methane emissions and leaks from gas production and transportation facilities have been underestimated (<http://www.scientificamerican.com/article/leaky-methane-makes-natural-gas-bad-for-global-warming>). Consequently, the impact of the Nexus project on GHG’s should not be dismissed so easily, particularly when considered with the cumulative impact of several pipeline projects proposed for the same region.

The Draft EIS fails to adequately analyze the impacts of the proposed project’s greenhouse gas emissions on climate change as required by NEPA. “The impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct.” *Center for Biological Diversity v. National Highway Traffic Safety Administration*, 508 F.3d 508, 550 (9th Cir. 2007); *Mid States Coalition for Progress v. Surface Transportation Board*, 345 F.3d 508 (9th Cir. 2008); *Border Power Plant Working Group v. DOL*, 260 F.Supp 2d 997 (S.D. Cal. 2003). NEPA calls for a quantification of the “incremental impact[s] that [the proposed project’s] emissions will have on climate change ... in light of other past, present, and reasonably foreseeable actions.” *Center for Biological Diversity v. Nat’l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1216 (9th Cir. 2008).

Accordingly, the Draft EIS must quantify and evaluate the cumulative and incremental effects of climate change resulting from the proposed project and connected actions in comparison to and in conjunction with the effects of emissions of other reasonable alternatives or actions – past, present and reasonably foreseeable.

Cumulative Impacts And The Need For A Programmatic EIS Should Be Considered.

FERC continues to take a limited view of cumulative impacts, both for the pipeline itself over its extended range and in concert with the many other projects in the region. FERC focuses on localized effects rather than on the combined effects on broader areas such as watersheds and drainage systems. Likewise, regional farm production or the health of species of concern should be considered cumulatively. A valid cumulative impacts analysis should address upstream extraction in the Marcellus/Utica plays as well as downstream transportation and combustion.

While acknowledging 9 planned, proposed, or existing FERC-related natural gas transmissions projects in the region, FERC limits consideration of cumulative impacts only to segments of projects within 10 miles of the Nexus project. FERC should instead be considering the broad impacts of the numerous projects that are emanating from the Marcellus shale region, many of them, including Rover, duplicative. It appears that the draft EIS is less reluctant to look at broader impacts when they favor construction. On page 4-270 we find this statement: “*We find that the Projects, along with other planned natural gas projects in the Midwest region, may result in the displacement of some coal use or encourage the use of lower carbon fuel for new growth areas, thereby regionally offsetting some GHG emissions.*” These are essentially downstream impacts on power plant activities outside of FERC’s jurisdiction (and the GHG offset is at best questionable). FERC should be equally willing to look at upstream cumulative adverse impacts such as the increase in green house gas emissions from methane leaks and natural gas production.

- CO47-13
- See the response to comment FA2-34.
- CO47-14
- Natural gas production, including upstream extraction, is discussed in section 4.14.3.1 in the cumulative impacts section.

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CO47 – Sierra Club (cont'd)

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We note that the December 2014 guidance document from the federal Council for Environmental Quality (CEQ) recommended the use of a programmatic EIS when “several energy development programs proposed in the same region of the country have similar proposed methods of implementation and similar best practices and mitigation measures that can be analyzed in the same document.”

CEQ further states, “Programmatic NEPA reviews provide an opportunity for agencies to incorporate comprehensive mitigation planning, best management practices, and standard operating procedures, as well as monitoring strategies into the Federal policymaking process at a broad or strategic level. These analyses can promote sustainability and allow Federal agencies to advance the nation’s environmental policy as articulated in Section 101 of NEPA.”

Addressing cumulative impacts in a systematic way is crucial not only for avoiding and mitigating adverse impacts, but also for assessing the economic viability of a project.

Summary

Ultimately, this is a badly flawed proposal. FERC’s issuance of a Certificate of Public Convenience and Necessity is supposedly based on a balancing of public benefits vs. possible adverse impacts. The financial condition of Nexus suppliers, the questionable level of market demand, and the apparent reliance on affiliate transactions speak to the lack of public need, while the potential for adverse impacts is clear. A company’s desire to build a pipeline does not constitute a need. FERC, to date, has not thoroughly analyzed the need for this project, nor has it demonstrated that this is the only (or best) way to meet that need. We should not be pitting the safety, economic value, and environmental health of property owners and communities against pipeline projects that are neither viable nor needed.

COMPANIES/ORGANIZATIONS COMMENTS

CO48 – Emens & Wolper Law Firm

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UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

OEP/DG2E/GAS 2	}	Docket No. CP16-22-000
NEXUS Gas Transmission, LLC	}	CP16-23-000
Texas Eastern Transmission LP	}	CP16-24-000
DTE Gas Company	}	CP16-102-000
Vector Pipeline L.P.	}	

REQUEST ("REQUEST" OR "MOTION") FOR THE FEDERAL ENERGY REGULATORY COMMISSION ("FERC" OR "COMMISSION") TO AMEND ITS DRAFT ENVIRONMENTAL IMPACT STATEMENT ("DEIS") PRIOR TO ISSUANCE OF THE FINAL ENVIRONMENTAL IMPACT STATEMENT ("FEIS"), AND TO INCLUDE CERTAIN CONDITIONS RE: ITS CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY ("CPCN"), IF ISSUED TO NEXUS PIPELINE, LLC ("NEXUS")

Emens & Wolper Law Firm Co., LPA ("E&W"), on behalf of the many landowners it represents who are directly affected by the above captioned proceeding, hereby requests that FERC (1) amend the NEXUS DEIS issued July 8, 2016 per requests herein, and (2) if FERC decides to issue to NEXUS a CPCN, that the conditions set forth herein are satisfied prior to issuance or be included in the CPCN, as the context indicates.

Attached is a Memorandum in Support setting forth the reasons and bases for said amendments to the DEIS, and for certain conditions if NEXUS receives a CPCN.

A confidential and privileged list of E&W landowner clients is attached hereto as Exhibit A. This list of clients has been provided to NEXUS representatives and is continuously being updated. E&W filed a Motion to Intervene as a representative of its then current and future

COMPANIES/ORGANIZATIONS COMMENTS

CO48 – Emens & Wolper Law Firm (cont'd)

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landowner clients, dated December 12, 2015. E&W's Motion to Intervene was unopposed by NEXUS.

Respectively submitted,

/s/ J. Richard Emens

J. Richard Emens

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Counsel for Landowners reflected on Exhibit A

COMPANIES/ORGANIZATIONS COMMENTS

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**MEMORANDUM IN SUPPORT OF REQUEST FOR FERC TO AMEND ITS DEIS
PRIOR TO ISSUANCE OF THE FEIS, AND TO INCLUDE CERTAIN CONDITIONS
RE: ITS CPCN, IF ISSUED TO NEXUS**

Currently E&W represents more than fifty landowners who own more than five-thousand acres of Ohio and Michigan land that will be impacted by the NEXUS Pipeline Project; many miles of pipeline will cross the properties of these landowners. None of these landowners want the pipeline on their properties. E&W, while a small law firm, has nearly 100 years of experience representing landowners and oil and gas industry clients. For the past six years, E&W has represented only landowners. Ohio's shale activity has demonstrated that many oil, gas, and pipeline companies that have come from outside Ohio have little or no regard for landowners and continually attempt to use said companies' overwhelming financial muscle to intimidate and take advantage of Ohio landowners. NEXUS exemplifies this approach.

In reviewing, analyzing, and approving any new proposed interstate natural gas pipeline project, the Commission is tasked with conducting two independent reviews of the proposed project: (1) the Commission conducts a review pursuant to the Commission's Statement of Policy for the Certification of New Interstate Natural Gas Pipeline Facilities ("Policy Statement");¹ and (2) the Commission conducts a review pursuant to the National Environmental Policy Act of 1969 ("NEPA").² Issues related to landowners are considered under both reviews. The Commission has stated it reviews landowner property rights issues under its Policy Statement review, as property rights issues are different in character from landowner environmental issues considered under NEPA.³

¹ Statement of Policy, 88 FERC ¶ 61,227, 1 (Sep. 15, 1999).

² *Id.* at 24; 42 U.S.C. §§ 4321-4370h (1970).

³ Statement of Policy, 88 FERC ¶ 61,227, 24 (Sep. 15, 1999).

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CO48 – Emens & Wolper Law Firm (cont'd)

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Below we set forth: (1) information relevant to the Commission's review of the NEXUS Pipeline Project pursuant to its Policy Statement; (2) requests for conditions to be satisfied prior to/or included in a NEXUS CPCN if the Commission decides to issue a CPCN to NEXUS; and (3) comments and amendment requests for the Commission to include in issuing its Final Environmental Impact Statement ("FEIS") for the NEXUS Pipeline Project pursuant to its review under NEPA.

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MEMORANDUM IN SUPPORT OF REQUEST FOR FERC TO AMEND ITS DEIS PRIOR TO
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L. THE COMMISSION SHOULD NOT APPROVE THE NEXUS PROJECT PURSUANT TO ITS POLICY STATEMENT WITHOUT ADDITIONAL CONDITIONS

A. OVERVIEW OF THE FERC POLICY STATEMENT AND FERC'S TESTS FOR EVALUATING PROPOSED PIPELINE PROJECTS

On September 15, 1999, the Commission issued an updated Policy Statement.⁴ The Policy Statement recited it was issued to provide guidance to the industry and public as to how the Commission evaluates proposals for certifying new pipeline construction projects.⁵ Under the Policy Statement, the Commission has several tests it uses to evaluate new pipeline projects.

A threshold requirement is the pipeline must be prepared to financially support the project without relying on subsidization from existing customers (i.e. the project must be financially viable).⁶ Second, the applicant must show it has made efforts to eliminate or minimize any adverse effects the project might have on the existing customers of the pipeline proposing the project, existing pipelines in the market and their captive customers, or landowners and communities affected by the route of the new pipeline.⁷

Under this second test, if the Commission finds there is an adverse effect on any of the three interests identified, the Commission will proceed to evaluate the project by balancing the evidence of public benefits to be achieved against the residual adverse effects (i.e. the Commission conducts a balancing test).⁸ Only when the benefits outweigh the adverse effects on economic interests will the Commission then proceed to complete the environmental analysis

⁴ *Id.* at 1.

⁵ *Id.* at 2.

⁶ *Id.* at 19.

⁷ *Id.* at 23.

⁸ *Id.* at 25.

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where other interests are considered.⁹ The Commission sets forth several examples of the balancing test described above in the Policy Statement. The applicable and relevant example of the balancing test to the NEXUS Pipeline Project is where the applicant does not negotiate and is not able to acquire, all the necessary rights-of-way¹⁰ for the project:

“It may not be possible to acquire all the necessary right-of-way by negotiation. However, the company might minimize the effect of the project on landowners by acquiring as much right-of-way as possible. In that case, the applicant may be called upon to present some evidence of market demand, but under this sliding scale approach the benefits needed to be shown would be less than in a case where no land rights had been previously acquired by negotiation. For example, if an applicant had precedent agreements with multiple parties for most of the new capacity, that would be strong evidence of market demand and potential public benefits that could outweigh the inability to negotiate right-of-way agreements with some landowners. Similarly, a project to attach major new gas supplies to the interstate grid would have benefits that may outweigh the lack of some right-of-way agreements. A showing of significant public benefit would outweigh the modest use of federal eminent domain authority in this example.”¹¹

B. NEXUS FAILS TO SATISFY SEVERAL TESTS

Based on the information provided immediately below, NEXUS fails to satisfy the tests set forth by the Commission in its Policy Statement. There are two major reasons NEXUS does not meet the tests: (1) The project may not be financially viable; and (2) NEXUS has acquired less than two-thirds of the necessary Ohio landowner easements.

Based on information and belief, NEXUS is only 55% subscribed which is clearly inadequate when imposing more than 255 miles of 36-inch natural gas pipeline on landowners. This information demonstrates that NEXUS has not satisfied the Commission’s threshold test under the Policy Statement that the project must be financially viable.

⁹ *Id.* at 25.

¹⁰ Rights-of-way and easements are used interchangeably in this Request/Motion.

¹¹ Statement of Policy, 88 FERC ¶ 61,227, 27 (Sep. 15, 1999).

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The key phrases in the “balancing test” quoted above¹² are “the company might minimize the effect of the project on landowners by ‘acquiring as much rights-of-way as possible,’” “some landowners,” “some right of way agreements,” “modest use of federal eminent domain authority,” and use eminent domain against the last “few holdout landowners.”¹³

The Policy Statement asserts that as long as a pipeline project only has a “few holdout” landowners which were unable to reach negotiation for their right-of way, the project could continue. The Policy Statement suggests the pipeline company attempt to acquire “all of the necessary right-of-way by negotiation.”¹⁴ If the Commission wanted to allow pipeline companies’ projects to be certified with only acquiring a small number of right-of-way agreements, it would have said so. In contrast, the Commission clearly asserted that the company should attempt to acquire all of the rights-of-way “by negotiation.” The very term negotiation means to have a mutual discussion aiming at agreement.¹⁵

NEXUS has not made satisfactory efforts to acquire rights-of-way from landowners in Ohio and Michigan and the efforts made have been unrealistic regarding easement provisions and compensation. FERC’s Policy Statement contemplates modest use of federal eminent domain. Obviously, suing more than 30% of total landowners affected by this project is not “modest” use of eminent domain, or a sign NEXUS is trying avoid eminent domain.

It is clear that NEXUS has made minimal efforts to negotiate fair and adequate compensation to landowners for easements on their property. It also appears that NEXUS has less than two-thirds of the necessary Ohio easements to construct the pipeline and that NEXUS’s actions from the beginning of the project have been to sue Ohio and Michigan landowners. We

¹² See *supra* Part I.B.

¹³ Statement of Policy, 88 FERC ¶ 61,227, 27 (Sep. 15, 1999) (emphasis added).

¹⁴ *Id.* (emphasis added).

¹⁵ In fact, the term “negotiate” has been defined as “to bring about by discussion or bargaining.” *Negotiate*, *Black’s Law Dictionary* (9th ed. 2009).

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cannot believe that the staff of FERC, nor its Commissioners, believes this was the intent of Congress in enacting the Natural Gas Act.¹⁶

C. CONDITIONS REQUESTED BE SATISFIED PRIOR TO ISSUANCE OF CPCN

We request the Commission include the following conditions be satisfied prior to issuance of a CPCN:

1. NEXUS has demonstrated financial viability of the project by being more than ninety-percent subscribed; and
2. Thirty days prior to the date NEXUS anticipates FERC issuing NEXUS a CPCN, NEXUS files with the Secretary proof, including copies of signed easements, that NEXUS has obtained signed easements that cover and include 90% of the landowner property in Ohio and Michigan necessary for the NEXUS Project.

II. COMMENTS SPECIFICALLY RELATED TO FERC'S DEIS ISSUED TO NEXUS

Below we set forth our specific requests and amendments directed to the Commission regarding the DEIS for the NEXUS Pipeline Project. This section first describes four central issues of overriding importance and one individual issue that we request FERC consider; then follows the DEIS outline by providing information and making specific requests for amendments to the DEIS and conditions to be included in the CPCN, if issued to NEXUS.

FOUR MAJOR CONCERNS AND ONE INDIVIDUAL CONCERN

ONE. Impact to Agricultural Land and Soils. The soils on the NEXUS pipeline route will be irreparably adversely impacted forever. If NEXUS uses proper soil conservation and

¹⁶ "Natural Gas Act" 15 U.S.C. §§ 717-717z.

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- CO48-1 preservation practices, these damages can be reduced. NEXUS' proposed easement does not contain sufficient terms to protect land, especially agricultural land. Compaction caused by NEXUS' contractor's heavy equipment will cause serious compaction which reduces crop yield.¹⁷ Please see Exhibit B.
- CO48-2 **TWO. Safety Concerns.** The numerous Ohio and Michigan landowners on the NEXUS pipeline have rightful safety and related concerns. Many landowners have provided testimony about safety. NEXUS needs to do much more! Please read the oral testimony of our clients, Liz McKernon, and Hank Heilmann, which they provided at the Elyria, Ohio FERC meeting on August 16, 2016, and the testimony of many other landowners.
- CO48-3 **THREE. Drainage and Drain Tile Repair.** The NEXUS DEIS mention of "previously swampland" which is crossed by the NEXUS pipeline does not even begin to describe the drainage issues that currently exist in the Black Swamp area of Ohio. Please see Exhibit C. Many miles of the NEXUS pipeline crosses agricultural land that currently has and needs drain tile. The NEXUS "DRAFT Drain Tile Mitigation Plan" is inadequate and is only a "DRAFT." How can we (E&W) and our landowner clients know what NEXUS plans to do when all NEXUS offers is a "DRAFT."
- CO48-4 **FOUR. Notice Needed for Landowners on City of Green Route Alternative.** Since the NEXUS DEIS has indicated that the City of Green Route Alternative (Section 3.3.3 of the DEIS) is a viable route, the landowners on said alternatives route need sufficient NOTICE! To date, most landowners have not received sufficient notice.

¹⁷ Daniel Gimenez et. al, "Assessment of Soil Disturbance on Farmland" Rutgers NEW JERSEY AGRICULTURAL EXPERIMENTATION STATION, pg. 1-7, April 2010.

CO48-1 See section 4.2.2 for mitigation measures to reduce soil compaction.

Prior to construction, NEXUS shall file with the Secretary an *Agricultural Impact Mitigation Plan (AIMP)* detailing construction and restoration measures to be implemented on the NGT Project to address agricultural issues unique to Ohio and Michigan. For construction and restoration measures in Ohio, NEXUS shall consult with the Ohio Department of Agriculture (ODA) on construction procedures to be used in agricultural land in Ohio and shall file with the Secretary any measures that result from coordination with the ODA.

Prior to construction, NEXUS shall file with the Secretary a 5-year post-construction monitoring program to evaluate crop productivity in areas impacted by the construction of the Project. NEXUS shall include in the program a commitment to file with the Secretary quarterly reports for a period of 5 years following construction documenting any crop-related problems and describing any corrective action taken to remedy those problems.

CO48-2 See section 4.13 for a discussion of safety and reliability issues and mitigation measures associated with the Projects.

CO48-3 FERC will require NEXUS to submit a final *Drain Tile Mitigation Plan* that incorporates agency and landowner comments on the Projects and draft EIS.

CO48-4 Landowners located along the City of Green Alternative were provided a copy of the draft EIS for review and comment and received the same comment period as all other interested parties.

COMPANIES/ORGANIZATIONS COMMENTS

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CO48-5

INDIVIDUAL REQUEST. Landowner Edmund J. Miller and his family (“the Millers”), whose property is near Luckey, in Wood County, Ohio, have special circumstances that require re-route. The Millers have told NEXUS of their family concerns and have filed with FERC. We agree with the Millers and request that NEXUS re-route its pipeline as requested by the Millers.

III. SPECIFIC REQUESTS AND PROPOSED AMENDMENTS

Review of the NEXUS DEIS informs the bases for the following requested amendments, deletions, additions, etc. We recognize and appreciate the thousands of hours that the FERC staff and Merjent, Inc. personnel must have spent in preparing the more than 440-page DEIS and compiling the hundreds of pages of appendices. On behalf of numerous of landowners and for the reasons stated, the following comments, recommendations, and requests are respectfully submitted:

A. Executive Summary: Pages E-1 to E-17

CO48-6

1. Introduction: Page ES-1. Request that footnote 2 states that “We,” “us,” and “our” also refers to the contractor, Merjent, Inc. whose personnel obviously had much to do with the preparation of the DEIS. As indicated in Appendix P, the “List of Preparers” sets forth more than twice as many “preparers” from the contractor, Merjent, Inc. as from FERC. This request also applies to each place throughout the DEIS where “we,” “us,” and “our” or “the staff prepared” appears.

CO48-7

2. Groundwater, Surface Water, Water Use and Wetlands: Pages ES-4 to ES-6. Page ES-4. Please see later comments regarding flash flooding and depth of pipeline below existing streambeds.

CO48-5 See response to comment letter IND436

CO48-6 Comment noted.

CO48-7 Comment noted.

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CO48-8 Also, while we appreciate NEXUS' willingness to conduct pre-construction and post-construction testing of water quality and yield within 150 feet of the construction workplace, we request a Staff Recommendation in Section 5 that NEXUS gets specific information about how to make the request to landowners within 10 days after the FEIS is issued.

CO48-9 **3. Vegetation, Wildlife, and Aquatic Resources: Pages ES-6 to ES-8.**
Page ES-7. We disagree with the statement "Impacts on upland open land, emergent wetlands, and agricultural lands would be short term [and would] . . . return to their pre-construction states within one to three growing seasons after restoration is complete," unless further modifiers are stated. Please see discussion and request at our E-3.

CO48-10 **4. Land Use, Recreation, and Visual Resources: Pages ES-9 to ES-12.**
Page ES-9. We appreciate FERC's recommendation that "NEXUS provide evidence of landowner concurrence" "for all residences located within 10 feet of the construction work area." We request that 10 feet be changed to 50 feet—which is only 100 feet from the pipeline!

CO48-11 **5. Land Use, Recreation, and Visual Resources: Pages ES-9 to ES-12.**
ES-10. NEXUS' plans for "agricultural monitors" need to be made specific, and timely information about such monitors needs to be provided to landowners (reference to landowners in this filing refer to landowners "on" the NEXUS pipeline, unless otherwise indicated).

CO48-8 Comment noted.

CO48-9 Restoration of agricultural and open lands would follow FERC's *Plan and Procedures*. Per these documents, decompaction and other mitigation measures would be used to restore the right-of-way. In most cases, this would allow for vegetative restoration in one to three growing seasons. Section 2.3.1.7 states that NEXUS and Texas Eastern would conduct restoration activities in accordance with landowner agreements, permit requirements, and written recommendations on seeding mixes, rates, and dates obtained from the local conservation authority or other duly authorized agency and in accordance with NEXUS and Texas Eastern construction and restoration plans.

CO48-10 Thank you for the comment; however, the standard applied to this project is that landowner concurrence with *RCPs* is required only for residences located within 10 feet of the construction work area.

CO48-11 The EIS has been updated to clarify that NEXUS environmental inspectors would be on site to monitor construction activities within agricultural lands. We do not see the benefit of providing timely information about the environmental inspectors to landowners.

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CO48 – Emens & Wolper Law Firm (cont'd)

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CO48-12 We have only seen a "DRAFT" of the "Drain Tile Mitigation Plan" referred to in the DEIS and may have comments and requests once a final plan is issued. Drain tile is of vital importance to many, many landowners on this pipeline.

CO48-13 6. **Safety and Reliability: ES-14.** Since it is recognized that safety is a major concern of landowners and the "potential impact radius for the NGT [Pipeline] Project would be 1,100 feet," we request there be more explanation regarding safety measures, other than those taken care of by the United States Department of Transportation and the Pipeline and Hazardous Materials Safety Administration. Landowners are not familiar with those entities and the law—the sooner NEXUS provides written specific information about safety measure to landowners, the better for all.

CO48-14 7. **ALTERNATIVES: ES-15 to ES-16.** Since the City of Green alternative appears to be alive and well, the sooner FERC and NEXUS get accurate maps and other relevant information to landowners on that alternative, the better. It is not enough to say that FERC wants comments from those landowners – THEY DON'T KNOW WHO THEY ARE! To date, our requests to NEXUS for accurate maps and names of landowners have gone unanswered.

CO48-15 8. **CONCLUSIONS: ES-16 to ES-17.** In order to have impacts reduced to "less than significant levels," we agree that the 47 mitigation measures in Section 5.2 of the draft need to be implemented *and* additional requests as set forth in this filing included.

CO48-12 FERC will require NEXUS to submit a final *Drain Tile Mitigation Plan* that incorporates agency and landowner comments on the Projects and draft EIS.

CO48-13 Section 4.13 of the EIS describes many of DOT's regulations regarding safety. The EIS also identifies pipeline incident statistics.

CO48-14 Detailed alignment sheets of the City of Green route alternative were posted to the FERC docket on 9/2/2016.

CO48-15 Comment noted.

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CO48 – Emens & Wolper Law Firm (cont'd)

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B. Introduction: Pages 1-1 to 1-15

CO48-16 1. 1.0 Introduction: Pages 1-1 to 1-3. Page 1-1. The third sentence needs to recite “The Commission’s environmental staff, with assistance from Merjent, Inc. personnel, has prepared this [DEIS].” Similar language should be included in footnote 5 on page 1-2. Please see our comment in A-1.

C. Description of Proposed Action: Pages 2-1 to 2-33

CO48-17 1. 2.2.2.1 Pipeline Facilities: Page 2-12. We are sure the FERC Staff caught in first line of second paragraph that it should be “TEAL,” rather than “NGT’s”.

CO48-18 2. 2.3.1.2 Clearing and Grading: Page 2-16. We are both surprised and disappointed that there is no mention of triple ditching, as some of the agricultural land is prime or similar farmland. Request that triple ditching be done in appropriate areas to protect soil.

CO48-19 Also, request that NEXUS timely provide to landowners specific information about Environmental Inspectors—how many, what their authority is, when they will be present, where they will be present, how landowners can communicate with them, etc.

CO48-20 2.3.1.3 Trenching: Pages 2-16 to 2-18. Furthermore, the depth of the trench will likely need to be more than “6 to 8 feet deep” in many agricultural lands, since there will be drain tile in much of the agricultural areas (a clear majority of the land where the pipeline is laid). Pipe is 3 feet in diameter, there needs to be at least 18 inches between pipeline and drain tile (which is 6-12 inches in diameter), and 4 feet of cover. Request this change be made.

CO48-16 Comment noted.

CO48-17 Section 2.2.2.1 has been updated to reference the correct project.

CO48-18 See section 4.2.2 for a discussion of general mitigation measures and specific conditions that will be required when backfilling excess glacial subsoil that could displace other soils layers in the pipeline trench.

Prior to construction, NEXUS shall file with the Secretary an *Agricultural Impact Mitigation Plan (AIMP)* detailing construction and restoration measures to be implemented on the NGT Project to address agricultural issues unique to Ohio and Michigan. Specifically, the *AIMP* should address plans for segregating topsoil in areas where the depth of topsoil is greater than 12 inches; triple stripping topsoil, subsoil, and substratum; and ensuring that excess spoil removed from the right-of-way during backfilling consists of substratum, and then, if needed, subsoil. For construction and restoration measures in Ohio, NEXUS shall consult with the Ohio Department of Agriculture (ODA) on construction procedures to be used in agricultural land in Ohio and shall file with the Secretary any measures that result from coordination with the ODA.

CO48-19 See section 2.5.2 for a description of Environmental Inspectors and their responsibilities. See response to comment CO48-26 for information on contacting the applicant regarding issue resolution.

CO48-20 See section 2.3.1.3 for a discussion of trench depth of cover. In addition, section 2.3.2.5 states that the depth of the trench would vary with the stability of the soil, but in all cases it would be sufficiently deep to allow for at least 3 feet of cover over the pipe.

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3. 2.3.1.5 Lowering-In and Backfilling: Pages 2-18 to 2-19. Page 2-19.

CO48-21 There is no discussion of the extreme adverse compaction that may occur if construction is done when the ground is wet. Request there be language saying that NEXUS will not do construction if the ground is wet with a description of adverse results to the soils and yields (for many, many years) if NEXUS does such construction. The construction equipment is much heavier than the typical farm equipment used within the route, which will result in serious compaction.

CO48-22 Also, request a provision in the FEIS that NEXUS will remove all rocks over 3" in diameter that are located during construction.

CO48-23 4. 2.3.2.5. Agricultural Areas: Page 2-26. Request that pre-construction drain tile planning and work be done on much of the agricultural lands in order not to damage the soil, especially if the construction is to be done in late winter or early spring as now appears likely.

CO48-24 5. 2.3.2.7 Residential Construction: Page 2-27. Request that Staff Recommendation #28 on Page 5-24 be amended so that the 10' is 50' and the provisions of 2.3.2.7 be complied with.

CO48-25 Also, it is very important that clarification of NEXUS timing of construction be obtained. From speaking with NEXUS personnel it appears pipeline construction would not start until the spring of 2017; if pipeline construction is to start sooner, then the Winter Construction Plan will need major modification for open land and agricultural areas to protect the soil and drainage systems and avoid severe compaction!

CO48-21 Soil impacts and mitigation measures are discussed in section 4.2.2 and the applicants' *E&SCPs*.

Prior to construction, NEXUS shall file with the Secretary a 5-year post-construction monitoring program to evaluate crop productivity in areas impacted by the construction of the Project. The program shall stipulate that if any landowner agrees that revegetation and crop productivity are successful prior to the 5-year requirement, NEXUS shall provide documentation in its quarterly reports indicating which landowners have agreed that monitoring is no longer necessary.

CO48-22 Rock removal would comply with the applicants' *E&SCPs*.

CO48-23 NEXUS's provisions for pre-construction drain tile planning are spelled out in section 5 of its *Drain Tile Mitigation Plan* (appendix E-3 of the EIS).

CO48-24 Thank you for the comment; however, the standard applied to this project is that landowner concurrence with RCPs is required only for residences located within 10 feet of the construction work area.

CO48-25 Section 2.4 indicates that the applicants request to start construction in the first quarter of 2017.

COMPANIES/ORGANIZATIONS COMMENTS

CO48 – Emens & Wolper Law Firm (cont'd)

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CO48-26 6. 2.5.2 Environmental Inspection: Pages 2-29 to 2-31. Pages 2-30 to 2-31.

It is very important that landowners have access to one or more Environmental Inspectors ("ES(s)"); with only one EI for each 50-mile spread in Ohio it appears much soil damage could occur unless each landowner knows how to contact EIs in case of problems, especially where compaction is occurring.

CO48-27 7. 2.5.4 Compliance Monitoring: Pages 2-31 to 2-32. The FERC

monitoring during and after construction sounds as if it could be beneficial, but it needs to be included as a recommendation in Section 5.

D. NGT AND TEAL PROJECTS ALTERNATIVES: Pages 3-1 to 3-94

CO48-28 1. City of Green Route Alternative: Pages 3-22 to 3-27. We repeat our comment at A.7—the landowners on this alternative need to know who they are and what can happen to their land! And it is NEXUS' obligation to let these landowners know very soon and to distribute accurate maps so the public can also know! Notices need to be run in local papers and on radio and television; a simple letter is *not* sufficient notice. FERC limiting these landowners comment period to "during the draft EIS comment period" is also a real disservice to these landowners. Request that all this be accomplished soon.

CO48-29 Also, Page 3-24 mischaracterizes what occurs when a pipeline company operates on the land—what happens is a "taking," not "use" of the landowner's land.

CO48-30 And, the final paragraph on Page 3-24 omits problems with drain tile and wrongly describes impacts on agricultural land as "mostly minor and temporary to short-term." The damage to agricultural land from compaction alone will occur and persist for many years.

CO48-26 Section 4.9.4.1 indicates that NEXUS and Texas Eastern have prepared Issue Resolution Plans. The plans identify a toll-free Landowner Hotline through which landowners can contact project representatives with questions, concerns, and complaints during construction. NEXUS and Texas Eastern personnel would staff the hotline Monday through Friday from 7:00 a.m. to 5:00 p.m., and Saturday from 7:00 a.m. to 12:00 p.m. After hours, an answering machine would be available to receive calls. If the identified issue cannot be immediately responded to, NEXUS and/or Texas Eastern personnel would attempt to contact the caller the same business day and no later than 24 hours after the initial call. Once documented, NEXUS and/or Texas Eastern personnel would work with the landowner until the issue is resolved. In the event NEXUS' and/or Texas Eastern's response is not satisfactory to the landowner, the landowner would have the opportunity to contact FERC's Landowner Helpline.

CO48-27 NEXUS committed to using FERC Compliance Monitors on the NGT Project; therefore, a recommendation is not necessary.

CO48-28 See response to comment CO48-04. In addition, detailed alignment sheets of the City of Green route alternative were posted to the FERC docket on 9/2/2016.

CO48-29 Comment noted.

CO48-30 The final paragraph of section 3.3.3 has been updated to include drain tiles. See section 4.9.5 for a discussion of impacts on agricultural lands.

COMPANIES/ORGANIZATIONS COMMENTS

CO48 – Emens & Wolper Law Firm (cont'd)

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E. ENVIRONMENTAL ANALYSIS: Pages 4-1 to 4-272

CO48-31

1. **4.1.3.6 Flash Flooding: Page 4-15.** This section focuses on Flash Flooding “to occur in streams.” Nowhere in the DEIS is there a necessary discussion of the Black Swamp area of Ohio in central and northwest Ohio which is crossed by many miles of the NEXUS pipeline. Included as Exhibit C is a brief description of the Black Swamp area. We believe it vital and request the NEXUS FEIS describe this area and make additional recommendations to NEXUS regarding avoiding construction during rainy times, the long term negative soil results from compaction (especially when the soil is wet), and the importance of proper pre-construction, construction, and post-construction dealing with drain tile—as well as accurate monitoring (and taking appropriate corrective measures) during all of these time frames. We do not believe NEXUS current Drain Tile Mitigation Plan is complete or detailed enough for the above described geographical areas.

CO48-32

2. **4.1.5.1 Geology/Bedrock Geology/Surface Geology: Pages 4-16 to 4-17.** Request the notice to landowners of blasting be changed to “at least 72 hours” prior, rather than 24 hours.

CO48-33

3. **4.2 Soils and Subsections: Pages 4-21 to 4-31.** Please see our comments and Requests at E-1, E-6, E-9, E-12, E-24, and E-26, which are all relevant here also as to Soils, Erosion Potential, Prime Farmland, Compaction and the Drain Tile Mitigation Plan. In addition, we are disappointed that there is no mention in the DEIS of triple ditching as a soil protective measure, especially in areas of prime and similar farmland and the Black Swamp area. We again request that such triple ditching be included in a Staff Recommendation in Section 5.2.

CO48-31 See section 4.2.2 for a discussion of mitigation measures on agricultural lands and sections 4.2.2 and 4.9.3.5 for a discussion of mitigation measures related to drain tile systems. FERC will require NEXUS to submit a final *Drain Tile Mitigation Plan* that incorporates agency and landowner comments on the Projects and draft EIS.

CO48-32 Comment noted.

CO48-33 See section 4.2.2 for a discussion of general mitigation measures and specific conditions that will be required when backfilling excess glacial subsoil that could displace other soils layers in the pipeline trench.

Prior to construction, NEXUS shall file with the Secretary an *Agricultural Impact Mitigation Plan (AIMP)* detailing construction and restoration measures to be implemented on the NGT Project to address agricultural issues unique to Ohio and Michigan. Specifically, the *AIMP* should address plans for segregating topsoil in areas where the depth of topsoil is greater than 12 inches; triple stripping topsoil, subsoil, and substratum; and ensuring that excess spoil removed from the right-of-way during backfilling consists of substratum, and then, if needed, subsoil. For construction and restoration measures in Ohio, NEXUS shall consult with the Ohio Department of Agriculture (ODA) on construction procedures to be used in agricultural land in Ohio and shall file with the Secretary any measures that result from coordination with the ODA.

COMPANIES/ORGANIZATIONS COMMENTS

CO48 – Emens & Wolper Law Firm (cont'd)

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CO48-34 **4. 4.2.2 General Impacts and Mitigation: Pages 4-28 to 4-31.** Request the next to last sentence in the first paragraph be amended to read “. . . there would be permanent impacts at certain access roads, cathodic protection sites, areas where construction was done during wet soil periods, and above ground sites.” We also disagree with the words “temporary” and “not significantly alter” in the last paragraph on Page 4-31 for the reasons recited above.

CO48-35 **5. 4.3.1.1 Existing Environment – Groundwater Use: Page 4-36.** The reference in the last paragraph to Section 4.3.2.1 should probably be 4.3.2.3, but, much more importantly, it seems likely that the 67 million gallons of water for hydrostatic testing taken from surface waters will impair those waters – but the DEIS does not say that and should.

CO48-36 **6. 4.5.2.1 NGT Project: Pages 4-69 to 4-70.** Page 4-69. We again object to the concepts and request that the wording of the next to last and prior sentences of the last paragraph be amended to delete “short term” and “minimal”—and include language which recognizes the likely long term adverse impacts on agricultural and open lands as described above.

CO48-37 **7. 4.5.3 General Construction and Restoration Procedures: Page 4-73.**
The described monitoring procedures would likely be beneficial if landowners were aware that NEXUS and FERC staff have committed to them. Request that NEXUS (and FERC, if NEXUS doesn't) provide timely written information to all landowners on the pipeline of such procedures and how landowners can be aware and involved.

CO48-34 Comment noted.

CO48-35 Section 4.3.1.1 has been updated with the correct section reference. Federal and state agencies do not consider water withdrawal to be an impairment; however, they ensure that permits are not issued for waterbodies that cannot sustain the proposed volumes of water withdrawal.

CO48-36 See response to comment CO48-9.

CO48-37 Comment noted. Also, see response to comment CO48-26.

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COMPANIES/ORGANIZATIONS COMMENTS

CO48 – Emens & Wolper Law Firm (cont'd)

R-512

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CO48-38 **8. Table 4.9.1-1: Pages 4-110 to 4-112.** Request that acreage for valves and related equipment and fencing be included in the charts. With approximately 200 miles of NEXUS pipeline crossing Ohio and the chart showing 2746.4 acres of Ohio land utilized during construction (and 949.3 acres taken for operations) on agricultural land, and numbers showing residential, open water, compressor stations, etc., it would appear the acres for valves would also be listed.

CO48-39 **9. 4.9.2 Project-Specific Impacts and Mitigation: Pages 4-117 to 4-119.** Page 4-118. We again request the language in the third paragraph, "minor and temporary to short term," be amended to correctly describe longer term adverse impacts to agricultural lands.

CO48-40 **10. 4.9.5.4 Agricultural Drain Tiles and Irrigation Structures – NGT Project: Pages 4-133 to 4-134.** Please our see earlier comments regarding the Drain Tile Mitigation Plan at E-1, and note especially that injured or broken drain tile will result in flooding.

CO48-41 **11. 4.10.3 Population and Employment: Pages 4-174 to 4-178.** Page 4-176. It is continually disturbing to those of us who care about farmers and agriculture that the entire DEIS barely recognizes the adverse impacts of the pipeline and its facilities on farmers, farms, and the agricultural industry. This omission is highlighted by the description in the last paragraph of "Major industries in . . . Ohio. . ." which DOES NOT EVEN LIST agriculture — agriculture is the largest industry in the State of Ohio!

CO48-42 **12. 4.10.3 Population and Employment: Pages 4-174 to 4-178.** Page 4-177. If the construction of the pipeline is done between February and May 2017 (as stated in

CO48-38 While the footprints of valves and related equipment are located entirely within the mainline permanent right-of-way, the 16 MLVs (as listed in table 2.1.1-2) would permanently impact 0.8 acre of agricultural land and 0.2 acre forest/woodland.

CO48-39 Comment noted.

CO48-40 See section 4.2.2 for a discussion of mitigation measures on agricultural lands and section 4.9.3.5 for a discussion of mitigation measures related to drain tile systems.

CO48-41 Comment noted. According to 2010-2014 ACS 5-year census data estimates, agriculture accounts for only 1.1% of the total industry in Ohio.

Prior to construction, NEXUS shall file with the Secretary an *Agricultural Impact Mitigation Plan (AIMP)* detailing construction and restoration measures to be implemented on the NGT Project to address agricultural issues unique to Ohio and Michigan. For construction and restoration measures in Ohio, NEXUS shall consult with the Ohio Department of Agriculture (ODA) on construction procedures to be used in agricultural land in Ohio and shall file with the Secretary any measures that result from coordination with the ODA.

CO48-42 See sections 4.2.1.4 and 4.2.2 for a discussion of compaction prone soils and proposed mitigation measures. See sections 4.2.2 and 4.9.3.5 for a discussion of mitigation measures related to drain tile systems.

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CO48-42
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the fifth full paragraph—the wet season in Ohio) all of our expressed concerns about compaction, drain tile damage, flooding, etc. become even more relevant.

CO48-43

13. 4.10.5 Public Services: Pages 4-180 to 4-183. Page 4-183, Safety is Ohio landowners' biggest concern! It sounds good to say (in the second paragraph) "NEXUS would also communicate regularly with the public who live and work near the pipelines and facilities about pipeline safety and emergency response plans," but who will decide on, and implementing all of this? And what are the specific plans? Please see our comment in E-19.

CO48-44

14. 4.10.8 Property Values: Pages 4-187 to 4-189. These pages demonstrate exactly why we have requested that at the beginning of each DEIS section where there are words like "we," "us," and "our," refers to the FERC staff," the DEIS needs to state (and we request that it be stated) that FERC has hired a contractor to do much of the work of the DEIS. These three pages are clearly designed to prejudice Courts against landowners when NEXUS sues for eminent domain and quick-take. We expect that Merjent, Inc. personnel wrote most of these pages and we think it is eminently unfair—and misleading. Any rational person knows that he/she does not want a huge natural gas pipeline near to where he/she lives, works, or plays—and that no rational person will pay as much for land near such pipeline as he/she would for the same property without the pipeline. Also request that most all of the "studies" referred to in these pages be deleted, or, if not, there be a footnote saying that Merjent, Inc. personnel wrote most of these three pages.

CO48-45

15. 4.12.1.1 Existing Air Quality – Regional Climate: Page 4-205. We appreciate the recognition that "precipitation extremes are common in the region"

CO48-43 NEXUS is required to develop an emergency response plan for each project. See sections 2.6.1 and 4.13.1 for further discussion.

CO48-44 Comment noted.

CO48-45 Comment noted.

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CO48 – Emens & Wolper Law Firm (cont'd)

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CO48-45 (cont'd) although we question whether “precipitation is generally distributed evenly throughout the year.” Our experience is that the most occurs during February and the spring.

CO48-46 **16. Air Quality Modeling: Pages 4-216 to 4-220.** Page 4-219. We also appreciate the recognition that “While pipeline fugitive methane leaks (e.g. from valves and fittings) and compressor station natural gas combustion emissions would occur, these do not produce oil vapors.”

CO48-47 **17. Table 4.12.2-2: Pages 4-225 to 4-226.** Page 4-22. We request the FEIS have another column in Table 4.12.2-2 indicating the milepost for each entry and exit and what notice of HDD landowners would receive prior to such activity, so that landowners in the respective areas could be prepared for the noise.

CO48-48 **18. 4.12.2.2 Operational Impacts and Mitigation – Pipeline Facilities: Pages 4-227 to 4-228.** Page 227. Request that NEXUS be required to give at least 72 hours’ notice to landowners within 0.25 miles of a MLV site prior to each blowdown event.

CO48-49 **19. 4.13.1 Safety Standards: Pages 4-232 to 4-241.** Page 4-232. Request that at least a brief discussion of the new pipeline safety law recently signed into law by the President be included in the FEIS.

CO48-50 **20. 4.13.1 Safety Standards: Pages 4-232 to 4-241.** Pages 4-236 to 237. In view of the many concerns about safety received by FERC (which we have advised is a *major* concern) it is recommended that NEXUS immediately prepare and communicate to all who live, work, and play within several miles of the pipeline all of the information described in the last paragraph on Page 4-236 as completed at the top of Page 4-237. If

CO48-46 Comment noted.

CO48-47 See table 2.3.2-1 for HDD entry and exit MPs. See section 4.12.2.1 for the notification process for landowners near HDD sites.

CO48-48 As discussed in section 4.12.2.2, blowdowns are infrequent and short in duration. NEXUS has indicated they would minimize noise by incorporating silencers during blowdown events. Therefore, we do not find it necessary to require NEXUS to give landowners prior notice of planned blowdowns. However, individuals seeking advance notification should contact NEXUS to make any such requests.

CO48-49 The Protecting Our Infrastructure of Pipelines and Enhancing Safety (PIPES) Act of 2016 is an extension of PHMSA’s existing pipeline safety program. The PIPES Act is a directive to DOT/PHMSA to carry out the improvement of pipeline safety and does not directly apply to regulated pipeline companies.

CO48-50 See the responses to comments FA2-37 and FA2-38.

R-514

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R-515

CO48-50
(cont'd)

NEXUS is concerned about accomplishing construction of the pipeline and the safety of those near the pipeline, it will have that information prepared and communicated prior to the issuance of the FEIS. Request that Section 5 include a recommendation that FERC not issue a certificate until at least 90 days after NEXUS has done such preparation and communication. It is not enough that NEXUS "would develop," "would provide," "would use," and "would also mail." It needs to happen now.

CO48-51

21. 4.13.1 Safety Standards: Pages 4-232 to 4-241. Pages 4-239 to 4-240, Recommend that "pipeline markers identifying the owner of the pipe and a 24-hour telephone number . . . be placed for 'line of sights' visibility" at appropriate sites in active agricultural crop locations and on the edges of waterbodies. As stated earlier stated, farmers are important people also.

CO48-52

22. 4.13.1 Safety Standards: Pages 4-232 to 4-241. Page 4-241, We appreciate that "FERC staff or its contractors would routinely inspect construction activities to ensure environmental compliance." Request that the FEIS recite specifically how landowners can get in touch with such personnel 24/7, especially in light of the "1,312 significant incidents" (explosions, fires, ruptures, etc.) that were reported from 1996 through 2015.

CO48-53

23. 4.13.2 Pipeline Accident Data: Pages 4-241 to 4-244. Page 4-243, When receiving information about safety, landowners would also like to know how they could get copies of the "annual surveys of" the pipeline regarding evidence of corrosion.

CO48-54

24. 4.14.1 Background: Pages 4-248 to 4-250. Page 4-249, We are puzzled by how NEXUS construction would begin in the first quarter of 2016? And we again

CO48-51

Section 4.13.1 of the final EIS has been updated to more clearly state the DOT regulations for pipeline markers. Specifically the regulations at 49 CFR 192.707 state that for buried pipelines, a line marker must be placed and maintained as close as practical over each buried pipeline at each crossing of a public road and railroad, and wherever necessary to identify the location of the pipeline to reduce the possibility of damage or interference.

CO48-52

The inspections performed by FERC staff or its contractors during construction are to ensure environmental compliance. The pipeline incident statistics identified in section 4.13 of the EIS are with respect to operating the facilities. As identified in section 4.13.1 of the EIS, Ohio and Michigan perform inspections on interstate natural gas pipeline facilities. The DOT is also responsible for enforcement action in all of the Projects' states.

CO48-53

NEXUS and Texas Eastern would be required to keep detailed records of all inspections and supplements to the corrosion protection system as necessary to meet the requirements of 49 CFR 192. However, these records are not provided to the Commission. Individuals interested in the results of safety inspections should contact the DOT.

CO48-54

Section 4.14.1 has been updated to reflect the current construction schedule. See sections 4.2.1.4 and 4.2.2 for a discussion of agricultural lands and compaction prone soils, as well as proposed mitigation measures.

Prior to construction, NEXUS shall file with the Secretary a 5-year post-construction monitoring program to evaluate crop productivity in areas impacted by the construction of the Project. NEXUS shall include in the program a commitment to file with the Secretary quarterly reports for a period of 5 years following construction documenting any crop-related problems and describing any corrective action taken to remedy those problems. The program shall stipulate that if any landowner agrees that revegetation and crop productivity are successful prior to the 5-year requirement, NEXUS shall provide documentation in its quarterly reports indicating which landowners have agreed that monitoring is no longer necessary.

COMPANIES/ORGANIZATIONS COMMENTS

CO48 – Emens & Wolper Law Firm (cont'd)

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CO48-54
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disagree with the statement that “The majority of impacts associated with the NGT and TEAL Projects . . . and most resources (with exceptions) would return to pre-construction conditions shortly after or within 3 years of construction.” We disagree because open and agricultural land is the overwhelming majority of the land crossed by the pipeline and the scar of the easement will be obvious for many, many years, even in cropland areas where crop yield will be less because of compaction.

CO48-55

25. 4.14.3.1 Shale Formations: Pages 4-250 to 4-251. Page 4-251. An “FYI,” as the Ohio Department of Natural Resources would tell you, as of June 4, 2016, 2181 permits have been issued to drill in the Utica formation in Ohio.

CO48-56

26. 4.14.8.1 Geology and Soils: Pages 4-257 to 4-258. Page 4-258. For reasons discussed earlier we disagree that the cumulative effect on “would be temporary and minor.”

F. CONCLUSIONS AND RECOMMENDATIONS 5.0: Pages 5-1 to 5-28

CO48-57

1. 5.1 SUMMARY OF THE ENVIRONMENTAL ANALYSIS: Page 5-1. Disagree that “Most of these environmental impacts would be temporary or short term” for the reasons stated previously.

CO48-58

2. 5.1.2 Soils: Pages 5-2 to 5-3. Page 5-2. We believe compaction impacts on agricultural land will be long term as stated previously.

CO48-59

3. 5.1.3 Surface Waters – Water Resources: Page 5-4. Question whether there will be “No long-term effects on surface waters” as stated previously.

CO48-55 Section 4.14.3.2 has been updated with the ODNr's latest drilling permit count.

CO48-56 Comment noted.

CO48-57 Comment noted.

CO48-58 See sections 4.2.1.4 and 4.2.2 for a discussion of agricultural lands and compaction prone soils, as well as proposed mitigation measures.

Prior to construction, NEXUS shall file with the Secretary a 5-year post-construction monitoring program to evaluate crop productivity in areas impacted by the construction of the Project. NEXUS shall include in the program a commitment to file with the Secretary quarterly reports for a period of 5 years following construction documenting any crop-related problems and describing any corrective action taken to remedy those problems. The program shall stipulate that if any landowner agrees that revegetation and crop productivity are successful prior to the 5-year requirement, NEXUS shall provide documentation in its quarterly reports indicating which landowners have agreed that monitoring is no longer necessary.

CO48-59 Comment noted.

COMPANIES/ORGANIZATIONS COMMENTS

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- CO48-60 4. **5.1.5 Vegetation: Pages 5-5 to 5-6.** Page 5-5. Disagree that "Impacts on . . . agricultural lands would be short term" as stated previously.
- CO48-61 5. **5.1.8 Land Use, Recreation, and Visual Resources: Pages 5-9 to 5-11.** Page 5-9. Disagree that "Agricultural land . . . would be restored to previous use following construction" for the reasons previously stated. Request that the role of "agricultural monitors" be meaningful and that landowners know who the monitors are and how to timely communicate with them.
- CO48-62
- CO48-63 6. **5.1.8 Land Use, Recreation, and Visual Resources: Pages 5-9 to 5-11.** Page 5-10. Request that the Drain Tile Mitigation Plan be finalized, as only a "DRAFT" has been provided, and it is not complete, nor sufficient to accomplish what needs to be done to protect drain tile and protect against erosion, compaction, and flooding.
- CO48-64 7. **5.1.12 Safety and Reliability: Page 5-15.** As stated earlier, safety is a major concern of those who live, work, or play anywhere near the pipeline. It is not enough to say that "NEXUS would develop a Public Awareness Program" and "would mail." This needs to be done now.
8. **5.2 FERC STAFF'S RECOMMENDED MITIGATION: Pages 5-18 to 5-28.** We very much appreciate the FERC Staff's recommended mitigation plans and believe that all should be complied with as provided in the 47 recommendations. As indicated throughout our comments, requests and recommendations, we have additional recommendation that we request the staff will include in the FEIS.

CO48-60 See sections 4.2.1.4 and 4.2.2 for a discussion of agricultural lands and compaction prone soils, as well as proposed mitigation measures.

Prior to construction, NEXUS shall file with the Secretary a 5-year post-construction monitoring program to evaluate crop productivity in areas impacted by the construction of the Project. NEXUS shall include in the program a commitment to file with the Secretary quarterly reports for a period of 5 years following construction documenting any crop-related problems and describing any corrective action taken to remedy those problems. The program shall stipulate that if any landowner agrees that revegetation and crop productivity are successful prior to the 5-year requirement, NEXUS shall provide documentation in its quarterly reports indicating which landowners have agreed that monitoring is no longer necessary.

CO48-61 See sections 4.2.1.4 and 4.2.2 for a discussion of agricultural lands and compaction prone soils, as well as proposed mitigation measures.

Prior to construction, NEXUS shall file with the Secretary a 5-year post-construction monitoring program to evaluate crop productivity in areas impacted by the construction of the Project. NEXUS shall include in the program a commitment to file with the Secretary quarterly reports for a period of 5 years following construction documenting any crop-related problems and describing any corrective action taken to remedy those problems. The program shall stipulate that if any landowner agrees that revegetation and crop productivity are successful prior to the 5-year requirement, NEXUS shall provide documentation in its quarterly reports indicating which landowners have agreed that monitoring is no longer necessary.

CO48-62 Section 4.9.5 will be updated with a description of agricultural monitors and their responsibilities. NEXUS' *Drain Tile Mitigation Plan* (appendix E-3) provides a contact number for landowners.

CO48-63 FERC will require NEXUS to submit a final *Drain Tile Mitigation Plan* that incorporates agency and landowner comments on the Projects and draft EIS.

CO48-64 FERC will require NEXUS to submit a final *Drain Tile Mitigation Plan* that incorporates agency and landowner comments on the Projects and draft EIS.

COMPANIES/ORGANIZATIONS COMMENTS

CO48 – Emens & Wolper Law Firm (cont'd)

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IV. E&W ADDITIONAL SPECIFIC REQUESTS

A. VITAL SOIL AND DRAIN TILE CONDITIONS

The NEXUS Pipeline Project crosses many acres of Ohio land that have soil and drainage issues similar to land crossed by the Rover pipelines. The Rover Final Environmental Impact Statement ("RFEIS") focused in much more depth and accuracy on these two important issues than has the NEXUSNEXUS DEIS. The RFEIS contains six specific recommendations on soil and drainage in "Section 5.2 FERC ROVER STAFF'S RECOMMENDED MITIGATION," being # 36, 37, 38, 39, 40, and 42 which appear on Pages 5-23 and 5-24 of the RFEIS. We believe it vital that these six FERC STAFF RFEIS RECOMMENDATIONS be included in the NEXUS FEIS (with the appropriate changes being made such as "NEXUS" instead of "Rover" in each paragraph). Especially because there is significant FERC Staff overlap between the Rover FEIS and the NEXUS DEIS, these E&W requests should be easily understood and included in the NEXUS FEIS.

Therefore, it our request that the following be included in the NEXUS FERC STAFF RECOMMENDED MITIGATION in the NEXUS FEIS.

1. PRIOR TO CONSTRUCTION. NEXUS shall file with the Secretary a 5-year post-construction monitoring program to evaluate crop productivity in areas impacted by the construction of the project. NEXUS shall include in the program a commitment to file with the Secretary quarterly reports for a period of 5 years following construction documenting any crop-related problems, including soil heating near compressor stations identified by the company or landowner, and describing any corrective action taken to

CO48-65

Prior to construction, NEXUS shall file with the Secretary a 5-year post-construction monitoring program to evaluate crop productivity in areas impacted by the construction of the Project. NEXUS shall include in the program a commitment to file with the Secretary quarterly reports for a period of 5 years following construction documenting any crop-related problems and describing any corrective action taken to remedy those problems. The program shall stipulate that if any landowner agrees that revegetation and crop productivity are successful prior to the 5-year requirement, NEXUS shall provide documentation in its quarterly reports indicating which landowners have agreed that monitoring is no longer necessary.

CO48-65

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remedy those problems. The program shall stipulate that if any landowner agrees that revegetation and crop productivity are successful prior to the 5 year requirement, NEXUS shall provide documentation in its quarterly reports, indicating which landowners have agreed that monitoring is no longer necessary. This documentation shall include the landowner name, tract number and the date of agreement.

CO48-66

2. PRIOR TO CONSTRUCTION. NEXUS shall consult with the Ohio Department of Agriculture ("OHDA") on construction procedures to be used in agricultural land in Ohio and NEXUS shall file with the secretary any updates to the "DRAFT" Drain Tile Mitigation Plan that result from coordination with the OHDA. Any comments received from OHDA on NEXUS' Ohio "DRAFT" Drain Tile Mitigation Plan shall also be filed with the Secretary.

CO48-67

3. 90 DAYS PRIOR TO CONSTRUCTION IN AGRICULTURAL LANDS. NEXUS shall file with the Secretary its final Drain Tile Mitigation Plan including landowners' concurrence with the plan.

CO48-68

4. PRIOR TO CONSTRUCTION. NEXUS shall commit to hire local drain tile contractors to install/repair drain tiles that are damaged or need to be rerouted due to construction activities.

CO48-69

5. UPON COMPLETION OF CONSTRUCTION. NEXUS shall provide information on encountered, severed, and/or damaged drain tile lines to the landowner, the local county Soil and Water Conservation District, and the information shall be kept in the company's landowner records for future reference.

CO48-66

NEXUS and Texas Eastern will implement their *Erosion and Sediment Control Plan (E&SCP)*, which is based on FERC's *Upland Erosion Control, Revegetation, and Maintenance Plan (Plan)* and *Wetland and Waterbody Construction and Mitigation Procedures (Procedures)*. FERC's Plan and Procedures are a set of construction and mitigation measures that were developed in collaboration with other federal and state agencies and the natural gas pipeline industry to minimize the potential environmental impacts of the construction of pipeline projects in general.

For construction and restoration measures in Ohio, NEXUS shall consult with the Ohio Department of Agriculture (ODA) on construction procedures to be used in agricultural land in Ohio, including the Pipeline Standards and Construction Specifications, and shall file with the Secretary any measures that result from coordination with the ODA. Any comments received from ODA shall also be filed with the Secretary.

CO48-67

FERC will require NEXUS to submit a final *Drain Tile Mitigation Plan* that incorporates agency and landowner comments on the Projects and draft EIS.

CO48-68

Comment noted. NEXUS would potentially hire local contractors regardless because they would be more cost effective and accessible.

CO48-69

Comment noted.

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6. PRIOR TO CONSTRUCTION. NEXUS shall file with the Secretary, for review and written approval of the Director of OEP, a complete list of all CRP enrolled lands that would be crossed by the project by milepost. In addition, NEXUS shall file with the Secretary any revised impact mitigation measures or conservation plans that will be necessary in order to maintain CRP compliance along with confirmation from the FS that parcels will remain eligible for the program if the specified mitigation is implemented. If parcels will no longer be eligible for enrollment, NEXUS shall identify how it will compensate landowners for the lost program benefits.

CO48-70

Section 5.8.1 "recommend[s] that NEXUS and Texas Eastern file with the Commission for review and approval prior the end of the draft EIS comment period a list by milepost of the CRP lands that would be crossed by the NGT and TEAL Projects, identify construction and operation impacts (acres), and identify mitigation measures specific to each CRP parcel crossed."

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New Jersey Agricultural
Experiment Station

Exhibit B

Assessment of Soil Disturbance on Farmland

Presented to

New Jersey State Agriculture Development Committee

by

Dr. Daniel Gimenez

Daniel Kluchinski

Dr. Stephanie Murphy

Loren S. Muldowny

RUTGERS

School of Environmental
and Biological Sciences

RUTGERS

New Jersey Agricultural
Experiment Station

April, 2010

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Assessment of Soil Disturbance on Farmland

Purpose of the Summary

This summary was produced to assist in decision-making by the State Agriculture Development Committee (SADC) about the impact that selected farm activities have on soil characteristics, how negative impacts on soil properties may be remediated, and whether these activities should be encouraged or discouraged on New Jersey preserved farmland. New Jersey's Farmland Preservation Program consists of the purchase of development rights to parcels of land with the intention that the land use will henceforth be limited to agricultural and horticultural production. The land title is attached to a deed of easement which specifies the terms of the sale, including restrictions placed on the use of the property. Generally, non-agricultural uses are not permitted. In addition, no activity is permitted which would be detrimental to water conservation, erosion control, or soil conservation. Our intent is to discuss these issues with the acknowledgement that impacts on soils differ due to site-specific factors and properties, and that site specific remediation practices may be needed to alleviate or mitigate any negative impact on soil properties. We also present our findings and recommendations without considering the extent of disturbance (acreage) or purpose for it, but acknowledge the goal of maintaining soil quality, health and conditions that allow for current and future uses for agricultural and horticultural production.

Literature Search Limitation and Scope

Because the scientific literature on soil degradation is vast and spans many decades, continents, and climatic zones, the literature search used to develop this summary was limited to research on humid, temperate zone agriculture, similar to New Jersey conditions and soils, disregarding a sizable literature from arid and semi-arid regions as well as tropical climate regimes. In addition to the literature review findings, our professional expertise and opinions and common professional knowledge are the basis for the statements and recommendation made within.

Guidance from the New Jersey State Agriculture Development Committee (SADC)

Ranking criteria are applied when land parcels are selected for the Farmland Preservation program. Part of this ranking is a determination of the soils based on a classification system developed by the New Jersey unit of the Natural Resources Conservation Service.

- **Prime farmland** is land that has the best combination of physical and chemical characteristics (defined below) for producing food, feed, forage, fiber and oilseed crops and is also available for these uses. It has the soil quality, growing season, and moisture supply needed to economically produce sustained high yields of crops when treated and managed according to acceptable farming methods. Prime Farmlands are not excessively erodible or saturated with water for a long period of time, and they either do not flood frequently or are protected from flooding.
- Farmlands of **statewide** importance include those soils in land capability Class II and III that do not meet the criteria as Prime Farmland due to erosion hazard, wetness, or susceptibility to flooding. These soils are nearly Prime Farmland and economically produce high yields of crops when treated and managed according to acceptable farming methods. Some may produce yields as high as Prime Farmland if conditions are favorable.
- Farmland of **local** importance includes those soils that are not prime or statewide importance and are used for the production of high value food, fiber or horticultural crops.
- Farmland is classified as **unique** if it is being used for special crops production.

(Source: <http://www.nj.nrcs.usda.gov/technical/soils/njfarmland.html>)

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Although NJ soils are grouped into these four classifications, each individual soil's inherent properties and intrinsic agricultural productivity vary. Our approach in this analysis is to discuss specific management practices that may unintentionally or purposefully degrade soil characteristics and to make recommendation on how to remediate, when possible, any negative impacts. Any practice which results in the land no longer being tillable, or which forces a downgrade of the soil classification to more limited use, would make it less suitable for long-term agricultural sustainability and is contrary to soil conservation goals. However, soils of varying quality, or classification as listed above, will react to the impact to different degrees and may require remediation of differing types or lengths of time to be effective.

Soil Quality and Sustainability in Agriculture

Soil quality is defined as "the capacity of a specific kind of soil to function, within natural or managed ecosystem boundaries, to sustain plant and animal productivity, maintain or enhance water and air quality, and support human health and habitation" (USDA-NRCS, 2007). Considering the focus on function, specific functions of concern should be defined in advance when applying the concept of soil quality. Soil quality concepts are commonly used to evaluate sustainable land management in agricultural ecosystems, and preventing a decline in soil quality is essential to the concept of sustainability in agriculture. By analogy to living systems, the relative condition and functioning of the soil ecosystem is often referred to as soil "health".

An important part of the soil quality definition is that quality is specific to each kind of soil. The quality of a soil has two distinct aspects, *inherent* quality and *dynamic* quality. Inherent quality is use-invariant and represents intrinsic properties (qualities) of soils as determined by the factors of soil formation--climate, topography, biota, parent material, and time. The inherent quality of soils is often used to compare the capabilities of one soil against another, and to evaluate the worth or suitability of soils for specific uses.

Soil Quality as Influenced by Management

In contrast with *inherent* soil quality, which derives from soil-forming factors, *dynamic* soil quality can vary depending on how the land is managed. Management choices affect the amount of soil organic matter, soil structure, soil depth, water and nutrient holding capacity (USDA-NRCS, 2007). These in turn affect soil functions relevant to agriculture in general and to this study in particular, such as i) food and biomass production (include physical support of plants and habitat for roots), ii) storing, filtering and transformation of matter and energy (water, nutrients and organic matter) and iii) biological habitat and gene pool.

Use-dependent effects most often manifest in surface and near-surface layers result in an increase (aggradation), decrease (degradation) or sustained capacity of a soil to perform the functions listed above. The soil properties considered most representative of the overall soil health or quality include: organic matter content, soil structure, bulk density, infiltration rate, and activity of the biological community. Collectively, management will aggrade, sustain or degrade the quality of the soil. Management practices and uses of the land that have a positive (aggrading) effect on soil quality include for instance those practices leading to an increase in organic matter content. On the other hand, management practices causing compaction, erosion, or acidification have a degrading effect on soil quality and result in an increased input to maintain plant growth; thus precluding the concept of sustainability. A similar set of functions would apply to animal agriculture with additional functions related to waste management.

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Soil quality can be evaluated relative to a standard or reference condition that represents the full capacity of that soil to function for a specific use. Several systems have been developed to evaluate soil quality and soil health, and numeric soil quality indices have been created to facilitate a comparison of one soil against another as well as to evaluate the change in quality expected from a change in management. The limitation that a given soil can only be compared to its own full potential, or to another soil of the same inherent properties, remains. This is especially relevant to New Jersey soils which vary greatly in their inherent quality from one region and physiographic province to another. Therefore, while a condensation of soil quality into a single value may be of limited practical value, the exercise of assessing relative change in the important soil properties can be a useful tool in guiding decisions for management. In order to make decisions about management practices, a NRCS soil management plan could be used to assess if a planned practice or use will significantly destroy or impair soil quality, and include a remediation plan to restore the affected characteristic or factor.

Compaction

Soil structural integrity is always part of the minimum data set for the evaluation of soil quality, and compaction with its damage to soil structure and/or tight packing of soil particles is the most widespread kind of soil physical degradation across all soil textures. It is recognized as a ubiquitous problem in the agriculture of all temperate-zone industrialized countries. The degree and depth of the disturbance by compaction, as well as soil type, influences whether a remedy is possible or feasible, or whether the damage is permanent.

To the extent that soil drainage is impaired, compacted soils are relatively wet in the spring which slows soil warming and results in delayed planting. Equipment and fuel requirements for tillage of compacted soil are increased. Winter freezing/thawing cycles are only minimally helpful at alleviating compaction and only near the surface. The major consequences of agronomic compaction are summarized below.

Soil structure is destroyed.

- Soil aggregates of structured soils are destroyed, and particles are re-oriented into platy structure (having primarily horizontal fissures) or kneaded into a high-strength mass. Subsequent tillage may break the mass into clods but does not restore the original structure. In coarse-textured soils, particles are forced into a close-packing arrangement, and pore size distribution is proportionately affected.
- Total pore space of the soil is decreased.
- Larger pores, which function as conduits for water, air, and roots, are preferentially destroyed, decreasing permeability, aeration, and root growth. Not only size but also continuity of pores is reduced.

Plant growth is negatively affected.

- Cool, wet soils (as may result from poor drainage of compacted soils) delay planting and reduce and slow germination and crop development.
- Roots are prevented from proliferating in the topsoil and extending to the subsoil because of high soil strength (resistance to penetration).
- Crops with limited root systems are unable to take up adequate water and nutrients and are susceptible to induced drought, nutrient deficiencies, and aeration stress.
- Plants are stunted and display delayed development.
- Stressed plants are susceptible to disease and insect damage.
- Crop yields are reduced.

Natural hydrology is circumvented.

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- Reduced macro-pore-space results in poor infiltration and can result in excess puddling and/or increased runoff volumes and rates. Weight of construction equipment corresponding to differing levels of compaction is not as important to infiltration rate as whether compaction occurred at all, with compacted soil effectively acting as an impervious surface (Gregory, et al, 2006).
- Increased water volume in storm drains and streams leads to flooding hazards.
- Groundwater recharge is reduced along with stream base flow during dry periods.
- Supply of fresh water is decreased.
- Even in cases where topsoil compaction is relieved and water can infiltrate, subsoil compaction limits internal drainage. "Perched" water in the soil profile can create anaerobic zones, presenting further risks to roots, and increases susceptibility of topsoil to erosion.

Increased water runoff poses a water pollution hazard.

- Increased water runoff speed and volume results in increased chemical as well as biological contaminant load to streams and other water bodies.
- Risk of soil erosion increases with increasing runoff.
- Soil particles themselves ("suspended solids") are detrimental to water quality but also transport nutrients (especially phosphate) which can be pollutants.

Soil compaction is not easily or rapidly remedied.

- Surface tillage treats - but does not remediate - surface (8-10") compaction.
- Tillage after compaction yields clods rather than aggregates; additional tillage is needed to break up clods and smooth ground to create a seedbed. Broken up clods still do not function physically or biologically like naturally formed aggregates.
- Because of tillage-induced loss of soil strength, "loosening inevitably brings the risk of greater subsequent compaction" (Gabriels, et al., 1997).

Biological amelioration has been used for long-term treatment.

- Roots of grasses and deep tap-rooted crops help penetrate compacted layer.
- Tree roots can penetrate highly compacted soil (1.6 g cm⁻³ clay loam) and increase infiltration rates under experimental conditions (Bartens et al., 2008).
- Organic matter amendments promote earthworm populations and other soil organisms, whose activities loosen the soil and re-create structure.
- Treatment may entail years of remediation effort and expense without a saleable crop and reduced yields until soil conditions improve.

Compaction often reaches subsoil (12-20" or more), beyond the reach of normal tillage operations.

- Subsoil "ripping" or deep tillage would be required to break up deep compaction, requiring special equipment and high energy expenditure.
- Limited area is treated per pass.
- As with surface tillage, there is "risk of greater subsequent compaction".
- Subsoil compaction is a long-term and possibly unsolvable problem; depending on degree of compaction, recovery may require from 3 to 9 or more years, or the damage may be permanent. Deliberate compaction, particularly with vibratory forces, increases the depth and degree of compaction possible.
- Maximum compaction (or optimal compaction sought by engineers of loessial silt loam can result in density of about 105 pounds per cubic foot, about equal to 1.68 g/cm³ or 36.6% total porosity. Compare this to "ideal" soil density for plant growth: 50% porosity, 1.32 g/cm³.
- Vibratory compaction (applying dynamic or time-variable load) is a more "efficient" (severe) method of compaction than static loading.
- There is no reference to attenuation time of a compacted condition for engineering purposes. The assumption is that when done well, it will not loosen naturally--it is a permanent change.
- Soil compaction for engineering purposes results in a nearly impermeable surface or layer.

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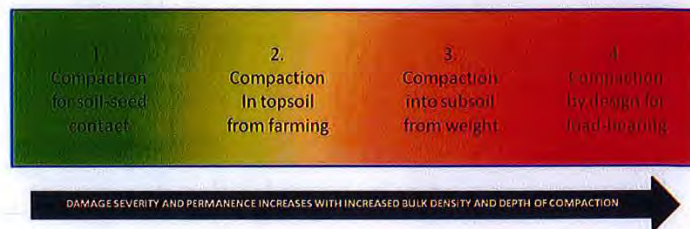
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Compaction as a Continuum

An idealized soil in good agronomic condition is often depicted as having 50% of its volume occupied by soil mineral and organic matter and 50% of its volume consisting of pore space. This pore space may be occupied primarily by air or water or a combination of both in relative amounts depending on recent precipitation, internal drainage, and uptake of water by plants rooted in the soil.

As illustrated in Figure 1, there is a continuum of degrees of compaction ranging from light compaction needed to prepare a seedbed (level 1) to severe compaction designed for engineering purposes and that would preclude plant growth without remediation practices (level 4).

Figure 1. Degrees of soil compaction often encountered in agricultural operations, ranging from mild (1) to most severe (4).



A description of those compactions levels follow:

1. Acceptable compaction occurs after tillage and planting, where soil is pressed against the newly planted seed. Good contact between soil and seed is important for germination, keeping soil moisture in contact with the seed. These types of compaction are understood to be acceptable and necessary for many types of agricultural production.
2. Compaction in the topsoil resulting from field operations beyond primary and secondary tillage. This category of compaction is negative and unintended, but difficult to avoid. It can be partially remedied by management options of two kinds: i) additional field operations or practices, such as planting of cover crops and green manures for the purpose of improving soil structure, or ii) acceptance of reduced crop yield. The extent of impact is greatly dependent on site-specific soil properties including soil texture, soil moisture conditions, and production practices being used.
3. Compaction that extends beyond the topsoil and into the subsoil may be beyond economically feasible remediation, depending on the depth of the damage. In an agronomic setting, the topsoil is the Ap horizon, and its depth is determined by the reach of conventional tillage equipment, up to approximately 30 cm or 12 inches. Where the depth of subsoil compaction is no more than 50-60 cm or 20-24 inches, possible remedies may include a lengthy rotation with deep, tap-rooted species in combination with the contracting of specialized subsolling operations. Each carries a substantial direct or opportunity cost which may make any remedy unfeasible, depending on the value of the land in full production. Subsoil compaction is normally considered permanent damage, and may be manifested in reduced crop yields, impeded root growth, and decreased water percolation.
4. Deliberate compaction of soil in the context of structural engineering and slope stabilization is more drastic still. No overlap is found between the appropriate compaction required for field production and the engineering compaction specified for load-bearing construction. The literature does not consider the effects of such extreme compaction on crop yield since the context and intent in such cases is a permanent conversion of soil as a growth medium to soil as an

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engineering medium. For instance, deep tillage is used to alleviate compaction on mined sites, but when this practice is used for reclaiming severely compacted soils to plant forest, the return on the investment could be neutral to negative (Sweigard et al., 2007). In agriculture enterprises, the acreage that is converted to this state should be minimized if the objective is to maintain as much of the preserved farmland in a productive and quality state. This limitation however may exclude specific practices that are necessary for some types of agricultural production; our intent is to solely discuss this from a soil quality and health standpoint.

Focus of Research on Compaction and Remediation

Research on agricultural compaction is normally undertaken to minimize it, prevent it, remediate it, measure it, or compute yield reduction and other damages resulting from it. No research literature was found on the subject of site remediation following intentional compaction for engineering/construction purposes (level 4 as described above). Some literature exists on restoration of normal hydrologic function to unpaved logging roads in forests, on remediation and restoration following military training operations, and on remediation of utility rights of way through agricultural areas. Land reclamation following surface mining may provide a good indication of the magnitude of the restoration required following compaction for structural engineering purposes. This is extraordinarily costly restoration requiring specialized equipment not normally associated with agriculture. While it may be technically possible, in the absence of any budgetary limitation, to restore land productivity following such drastic disturbance, it is not considered feasible given any reasonable level of expected economic return (ten-year-old numbers range from \$5000 to \$20,000 and more per acre).

Compaction is not always recognized by the land user as a source of yield reduction. When land is partially degraded but still producing an economic yield, the land manager will typically modify his management to compensate for whatever is limiting to production. In many cases, rather than resulting in a reduction of yield, compaction damage manifests in the need for increased energy use, more frequent field operations, and higher fertilizer and water use - increased inputs which would not be needed in well-structured soil.

Subsoil compaction, below the depth of 30 cm or 12 inches (tillage depth), is usually considered a permanent degradation of agricultural land. The literature is full of statements that subsoil compaction must be avoided rather than remedied. As with land restoration following strip-mining, this may reflect the extreme cost of restoration rather than a declaration that no remedy is physically possible. Costs of restoration of desirable soil properties include the financial costs of soil amendments, labor, equipment, fuel and reduced yields. In addition, natural processes that improve soil, such as biological activity, soil aggregation, etc. depend also on time and site specific conditions that influence rates of improvement.

Specific Farm Practices

Most practices cannot be called destructive or constructive without knowledge of the impact of that practice on the soil resource of a specific site. For example, "leveling" which did not reduce the thickness of the topsoil could be a relatively benign operation of topsoil grooming used to increase infiltration if its use reduces overland flow. Alternatively, "leveling" could be highly destructive, such as a situation in which the entire topsoil horizon is penetrated or removed to match the elevation of some other point in the level plane. For this reason we focus on the extent of the soil disturbance resulting from the practice rather than the type of practice itself. Site-specific knowledge is needed to determine if a practice on a given site would cause a level of disturbance and reduction of soil quality that are incompatible with soil conservation.

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Tillage is generally accepted as a routine and acceptable agricultural practice. However, tillage usually results in some degradation of soil quality because it breaks down soil structure, compacts soil, and decreases certain populations of soil organisms. This must be balanced with the necessity of tilling soil to prepare the soil for the crop. On the other hand, the necessity of tilling is over-estimated by the farmer in many cases, and the soil disturbance by excessive tillage (again, a matter of degree) degrades soil quality more than necessary to grow the crop. Therefore minimization of the frequency of soil tillage (using minimum tillage to no-tillage practices) or the use of less destructive implements (moldboard or chisel plow versus rototiller) is recommended when possible.

Geotextiles are sometimes used in specialty crop production systems in New Jersey; and little if any information is available regarding their effects on biological/microbial properties of the underlying soil. As with the example of land leveling, it is the degree of attendant soil disturbance and not merely the use of geotextile that determines the effect of this kind of disturbance. Factors that can be expected to relate to effects of geotextile use on underlying soil include: relative infiltration and/or aeration/evaporation rates; traffic loads applied, placement of gravel/stone over geotextile, and type of geotextile. Despite the lack of specific research on the impact of geotextiles on soil properties, basic concepts of soil science can be used to deduce possible results. If used only as a weed-blocking cover over undisturbed soils, geotextile cover of soil might lead to a gradual reduction in soil organic matter (as oxidation occurs without any input of organic matter from growing plants) and subsequent consequences. It might be expected that this, and the resulting reduction in soil quality, can be remedied by removing the textile and using practices to increase organic matter levels.

Increasing soil organic matter levels (carbon) is essential, however, it is difficult to access the rate of accumulation with soil building practices. The amount of increase over time varies depending on the type of management practices employed. These include reduced tillage intensity, increased crop rotation complexity, inclusion of legumes in rotation, inclusion of winter cover crops, efficient use of fertilizers, pesticides and irrigation, and erosion reduction (Paustian et al., 2007; West and Post, 2002), as well as manure management, effective crop species selection (Conant et al., 2001) or the addition of non-traditional materials such as non-composted municipal leaves (Heckman and Kluchinski, 2000). The rate of organic matter accumulation, or loss, varies due to the type of management that impacted the soil originally, the soil's inherent properties and current status, climate and other factors. This ideally requires *in situ* measurement over time to determine impacts. Carbon Management Response curves are reported as useful tools (West et al., 2004) to estimate the loss and gain of carbon between changes in land use, but none of the specific farm practices of concern are included in this work.

Regardless, organic matter is undoubtedly accumulating in the soil when above practices are utilized. The organic matter values may not show significant increases for many years, but improvement in physical soil properties such as aggregation and moisture holding can be realized. Research in New Jersey found 3 consecutive annual applications of 10 and 20 dry tons/A of municipal leaf waste increased soil organic matter levels 0.5 to 0.7% (Heckman and Kluchinski, 2000) one year after the final application. These high rate applications of high carbon material are atypical and suggest that green manures or cover crops use would increase levels at a much lower rate. Therefore, organic matter levels may increase slightly over several years but potentially could take decades of sound management. However, the benefits of any small increase would be manifested in improvements several soil properties. Therefore it is difficult to provide a specific time frame necessary to restore soil organic matter levels to initial or higher levels.

Seasonal use of impervious cover over undisturbed soil where the soil is being used in its existing condition as the growth medium (high tunnel hoop houses): High tunnel usage continues to increase throughout the country in areas where climatic crop producing limitations can be overcome, essentially allowing for growing season extension in the spring and fall months. The construction, unlike permanent greenhouses, does not involve the compaction or excavation of soil to build or pour concrete foundations. Rather, wood framing is used to establish a based to which PVC tubes driven into the ground and looped

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to the opposite side of the frame are attached. Once the support structure is completed, polyethylene greenhouse covering is attached. Our professional assessments is the main impact of this situation will be the limitation of precipitation (presumably rainfall) infiltrating and passing through the soil. Principles of water conservation, as well as economic motivation, will limit irrigation to what is necessary to keep the root zone moist for plant growth and is unlikely to allow leaching to groundwater. The increased soil temperatures may be sufficient to increase soil biological activity; this may enhance nutrient availability but increase oxidation and loss of soil organic matter. Stormwater management may be necessary to handle excess water attempting to infiltrate/runoff the areas surrounding the impervious structures. Steps to remediate any negative impact on soil properties are minimal; the return to traditional agricultural production (*sans* hoop house) can be easily achieved and management practices such as introduction of organic materials into the soil will remediate any loss of soil organic matter.

Long term use of impervious cover (high tunnel hoop houses for two years or more): This situation is between those described above and below; effects will depend on time and specific practices.

Long term impervious cover (roof) over undisturbed soil: Based on our professional assessment and/or cited research, the potential limitations that a roof imposes on natural soil processes are the amount and quality of sunlight, and the amount and quality of water passing through. Certain situations (glass houses) may allow direct sunlight, while opaque roofs will allow only indirect sunlight or artificial light underneath. Light limitation will affect plant growth and therefore organic matter addition and microbiological population and activity in the soil. Elimination of natural precipitation from soil may or may not have an effect, depending on other management factors. Frequent irrigation may allow similar total amounts of water as expected in precipitation (about 40" in New Jersey), but it is likely that rarely would the soil experience near-saturation conditions that cause leaching through the soil profile to groundwater. This could be expected to become a problem when/if fertilizing, as in glasshouse or hoop house situations. Routine application of fertilizer without leaching water application can lead to salt build-up (salinity), another form of soil degradation not normally encountered in New Jersey's humid climate but common in agriculture of arid regions. Remediation steps would include the reintroduction of organic materials to increase soil aggregation and other physical properties and biological activity. Rainfall and irrigation, and use of soil amendments such as gypsum, would help to leach any accumulated salts over time, most likely over several months or a year or two, depending on the level of salt accumulation, rainfall patterns, and soil permeability and drainage.

Permanent structure and long term impervious cover with soil substantially disturbed (including geotextile, alone, geotextile with gravel cover, or concrete foundation): When the function of a soil is strictly an engineering media, there are wholly different sets of quality criteria. They would include optimum water content (for compaction), compressibility, bearing capacity, shrink-swell behavior, strength, (etc.). The quality indicators for the engineering function are by necessity contrary to those for the cropping (food and biomass production) and hydrology functions of soil. In particular, soil compaction is necessary to provide a stable base for a permanent structure. For that reason, effort is made to compact soil to the greatest degree and depth possible (and in the process, destroy naturally developed soil structure) or to remove any of the soil that may impede providing such a base. The densified soil underneath a permanent structure (impervious cover) may still contain organic matter, and that content may remain relatively constant considering conditions conducive to limited decomposition while organic matter additions are precluded by the built structure. The impervious nature of the structure and the compaction required to build it prohibits the soil from infiltrating, filtering, and passing precipitation to groundwater, so that all precipitation impacting the structure and the surrounding affected soil have to be controlled by otherwise-unnecessary stormwater devices/structures.

Geotextile and geotextile with gravel cover could actually mitigate the negative effects, but concrete foundation "seals" the fate of the entombed soil. Recently evolving study of urban soil provides data to predict concrete's effects. The classification system being developed for urban soils, expanding on the

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classification systems for "natural" soils, includes "Technosols" whose development and properties are dominated by their extensive disturbance by man (Schwartz et al. 2009). Sealing of soil by concrete, which also occurs on farmland, qualifies a soil as a Technosol. The imperviousness of this type of Technosol and its effects on infiltration, runoff, and water pollution is not the only effect; pH of the soil underlying the concrete and its subsequent or concomitant effect on geochemical cycles and biological activity (Charzynski et al., 2009) are additional factors that alter soil functions in the long term. For example, pH approaching 8.3 negatively affects most agricultural and horticultural crops.

Remediation under these conditions would be more difficult and costly. After the removal of any structures and debris, specialist deep-tillage equipment requiring significant energy and time inputs may allow for cultivation of the soil and incorporation of soil organic amendments. Over time, the status of the soil may improve to the point where some crop yields would be expected but they would be less than similar undisturbed soils. The primary impacts would be that the majority of the soils' inherent characteristics are negatively impacted and its profile would be permanently and negatively altered. Therefore, to preserve the soil in its natural state, or to lessen the impact of such practices, the extent of disturbance (acreage) should be limited or the purpose for it justified in a soil management plan.

Long-term impact of outdoor equine training tracks: The construction of equine training tracks may involve grading (leveling and/or smoothing), compacting the soil base, and layering with desirable footing material. Subsequent management includes tractor-mount raking and rolling to eliminate vegetation and to smooth and firm the surface. Spraying the surface with water when dry is typical to control dust and prevent wind erosion. The effects on underlying soil would include primarily compaction of the soil by both horse and tractor traffic. The surface soil texture is likely to be affected when the original soil is fine-textured or loamy; these soil types are most likely to have addition of footing material due to requirement for rapid infiltration/permeability and susceptibility to compaction when wet and hardness when dry (whereas sandy soil is inherently more suitable because of rapid water infiltration/permeability and poor cohesiveness). Organic matter content of the soil will be depleted as the original humus is oxidized and the only input is limited to the occasional manure pile. The surface of the (non-vegetated) track is likely to experience erosion by water during rainstorms and by wind when dry. Turf tracks are better protected from erosive forces, but additional management requirements are necessary to maintain the turf as a "crop" (nutrient levels, irrigation, etc.). Remediation steps would include the reintroduction of organic materials to increase soil aggregation and other physical properties and biological activity.

Impact of Practices on Soil Functions and Potential for Remediation

A qualitative summary of the practices discussed and their impact on selected soil functions is presented in Table 1. The matrix can serve as an initial comparison among practices. The assessment of impact of each practice is expected to vary with soil type and would need to be validated with either additional data or modeling.

As outlined, there is a continuum of impacts for any soil function (Table 1). Soil under almost any condition can be improved, but there is potential for a loss of productivity if the soil structure has been irreparably harmed. The determination of what is "acceptable" and "unacceptable" soil disturbance can only be established through research involving the set of practices under consideration and the soil and climate conditions in New Jersey. Most minor to significantly negative practices can be remediated through various cultural practices, however increasing costs (time, money) may be prohibitive and crop yield or quality may be depressed for periods of time.

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Table 1. Summary of the relative impact of practices on selected soil functions and their potential for remediation¹

Practice	Soil Functions			Potential for Remediation ²
	Food and Biomass Production	Storing, Filtering and Transformations	Biological Habitat and Gene Pool	
Geotextiles	Very negative (no biomass production)	Limited reduction of biological activity and of exchanges of matter and energy with the atmosphere.		Medium to High
Impervious Cover-Seasonal	Enhanced (biomass production augmented)	Limited negative or neutral impact due to short time scale.		Very High
Permanent Structures	Very negative impact on all soil functions			Very Low
Outdoor Equine Training Tracks	Very negative impact on all soil functions			Low

¹ Based on the authors' professional judgment and experience as no specific research on the impact of the listed practices was found in the literature review.

² Potential for remediation is based on the degree of alteration of soil properties and do not consider the spatial extent of soil modification introduced by a given practice.

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COMPANIES/ORGANIZATIONS COMMENTS

CO48 – Emens & Wolper Law Firm (cont'd)

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COMPANIES/ORGANIZATIONS COMMENTS

CO48 – Emens & Wolper Law Firm (cont'd)

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Exhibit C

History of the Black Swamp: An Example of Drainage Necessity

The importance of drainage tiles, waterways, ditches and other drainage systems on and near NEXUS's planned Ohio route cannot be overstated. Much of the land NEXUS is proposing to traverse in Ohio contains elaborate systems to manage water. While NEXUS pays minor lip service to the landowners' drainage systems, NEXUS is unprepared to properly deal with the drainage systems it will encounter in north central and northwest Ohio. Below is an article that illustrates the importance of drainage systems to landowners and the communities along the NEXUS Ohio route. This article is from Historic Perrysburg, Inc., an organization that has a mission to provide awareness of the history of the northwest area. For more information, please see their website at <http://www.historicperrysburg.org/blackswamp.htm>

"It is hard to believe that there once lay a terrible swamp beginning in the vicinity of South Boundary Street and running as far south as Findlay, Ohio, and east and west from the city of Sandusky nearly to Fort Wayne, Indiana...40 miles wide and 120 miles long. It was the Great Black Swamp, an oozing mass of water, mud, snakes, wolves, wildcats, biting flies, and clouds of gnats and mosquitoes. It was nearly big enough to cover the entire state of Connecticut.



Water, often up to the belly of a horse, stood on the surface until it evaporated in the hot summer months. When it rained, or thawed in the winter, it was water and muck. Much of the swamp was covered with an almost impenetrable forest of giant oak, sycamore, hickory, walnut, ash, elm, maple and cottonwood trees, except in a few prairie areas where limestone just under the surface would not support timber growth.

Not even native Indians went into the swamp except to hunt, and unless you could follow a blazed trail, it was easy to become hopelessly lost since you could only see but a few yards ahead.

The swamp was created 20,000 years ago when the last glacier retreated. The enormous weight of the mile-thick ice pack pressed down and scooped out the earth beneath it to create a depression about 10 feet lower south of where Perrysburg sits on the river bluff. Thereafter, until it was drained, water stood in the silted wetland and clay in the ground prevented it from soaking in. When water was standing and flooding conditions occurred, large fish from the Maumee River and other streams could swim all over areas now covered by corn and soybean fields. One man in Perrysburg told of ice skating all the way to what is now Weston, Ohio, nearly 17 miles southwest of Perrysburg.

There was no end to the variety of sicknesses and maladies spawned from the mosquito-infested swamp. There was cholera, typhoid and milk sickness, but chief among them were malarial fevers generally known as "ague" for which people kept quinine powder on the table, along with salt and pepper, to sprinkle on their food.

The fevers caused people to have chills, or the shakes, and according to a doctor of the time it

COMPANIES/ORGANIZATIONS COMMENTS

CO48 – Emens & Wolper Law Firm (cont'd)

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took them from three to five years to get over it. The shakes occurred from about the first of July until the first frost. They took hold of people and literally shook them up. The doctor wrote that so violent were the chills and shaking that when they came on, the very bed and floor would rattle.

The Black Swamp was Ohio's last frontier, and beginning in the 1840s, it took several generations of determined farmers to drain it and make it the rich, flat farmland of today. What started it all was pretty much the idea of the medical profession which believed that it was bad swamp air that caused the fevers.

They were ignorant of the fact that it was blood-sucking mosquitoes that transmitted the disease, but at least they were on the right track. Along with this, when canals and railroads came through here they created markets for the vast timber resources, most of it in the swamp. And still another good reason for beginning the tremendous job of draining the swamp was the realization that it could be done. People learned from trying to build roads that they could dig ditches and the water would flow toward the nearest stream or river.

Until then, early farmers tilled just the highest ground, with some effort to build shallow, open ditches around a plot or field, or one leading to the nearest creek if available. As more settlers came, farmers would sometime cooperate in extending their adjoining ditches.

Finally, in 1850, the Ohio legislature passed the first law regarding government support for drainage systems resulting in people throughout northwest Ohio cooperating in wide-area drainage, with ditches deep enough to drain the swamp water into Lake Erie via the Maumee and Portage Rivers.

Individual farmers continued to dry out their fields by plowing trenches across them, using wooden troughs laid underground, and eventually with clay tiles and pipe introduced by European farmers.

It took back-breaking labor and construction of one of the greatest underground drainage systems in the history of the world to create the productive farmland we now drive by and take for granted just outside of Perrysburg."

As this article describes, but for the drainage systems that have been implemented by the State of Ohio and individual landowners, much of the Ohio land NEXUS proposes to traverse would still be a swamp. This is true outside of the "Black Swamp" area as well. Drainage systems in Ohio are essential to maintaining the land's productivity.

COMPANIES/ORGANIZATIONS COMMENTS

CO51 – Consumer Energy Alliance

R-543

Brydon Ross, Lexington, KY, August 29, 2016

Kimberly D. Bose Secretary,
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426

RE: FERC Docket No. CP16-22-000 – NEXUS Gas Transmission project

Dear Secretary Bose:

Consumer Energy Alliance (CEA) wishes to submit comments in support of the NEXUS Gas Transmission project.

Founded in 2006, CEA is the leading consumer advocate in support of affordable, reliable energy for our nation's energy consumers – both families and businesses. CEA is a nonpartisan, nonprofit organization with more than 400,000 individual members and over 300 affiliates. Our members advocate for a balanced energy policy and responsible access to American energy resources. As such, our members recognize pipelines and transmission lines are needed to deliver these American energy resources to our homes and businesses.

CO51-1 Expanded domestic natural gas production in areas like the Marcellus and Utica Shale has transformed America's energy outlook, providing opportunities for economic growth through consumer savings and increased employment. This is why CEA supports the construction of key energy infrastructure projects like the NEXUS pipeline – a pipeline designed to safely and efficiently move American-produced, clean-burning natural gas to families and businesses in northern Ohio and southeastern Michigan for home heating, cooking, power generation, and industrial uses.

More than just transporting natural gas in the safest and most environmentally responsible way possible, the NEXUS pipeline will generate up to \$830 million in economic activity while supporting more than 6,800 jobs during construction. As a result of this project, local governments, public safety forces, and schools will realize more than \$500 million in additional operating revenue.

Our organization's membership strongly values the contributions that safe, responsible domestic energy production and transportation has had for our Nation's consumers – particularly in the states of Ohio and Michigan. This is why we endeavor to educate all consumers through projects like Pipelines for America, a national educational campaign focused on the importance of U.S. energy infrastructure, and why continued investment in energy pipelines is needed to keep consumer energy prices stable and better protect the environment. Since we recognize this importance, CEA and our more than 56,000 individual members in these two states wish to reiterate our strong support for this much needed infrastructure project.

For the benefit of families and businesses, CEA respectfully urges FERC to approve the NEXUS Gas Transmission project. Please contact our Executive Director of CEA - Midwest Chris Ventura at cventura@consumerenergyalliance.org should you have any questions.

We appreciate the opportunity to comment on this important process.

Respectfully,
David Holt President
Consumer Energy Alliance

CO51-1 Comment noted.

COMPANIES/ORGANIZATIONS COMMENTS

CO52 – Consumer Energy Alliance

R-544

70160506-0025 FERC PDF (Unofficial) 08/06/2016

CONSUMER ALLIANCE
THE VOICE OF THE ENERGY CONSUMER

August 29, 2016

ORIGINAL

FILED
SECRETARY OF THE
COMMISSION

2016 SEP -6 P 2:52

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D.C. 20426

Kimberly D. Bose
Secretary, Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426

RE: FERC Docket No. CP16-22-000 – NEXUS Gas Transmission project

Dear Secretary Bose:

Consumer Energy Alliance (CEA) wishes to submit comments in support of the NEXUS Gas Transmission project.

Founded in 2006, CEA is the leading consumer advocate in support of affordable, reliable energy for our nation's energy consumers – both families and businesses. CEA is a nonpartisan, nonprofit organization with more than 400,000 individual members and over 300 affiliates. Our members advocate for a balanced energy policy and responsible access to American energy resources. As such, our members recognize pipelines and transmission lines are needed to deliver these American energy resources to our homes and businesses.

CO52-1 Expanded domestic natural gas production in areas like the Marcellus and Utica Shale has transformed America's energy outlook, providing opportunities for economic growth through consumer savings and increased employment. This is why CEA supports the construction of key energy infrastructure projects like the NEXUS pipeline – a pipeline designed to safely and efficiently move American-produced, clean-burning natural gas to families and businesses in northern Ohio and southeastern Michigan for home heating, cooking, power generation, and industrial uses.

More than just transporting natural gas in the safest and most environmentally responsible way possible, the NEXUS pipeline will generate up to \$830 million in economic activity while supporting more than 6,800 jobs during construction. As a result of this project, local governments, public safety forces, and schools will realize more than \$500 million in additional operating revenue.

Our organization's membership strongly values the contributions that safe, responsible domestic energy production and transportation has had for our Nation's consumers – particularly in the

2211 Norfolk Street Suite 410 Houston, TX 77098 713.337.8600

CO52-1

Comment noted. See section 4.10 for a discussion of potential socioeconomic impacts associated with the proposed Projects.

COMPANIES/ORGANIZATIONS COMMENTS

CO52 – Consumer Energy Alliance (cont'd)

20160906-0025 FERC PDF (Unofficial) 09/06/2016

CONSUMER ALLIANCE
THE VOICE OF THE ENERGY CONSUMER

states of Ohio and Michigan. This is why we endeavor to educate all consumers through projects like Pipelines for America, a national educational campaign focused on the importance of U.S. energy infrastructure, and why continued investment in energy pipelines is needed to keep consumer energy prices stable and better protect the environment. Since we recognize this importance, CEA and our more than 56,000 individual members in these two states wish to reiterate our strong support for this much needed infrastructure project.

CO52-2 For the benefit of families and businesses, CEA respectfully urges FERC to approve the NEXUS Gas Transmission project. Please contact our Executive Director of CEA - Midwest Chris Ventura at cventura@consumerenergyalliance.org should you have any questions.

We appreciate the opportunity to comment on this important process.

Respectfully,



David Holt
President
Consumer Energy Alliance

2211 Norfolk Street, Suite 410 Houston, TX 77098 713.337.8800

CO52-2

Comment noted.

R-545

COMPANIES/ORGANIZATIONS COMMENTS

CO53 – Coalition to Reroute NEXUS

20160908-5289 FERC PDF (Unofficial) 9/8/2016 4:35:44 PM

UNITED STATES OF AMERICA
BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

NEXUS GAS TRANSMISSION, LLC }
 }
 } DOCKET NO. CP16-22-000
 }

MOTION OR REQUEST TO CONSIDER ALTERNATE SOURCES OF GAS
SUPPLY AND RECONSIDER THE NO ACTION ALTERNATIVE

Now comes the Coalition to Reroute Nexus ("CoRN"), a non-profit organization and certain Ohio property owners ("Interveners"), by and through attorney David A. Mucklow and hereby moves the Federal Energy Regulatory Commission to examine the alternative sources for natural gas available to the major shippers on the NEXUS pipeline project and to reconsider the No Action Alternative.

In Support of this Motion the following is stated:

In FERC's Draft Environmental Impact Statement (DEIS) for NEXUS¹, the following is stated in regards to the No Action Alternative (NAA):

"The Commission has two possible courses of action in processing applications under Section 7 of the NGA: 1) deny the requested authorizations (i.e., the No Action Alternative), or 2) grant the Certificate with or without conditions. If the Commission denies the NEXUS and Texas Eastern applications, the environmental impacts identified in this EIS would not occur nor would the Projects' objectives be met. Although a Commission decision to deny the proposed action would avoid the immediate environmental impacts addressed in this EIS, other natural gas companies could construct projects in substitute for the natural gas supplies offered by the NGT and TEAL Projects. Such alternative projects could require the construction of additional and/or new pipeline facilities in the same or other locations to transport the gas volumes proposed by the Projects. These projects would result in their own set of specific environmental impacts that could be less than, equal to, or greater than those described for the current proposal.

¹ Draft Environmental Impact Statement, NEXUS Gas Transmission Project and Texas Eastern Appalachian Lease Project, July 2016.

COMPANIES/ORGANIZATIONS COMMENTS

CO53 – Coalition to Reroute NEXUS (cont'd)

20160908-5289 FERC PDF (Unofficial) 9/8/2016 4:35:44 PM

If the applicants' proposed facilities are not constructed, the Projects' shippers would presumably need to obtain an equivalent supply of natural gas from new or existing pipeline systems. In response, the applicants or another natural gas transmission company would likely develop a new project or projects to provide the volume of natural gas contracted through the Projects' binding precedent agreements with the shippers. As more fully evaluated in the following sections, construction of new pipelines or other natural gas infrastructure would result in environmental impacts equal to or greater than those of the Projects, and therefore would not be preferable to the proposed Projects. For these reasons, we are not recommending the no-action alternative."

CO53-1 FERC must consider the following:

- 1) 18 CFR 380.12 states the following: "Discuss the 'no action' alternative and the potential for accomplishing the proposed objectives through the use of other systems and/or energy conservation. Provide an analysis of the relative environmental benefits and costs for each alternative."

CO53-2 a. The DEIS dismisses discussion of energy conservation and/or renewables since it argues that the means of providing electricity is left up to the States, so the discussion is out of scope for discussion in the DEIS according to FERC. However, the CFRs require this discussion and analysis "of other systems and/or energy conservation." Shouldn't the EIS address energy conservation and/or renewables as alternatives to the proposed action? How many megawatts of renewable energy could be brought on line in substitution compared with the same investment including consideration of the costs of the adverse impacts? FERC must undertake this analysis. The analysis must be more than perfunctory and should contain objective criteria and comparisons. This portion of the DEIS is fundamentally insufficient.

CO53-3 b. 18 CFR 380.12 requires the consideration of "other systems" to accomplish the proposed objectives. The only "other systems" considered in the discussion of the

CO53-1 FERC regulations in 18 CFR 380.12 do not pertain to information that is required in an EIS. Rather, those regulations identify information the pipeline company should to submit to the Commission as part of their application. As discussed in section 3.1, the generation of electricity from renewable energy resources or the gains realized from increased energy efficiency and conservation are not natural gas transportation alternatives; therefore, they are not considered or evaluated further in this analysis.

CO53-2 See response to comment CO53-1.

CO53-3 TransCanada pipelines are evaluated in the systems alternative discussion in section 3.2. Both the ANR and Columbia pipelines, which are discussed in section 3.2, are assets owned by TransCanada. TransCanada does not own a pipeline system in the U.S. known as the TransCanada mainline.

R-547

COMPANIES/ORGANIZATIONS COMMENTS

CO53 – Coalition to Reroute NEXUS (cont'd)

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CO53-3
(cont'd)

NAA in the DEIS are other potential pipeline construction projects, e.g. Rover, with their own sets of adverse impacts. There is no mention of alternate sources of natural gas using existing or expanded infrastructure which would have very little adverse impact. The vast majority of the contracted capacity on Nexus is going to the Dawn Hub. One alternative to using Nexus to deliver gas to the Dawn Hub is to use TransCanada's mainline to deliver the same amount or more of the gas contracted by Nexus for Dawn at a competitive cost². Approximately, 2-3 Bcf/d transportation capacity will become available from Western Canada to the Dawn Hub. With this alternative, and other means to meet the project objectives in Michigan, all the adverse impacts associated with the project could be avoided. TransCanada is not the only potential system delivering gas to the Dawn Hub or to DTE.

CO53-4

- c. The NAA would need to also address project objectives in Michigan. These could be accomplished by numerous other means. The Project objectives in Ohio are largely non-existent, but could also be addressed by other means. According to the Nexus Resource Reports³, the growth of the natural gas market in Northern Ohio is a tepid 3 Bcf/year per annum, or 8 MMcf/day per annum. This small amount can easily be accommodated with existing infrastructure. For the power generation sector in Ohio, primary and secondary gas transmission sources already exist, eliminating the need for Nexus. Ohio is on the verge of rapidly expanding wind generation in the Northwest sector of the State, which will supplant the expected future need for coal or gas fired power generation plants.

² "TransCanada Seeks to Lure Shippers With Gas Line Toll Cut", Bloomberg News, July 21, 2016.

³ Nexus Resource Report 1 and Appendix 1C4, November 2015.

CO53-4

As discussed in the section 1.1.1, the NGT Project design is based on the contractual commitments generated during open seasons held with customers, market connections, and other parties that expressed interest in obtaining natural gas. The Commission does not direct development of the gas industry's infrastructure, neither on a broad regional basis nor a narrow localized basis. Instead, the Commission responds to the marketplace when an application is filed to provide new or modified service, and in each application the parameters of the project are determined by the applicant. Although the EIS briefly discusses NEXUS' and Texas Eastern's stated purposes, it does not determine whether the need for the Projects exists. The need for these Projects will be determined separately by the Commission when it makes its decision on the Projects (sometime after the Final EIS is issued).

COMPANIES/ORGANIZATIONS COMMENTS

CO53 – Coalition to Reroute NEXUS (cont'd)

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CO53-4
(cont'd)

d. The other objective of the project is to provide take-away capacity for the producers. But, with demand met by other means, with fewer adverse impacts, the producers do not need to produce. Production and investment in production has stalled.

CO53-5

2). As part of the Nexus Purpose and Need¹ the Applicant states that "...the traditional flow of natural gas to the region (Ontario and Michigan) from the Gulf Coast and Western Canada is declining..." The use of TransCanada would slow this decline, use existing infrastructure, and potentially avoid overbuilding of infrastructure.

CO53-6

3). There are other existing or proposed pipelines and capacity available that should be evaluated in the NAA. Rover, TransCanada, or other sources can meet the capacity for some time to come? What are the other options of serving the Nexus delivery points MR05 and MR06, if needed? Both Dominion East Ohio and Northcoast have east-west transmission systems near these delivery points.

CO53-7

The FERC DEIS has not fully explored the No Action Alternative as required by the CFRs and other guidelines. CoRN requests that FERC properly evaluate the No Action Alternative in a more exhaustive and comprehensive manner, since the potential savings in adverse impacts is enormous to both the natural and human environments, including consideration of billing the ratepayers (subsidies to Nexus) in Michigan and Ontario for a significant portion of the construction costs as has been discussed by both Ontario Energy Board and the Michigan Attorney General. CoRN specifically asks the FERC to analyze the possibility of using TransCanada's mainline as an alternative to Nexus for delivering gas to the Dawn Hub and the other suggested needs of Nexus being fulfilled by existing systems.

¹ Nexus Resource Report 1, November 2015.

CO53-5

Comment noted.

CO53-6

Section 3.2 discusses the possibility of utilizing existing systems in lieu of the Projects. As stated in section 3.0, we considered the 6 definitive receipt and delivery points on the NGT Project (including MR05 and MR06) to be essential to the Project's objective. This is important because we did not evaluate alternatives in section 3.0 of the draft EIS if they could not meet the Project's objectives.

CO53-7

Comment noted. See response to comment CO53-3.

COMPANIES/ORGANIZATIONS COMMENTS

CO53 – Coalition to Reroute NEXUS (cont'd)

20160908-5289 FERC PDF (Unofficial) 9/8/2016 4:35:44 PM

FERC's position allows the market to decide what infrastructure is required even if that results in oversupply of pipeline infrastructure. Clearly, an overcapacity issue has emerged even with the most robust projects of future growth or need. This approach is viable in a true free market economy, but the gas transmission industry is anything but free market with: established rates, subsidizing projects by passing on costs to ratepayers as in the case of Nexus, the ability to exercise eminent domain to acquire rights of way rather than paying free market prices for land (one example of this approach is the NFL Hall of Fame project in Canton, Ohio), and in the case of Nexus, the close corporate affiliations of the pipeline transmission company with shippers, cooperatives, partnerships, and corporate subsidiaries or affiliates.

CO53-8 Last, the September 6th announcement that Enbridge Inc. (ENB)(NYSE:ENB)(Enbridge (EEP)) and Spectra Energy Corp (SE)(NYSE:SE)(Spectra Energy) have entered into a definitive merger agreement under which Enbridge will acquire Spectra Energy in a stock-for-stock merger. Enbridge Inc. is a foreign for profit, company. This raises a plethora of questions that need to be fully explored and explained before this Project's recommendations are advanced. Additional analysis above what the Applicant claims to be the demand/market and alternatives is needed to not only comply with the federal regulations, but to avoid construction of unneeded infrastructure and the attendant adverse impacts to the environment, communities, and property owners.

CO53-9 In conclusion, FERC is required to undertake the no action alternative and evaluate both alternative energy systems such as the impact of wind generation in Northeast Ohio and alternate gas transmission systems which are in need of more capacity and reach or achieve the same market objectives.

CO53-8 Comment noted.

CO53-9 See response to comment CO53-4.

R-550

COMPANIES/ORGANIZATIONS COMMENTS

CO53 – Coalition to Reroute NEXUS (cont'd)

20160908-5289 FERC PDF (Unofficial) 9/8/2016 4:35:44 PM

/s/ David A. Mucklow
DAVID A. MUCKLOW(#0072875)

CERTIFICATE OF SERVICE

I hereby certify on this 8th day of September, 2016 that a copy of the foregoing document was served upon Nexus Gas Transmission, LLC and each person designated on the official service list compiled by the Secretary in this proceeding via email.

/s/ David A. Mucklow
DAVID A. MUCKLOW(#0072875)

R-551

COMPANIES/ORGANIZATIONS COMMENTS

CO54 – Coalition to Reroute NEXUS

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DAVID A. MUCKLOW

ATTORNEY AT LAW
919 E. TURKEYFOOT LAKE ROAD
SUITE B
AKRON, OH 44312
PHONE: (330) 896-8190
FAX: (330) 896-8201
davidamucklow@yahoo.com

September 08, 2016

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE Washington, DC 20426

Re: NEXUS Gas Transmission Project, Docket No. CP16-22-000

Subject: Response to City of Green Filing on August 29, 2016

Dear Ms Bose:

CO54-1 On behalf of the Coalition to Reroute Nexus (CoRN) and various Ohio property owners, I am writing in support of the efforts by the City of Green in minimizing the environmental impact of the Nexus Gas Transmission (NGT) and related projects. The City of Green (COG) posted updates to the COG Alternative route on August 29, 2016¹, and I would like to take this opportunity to comment further on this and other route alternatives.

City of Green Alternative Route

CO54-2 In the COG filing², a number of opportunities to improve the original COG Alternative route were developed. Specifically responding to the FERC request in the Draft Environmental Impact Statement (DEIS)³ to try "...to minimize impacts on residences, forests, and other environmental resources." The length of greenfield route was addressed because it appears to be an important consideration, although it is not independent from the other criteria. Many options for improvements to reduce impact to forested areas and the use of the amount of greenfield were pointed out in the COG filing as well as reduction to

¹ "Comments of the City of Green re the Alternate Route Modifications under CP16-22.", 20160829-5239, August 29, 2016.

² *Ibid*

³ Draft Environmental Impact Statement, FERC/DEIS-270D, July 2016.

CO54-1 See section 3.3.3 for a discussion of the City of Green route alternative, including a discussion of co-location with the Rover Pipeline Project, greenfield construction, and impacts on forested areas, state parks/forests, steep slopes, dwellings, and safety. Based on our review, we did not find the City of Green Route Alternative provides a substantial environmental advantage when compared to the corresponding segment of the proposed route and did not recommend that it be incorporated as part of the Projects.

CO54-2 See response to comment CO54-1.

COMPANIES/ORGANIZATIONS COMMENTS

CO54 – Consumer Energy Alliance (cont'd)

20160908-5291 FERC PDF (Unofficial) 9/8/2016 4:39:06 PM

CO54-2
(cont'd)

Impact on residential uses. A COG Alternative as now defined does not have any residences within 50 feet. The comparison of the preferred route and the original COG Alternative route was given in the DBIS in Table 3.3.3-1 (repeated below). The greenfield comparison was NGT: 62.7 mi, and COG: 78.9 mi. However, the DBIS COG figure originally did not include the 33.3 miles of right-of-way co-located or along the Rover route. Taking this into account reflects a significantly new and improved greenfield comparison:

Greenfield: NGT: 62.7 mi COG: 45.6 mi.

Factor	Alternative	Proposed Route
Length (miles)	102.8	97.3
Greenfield Construction (miles) ^a	78.9	62.7
Wetland Affected (acres) ^b	10.0	21.8
Perennial Waterbody Crossings (no.)	55	49
WHPA (no.)	6	7
Agricultural Land (acres) ^c	1,039.4	1,027.3
Forested Land (acres) ^d	234.8	191.5
State Parks and Forest (no./mile)	0.0/0	1/0.3 ^e
County/Metro Parks (no./mile)	1/0.2 ^e	5/0.8 ^e
Steep Slopes (miles) ^f	5.6	1.0
Sideline Construction (miles) ^g	7.4	1.8
Dwellings within 50 feet of the Pipe Centerline (no.)	4	1
Dwellings within 100 feet of the Pipe Centerline (no.)	12	12
Dwellings within 150 feet of the Pipe Centerline (no.)	31	68
Other Residential-type Structures within 150 feet (no.)	57	91

- a Based on the absence of adjacent or parallel rights-of-way within 300 feet of the pipe centerline.
b Based on a 75-foot-wide construction right-of-way in wetlands and forested land.
c Based on a 125-foot-wide construction right-of-way in agricultural land.
d Portage Lakes State Park.
e Canal Corridor.
f Ariss Park; Greensburg Park; Singer Lake Preserve; Chippewa Lake Nature Area; Buckeye Woods Park.
g Calculated by identifying slopes greater than 20 percent.
h Calculated by identifying slopes greater than 20 percent, and determining if the pipeline direction differed from the direction of the ground aspect.
i Includes detached dwellings, garages, sheds, and other buildings often associated with a residence.

CO54-3 Also, the options to reduce impact to greenfield in the recent COG filing would further decrease the COG number.

CO54-4 The forested acres can be significantly improved with the new COG options. Also, for the 33 miles overlapping with the Rover route, how are the forested acres counted? If Rover has already impacted the forests and wetlands along this route, the additional impact of NGT should be minimal. It would appear that the forested acres are not counted correctly if the impacts by Rover have been accounted for.

18 CFR 380 contains the updates to FERC responsibilities including NEPA.

18 CFR 380.15⁴ provides:

⁴ See e.g., <https://www.law.com/ll.edu/cfr/text/18/380.15>

CO54-3 See response to comment CO54-1.

CO54-4 See response to comment CO54-1.

COMPANIES/ORGANIZATIONS COMMENTS

CO54 – Consumer Energy Alliance (cont'd)

20160908-5291 FERC PDF (Unofficial) 9/8/2016 4:39:06 PM

“(e) Pipeline and electric transmission facilities construction.

(1) The use, widening, or extension of existing rights-of-way must be considered in locating proposed facilities.”

CO54-5 By co-locating Nexus with a portion of the Rover route, new greenfield construction is minimized which is required by the federal regulations. Eventually the COG alternate route departs from the Rover route, but the co-located portions would have a greatly reduced impact due to the “use, widening, or extension of existing rights-of-way.”

18 CFR 380.15 also states the following:

“(a) **Avoidance or minimization of effects.** The siting, construction, and maintenance of facilities shall be undertaken in a way that avoids or minimizes effects on scenic, historic, wildlife, and recreational values.”

and

(e) “(2) In locating proposed facilities, the project sponsor shall, to the extent practicable, avoid places listed on, or eligible for listing on, the National Register of Historic Places; natural landmarks listed on the National Register of Natural Landmarks; officially designated parks; wetlands; and scenic, recreational, and wildlife lands...”

CO54-6 In accordance with these regulations, the following comparisons become apparent:

State Parks and Forests:	NGT: 1	COG: 0
Wetland affected (acres)	NGT: 21.8	COG: 10.0
County and Metro Parks:	NGT: 5	COG: 1
Singer Lake Preserve:	NGT: 1	COG: 0
Incorporated Cities/Villages:	NGT: 3	COG: 0

18 CFR 380.15 also states the following:

“(3) Rights-of-way should avoid forested areas and steep slopes where practical.”

CO54-7 These categories include:

Steep Slopes (miles):	NGT: 1.0	COG: 5.6
Forested Acres	NGT: 181.8	COG: 234.5

CO54-5 See response to comment CO54-1.

CO54-6 See response to comment CO54-1.

CO54-7 See response to comment CO54-1.

COMPANIES/ORGANIZATIONS COMMENTS

CO54 – Consumer Energy Alliance (cont'd)

20160908-5291 FERC PDF (Unofficial) 9/8/2016 4:39:06 PM

CO54-8 As stated above, impacts to forested areas along with steep slopes would be reduced using the new COG options. Lastly with respect to dwellings or residential uses, the table should reflect NGT to have 4 dwellings within 50 feet, depending on the COG options implemented the count of dwellings could be further reduced as shown below:

Dwellings within 50 ft:	NGT: 4	COG: 0
Dwellings within 100 ft:	NGT: 12	COG: 1
Dwellings within 150 ft:	NGT: 66	COG: 8

CO54-9 Reducing conflicts with the human environment is both an objective of the federal regulations and NEPA. The COG improvements have achieved these objectives and will improve safety setbacks and reduce conflicts with humans.

These statistics will be significantly improved by considering the options identified by the COG³ as well as the ongoing work on the COG Alternative being done by FERC, and presumably by Nexus. The COG modifications are not intended definitive on the subject, but illustrative of how the route will be significantly, if not overwhelmingly, improved with an insignificant increase to length.

With the comparisons cited above and the options for improvement of the COG route, the choice becomes clear that the COG Alternative is the superior route for the NGT pipeline.

Respectfully submitted

/s/ David A. Mucklow
DAVID A. MUCKLOW(#0072875)

CERTIFICATE OF SERVICE

I hereby certify on this 24th day of August, 2016 that a copy of the foregoing document was served upon Nexus Gas Transmission, LLC and each person designated on the official service list compiled by the Secretary in this proceeding via email.

/s/ David A. Mucklow
DAVID A. MUCKLOW(#0072875)

³ "Comments of the City of Green re the Alternate Route Modifications under CP16-22-7", 20160829-5239, August 29, 2016.

CO54-8 See response to comment CO54-1.

CO54-9 See response to comment CO54-1.

COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS



September 14, 2016

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE Washington, DC 20426

U.S. Department of Energy
Office of Inspector General
Attn: IG Hotline
1000 Independence Avenue SW
Mail Stop 5D-031
Washington, DC 20585
Via email to ighotline@hq.doe.gov

EPA Inspector General Hotline
1200 Pennsylvania Avenue NW
Mail code 24311
Washington, DC 20460
Via email only to OIG_Hotline@epa.gov

Division of Investigations
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426
Via email only to hotline@ferc.gov

U.S. Postal Inspection Service
Criminal Investigations Service Center
Attn: Mail fraud
433 W. Harrison St. Rm 3255
Chicago, IL 60699-5255

Re: NEXUS Gas Transmission Project, FERC Docket No. CP16-22-000

Subject: **Investigation regarding public comment letters submitted by the Consumer Energy Alliance ("CEA")**

Dear Secretary Bose:

This document is being submitted by the Coalition to Reroute NEXUS (CoRN) in support of the request by Attorney Terry Lodge of Toledo, Ohio for investigation regarding falsified public comment letters

R-556

COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS (cont'd)



CO55-1

Comment noted.

CO55-1 admittedly filed by the Consumer Energy Alliance¹. Mr. Lodge submitted a request on August 31, 2016 to conduct an investigation regarding “falsely-identified public comment letters” onto the docket. The request was supported by an affidavit of Paul Wohlfarth from Ottawa Lake, Michigan who noted over 200 letters being submitted to FERC which appeared suspect because none of the letters were signed. In Mr. Wohlfarth’s declaration he notes having contacted fourteen people, all of whom denied knowledge of the letter or having given permission to send a letter on their behalf.

Mr. Lodge also filed a Notice of Protest for various clients. Mr. Lodge poignantly illustrates FERC’s responsibility to consider all comments filed on the FERC docket pursuant to 40 CFR 1503.4, and that “whoever . . . willfully (falsified, conceals, or covers up by any trick, scheme, or device a material fact; (2) makes any materially false, fictitious, or fraudulent statement or representation; or (3) makes or uses any false writing or document knowing the same to contain any materially false, fictitious, or fraudulent statement or entry, shall be fined under this title, imprisoned not more than 5 years . . .”. 18 U.S.C. § 1001(a). Although FERC may not consider this matter a serious matter because little weight would be given to comments submitted on the FERC docket accurately reflects public sentiment and which comments are relevant. As Mr. Lodge argued and I concur: “This is an extremely serious matter. . . Submission of hundreds of bogus comment letters during the comment period is calculated to convey the false impression that there is widespread public support for construction and operation of the pipeline and its infrastructure.” Perhaps one false and misleading letter could be ignored; however, CEA has acknowledged to orchestrating several hundred false and misleading submissions to the FERC docket. Whether this behavior is the work of a proponent of the pipeline or an opponent, FERC must take appropriate steps to police its docket and ensure that the record is based on authentic submissions expressing truthful statements from real persons. Otherwise chaos will ensue. Ignoring this situation will simply encourage more robotic filings using computer software and randomly generated fictitious filers.

CEA claims that it is the “leading consumer advocate for affordable reliable energy, activated its grassroots network to demonstrate the widespread support for the Project among the residents of Ohio before the Commission.” It alleges that it conducted “automated telephone surveys” directed to the individual listed in phone company records. They contend that “the individual who participates in the survey is asked a series of questions” which are answered by pressing buttons on the telephone. They acknowledge that no live person verifies any information. They claim that they asked for permission to forward comments in support of Nexus based upon the “express question” whether the person talking on the telephone agreed to submit comments in support of Nexus. CEA, however, admittedly submitted alleged false and misleading letters to FERC in an attempt to sway FERC in its decision making process in violation of federal criminal laws. CEA admits that their telephone surveys are automated, not verified, and there is no indication that the person taking the phone survey is the same person listed as the owner of the telephone. In fact, in one case, we know that one person who allegedly submitted

¹ NEXUS Gas Transmission, LLC, Docket CP16-22-000 submission dated September 2, 2016 by Edward Greenberg, Counsel for Consumer Energy Alliance.

COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS (cont'd)



comments is deceased. CEA admits that they flooded the FERC docket with unsubstantiated letters from 347 individuals.

CO55-2 The Coalition to Reroute Nexus ("CoRN") conducted its own independent investigation by contacting some of the names on the letters submitted in Medina and Summit Counties. Over a dozen affidavits were received back from persons whose name was used by CEA to submit letters for support of Nexus. The attached affidavits are filed in support that CEA engaged in a fraudulent and criminal enterprise to flood the FERC docket with letters of support when in fact the support was non-existent. The evidence is clear that CEA committed alleged criminal offenses on the FERC docket in order to fraudulently support the Nexus Project. CEA suggests that these crimes are "inadvertent errors" blaming "in some instances the respondent may not fully understand the presented question, unintentionally answer it in the wrong way and later change his or her mind." CEA suggests that the discrepancies "described by Neighbors [do not] invalidate the majority of the survey's results, and specifically do not support the wildly overblown allegation of forgery, fraud or false statements." However, when the affidavits received from a small sample taken by CoRN in two Counties through an actual verification process reveals that the fraud conducted by CEA was pervasive and not accidental. Combined with the investigation conducted by Neighbors in Toledo, Ohio, the affidavits reveal that several dozen of the alleged supporters never gave permission, do not or did not ever support Nexus, and that some people are deceased. Most people seem elderly and live nowhere near the Nexus project. This sampling represents that almost ten percent of the total number of letters submitted by CEA never gave permission to send any letter in support of Nexus.

CO55-3 Nexus also filed comments on the FERC docket disavowing any knowledge or participation in these activities by CEA. However, listed on the CEA website, as an industry member of the Consumer Energy Alliance, is Spectra Energy. Spectra Energy is one of two member partners listed as an owner of Nexus. It is difficult to believe that Spectra Energy had no knowledge of a campaign dedicated to garner support for its Nexus Project. The CEA activities would require funding. I would urge the postal inspectors immediately subpoena the emails between CEA and Spectra Energy to determine to what extent Spectra Energy was involved in the alleged criminal acts of CEA.

CO55-4 Lastly, CEA attorneys argued: "CEA supports energy projects that help reduce costs for households and small businesses and create economic opportunity. What is clear and beyond dispute regarding the Nexus project is that without Nexus energy prices for families and small business will increase due to lack of infrastructure and supply." However, nothing contained in the record supports that the Nexus project will reduce energy costs or that more infrastructure and supply is needed. To the contrary, the evidence supports that the Nexus Project is redundant, that extra carry charges will be added in Ohio, that rates are fixed and that in the case of DTE and the Dawn Hub, rate payers will be subsidizing infrastructure with higher rates in order for Spectra Energy and its subsidiaries to build unneeded additional pipeline infrastructure. Nexus will not help America energy independent nor will it lower energy costs. It will not yield higher tax revenue nor create long lasting jobs in America. It is not providing local energy infrastructure nor will it spur economic development. It will not create a stronger regional economy and will not be good for our environment.

CO55-2 Comment noted.

CO55-3 Comment noted.

CO55-4 Comment noted.

COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS (cont'd)

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CO55-5

Comment noted.

CO55-5 In conclusion, CoRN supports the Objection filed by Mr. Lodge and requests that an investigation be conducted, that items be stricken from the docket, and that appropriate criminal referrals be made.

Respectfully submitted,

/s/ David A. Mucklow
DAVID A. MUCKLOW(#0072875)

CERTIFICATE OF SERVICE

I hereby certify on this 14th day of September, 2016 that a copy of the foregoing document was served upon Nexus Gas Transmission, LLC and each person designated on the official service list compiled by the Secretary in this proceeding via email.

/s/ David A. Mucklow
DAVID A. MUCKLOW(#0072875)

COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS (cont'd)

20160914-5179 FERC PDF (UNOFFICIAL) 9/14/2016 4:18:31 PM

SUMMIT COUNTY, OHIO

AFFIDAVIT

STATE OF OHIO)
) ss:
COUNTY OF SUMMIT)

Now comes Affiant, CAROLINE BARNES, who being first duly sworn, states and avers upon his or her own first-hand knowledge as follows:

1. My name is CAROLINE BARNES. I reside at 4824 MANICREST RD
NEW FRANKLIN OHIO 43119
Ohio (Summit County Ohio).
2. I have not filed, submitted or authorized my name to be used to submit a letter in support of the Nexus gas transmission pipeline appearing on the FERC docket CP #16-22-000 and wish that any such letter in my name submitted on my behalf be withdrawn from the docket.
3. I wish that this incident be reported to the Federal Energy Regulatory Commission Inspector General, U.S. Postal Inspector, or a person with authority to investigate whether someone has used my identity in violation of the laws of the United States.

Further Your Affiant Sayeth Naught.

Caroline A Barnes
Name

SWORN TO BEFORE ME and subscribed in my presence on the

29 day of Aug, 2016.

NOTARY PUBLIC



LINDA A. LEDNIK
NOTARY PUBLIC
FOR THE
STATE OF OHIO
My Commission Expires
Nov. 23, 2020

COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS (cont'd)

Caroline Barnes
4224 Manchester Rd
Akron, OH 44319

ORIGINAL

FILED
SECRETARY OF THE
COMMISSION

2016 AUG 16 P 3 27

FEDERAL ENERGY
REGULATORY COMMISSION

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426-0001

RE: Docket Number – CP 16-22-000 – NEXUS Gas Pipeline Project

Dear Ms. Bose,

As a resident of Summit County and a supporter of the NEXUS pipeline, I would like to encourage you to approve the NEXUS project. This project will help us create new jobs, generate affordable electricity, protect our environment, and keep energy prices low.

It is very important to me that the environment be protected, and pipelines have been proven to be the safest, most environmentally friendly way to transport natural gas. Meeting or exceeding federal safety requirements, the NEXUS pipeline will be continuously monitored and regularly inspected.

The Ohio Chamber of Commerce has recognized the economic benefits that NEXUS will bring to our county, and our state – the creation of over 5,000 jobs and more than \$550 million in wages. In Summit County alone, the construction of NEXUS will support over 300 jobs and provide more than \$20 million in tax revenue for our local governments and schools within the first five years.

Please approve this important infrastructure project which will help bring good-paying jobs to our county.

Sincerely,

Caroline Barnes

R-561

COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS (cont'd)

SUMMIT COUNTY, OHIO

AFFIDAVIT

STATE OF OHIO)
) ss:
COUNTY OF SUMMIT)

Now comes Affiant, Monte York who being first duly sworn, states and avers upon his or her own first-hand knowledge as follows:

1. My name is Monte York I reside at 469 Barnett Rd.
Akron
Ohio (Summit County Ohio).
2. I have not filed, submitted or authorized my name to be used to submit a letter in support of the Nexus gas transmission pipeline appearing on the FERC docket CP#16-22-000 and wish that any such letter in my name submitted on my behalf be withdrawn from the docket.
3. I wish that this incident be reported to the Federal Energy Regulatory Commission Inspector General, U.S. Postal Inspector, or a person with authority to investigate whether someone has used my identity in violation of the laws of the United States.

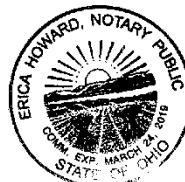
Further Your Affiant Sayeth Naught.

Monte York
Name

SWORN TO BEFORE ME and subscribed in my presence this

7 day of Sept, 2016.

[Signature]
NOTARY PUBLIC



COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS (cont'd)

20160914-5179 FERC PDF (Unofficial) 9/14/2016 4:18:31 PM

20160815-0072 FERC PDF (Unofficial) 08/15/2016

Monte York
469 Garnette Rd
Akron, OH 44313

FILED
SECRETARY OF THE
COMMISSION

2016 AUG 15 P 4: 09

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426-0001

ORIGINAL

FEDERAL ENERGY
REGULATORY COMMISSION

RE: Docket Number – CP 16-22-000 – NEXUS Gas Pipeline Project

Dear Ms. Bose,

I am writing in support of the NEXUS pipeline and to urge you to approve the construction of this pipeline for Summit County. Clean-burning natural gas can help us create new jobs, generate affordable electricity, protect our environment, and keep energy prices down. But first, this pipeline needs to be built.

Many local officials support the project because of the economic benefits it will bring to our county, and our region. In Summit County alone, the construction of NEXUS will support over 300 jobs and provide almost \$21 million in tax revenue within the first five years.

Although economic development for Summit County is very important, making sure our environment is protected is important as well. It is widely acknowledged that pipelines are the safest form of transportation for natural gas. This pipeline will be continuously monitored and regularly inspected to ensure the protection of the environment and the safety of our friends and neighbors.

Building the 255-mile pipeline will require thousands of new jobs and bring millions in new economic investment. I hope that you will join me in supporting this project for the betterment of our county, and opposing the City of Green's reroute, to ensure Summit County can access all of the economic development potential this pipeline may bring.

Sincerely,

Monte York

R-563

COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS (cont'd)

20160914-5179 FERC PDF (Unofficial) 9/14/2016 4:18:31 PM

MEDINA COUNTY, OHIO

AFFIDAVIT

STATE OF OHIO)
) ss:
COUNTY OF MEDINA)

Now comes Affiant, ROBERT, who being first duly sworn, states and avers upon his or her own first-hand knowledge as follows:

1. My name is ROBERT CURTIS; I reside at 4262 SETTERS WAY, Ohio BEUNSWICK, 44212 (Medina County Ohio).
2. I have not filed, submitted or authorized my name to be used to submit a letter in support of the Nexus gas transmission pipeline appearing on the FERC docket CP #16-22-000 and wish that any such letter in my name submitted on my behalf be withdrawn from the docket.
3. I wish that this incident be reported to the Federal Energy Regulatory Commission Inspector General, U.S. Postal Inspector, or a person with authority to investigate whether someone has used my identity in violation of the laws of the United States.

Further Your Affiant Sayeth Naught.

Robert C. Curtis

SWORN TO BEFORE ME and subscribed in my presence this 27TH day of AUGUST 2016.



DEBORA L. DANGELO, Notary Public
Residence - Medina Ohio
State of Ohio
My Commission Expires
June 18, 2020

Debora L. Dangelo
NOTARY PUBLIC

R-564

COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS (cont'd)

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20160915-0127 FERC PDF (Unofficial) 06/15/2016

ORIGINAL

Robert Curtis
4262 Settlers Way
Brunswick, OH 44212

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426-0001

FILED
SECRETARY OF THE
COMMISSION
2016 AUG 15 P 3 58
FEDERAL ENERGY
REGULATORY COMMISSION

RE: Docket Number – CP 16-22-000 – NEXUS Gas Pipeline Project

Dear Ms. Bose,

I am writing in support of the NEXUS pipeline and to urge you to approve the construction of this pipeline for Medina County. Clean-burning natural gas can help us create new jobs, generate affordable electricity, protect our environment, and keep energy prices down. But first, this pipeline needs to be built.

Many local officials support the project because of the economic benefits it will bring to our county, and our region. In Medina County alone, the construction of NEXUS will support over 700 jobs and provide more than \$54 million in tax revenue within the first five years.

Although economic development for Medina County is very important, making sure our environment is protected is important as well. It is widely acknowledged that pipelines are the safest form of transportation for natural gas. This pipeline will be continuously monitored and regularly inspected to ensure the protection of the environment and the safety of our friends and neighbors.

Building the 255-mile pipeline will require thousands of new jobs and bring millions in new economic investment. I hope that you will join me in supporting this project for the betterment of our county, and opposing the City of Green's reroute, to ensure Medina County can access all of the economic development potential this pipeline may bring.

Sincerely,

Robert Curtis

AUG 23, 2016

I DID NOT SEND THIS. I
KNOW NOTHING ABOUT THIS
DOCUMENT. THIS IS MAIL
FRAUD AND A TRAVESTY.



DEBRA L. DANZELO, Notary Public
Residence - Medina Ohio
State of Ohio
My Commission Expires
June 18, 2020

Debra L. Danzelo

Robert C. Curtis

ROBERT CURTIS

R-565

COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS (cont'd)

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MEDINA COUNTY, OHIO

AFFIDAVIT

STATE OF OHIO)
) ss:
COUNTY OF MEDINA)

Now comes Affiant, Carolyn J. Weber, who being first duly sworn, states and avers upon his or her own first-hand knowledge as follows:

1. My name is Carolyn J. Weber; I reside at 7835 FLYING RD, Ohio
Medina OH 44056
(Medina County Ohio).
 2. I have not filed, submitted or authorized my name to be used to submit a letter in support of the Nexus gas transmission pipeline appearing on the PERC docket # C.P. 16-22-000 and wish that any such letter in my name submitted on my behalf be withdrawn from the docket.
 3. I wish that this incident be reported to the Federal Energy Regulatory Commission Inspector General, U.S. Postal Inspector, or a person with authority to investigate whether someone has used my identity in violation of the laws of the United States.
- Further Your Affiant Sayeth Naught.

Carolyn J. Weber



SWORN TO BEFORE ME and subscribed in my presence this 3rd day of SEPT
DEBORA L. DANGELO, Notary Public
Residence - Medina Ohio
State of Ohio
My Commission Expires
June 18, 2020

Debora L. Dangelo
NOTARY PUBLIC

R-566

COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS (cont'd)

20160914-5179 FERC PDF (Unofficial) 9/14/2016 4:18:31 PM

Carolyn Welch
7835 Elyria Rd
Medina, OH 44256

ORIGINAL

FILED
SECRETARY OF THE
COMMISSION
2016 AUG 16 P 3:43
FEDERAL ENERGY
REGULATORY COMMISSION

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426-0001

RE: Docket Number – CP 16-22-000 – NEXUS Gas Pipeline Project

Dear Ms. Bose,

Please join me in supporting the approval of the NEXUS pipeline which will help bring jobs and energy security to our county.

Many groups such as the Ohio Chamber of Commerce as well as local elected officials have voiced their support for this important infrastructure project. I agree with these groups that NEXUS will provide substantial economic benefits to counties like ours in addition to maintaining reliable, affordable natural gas service.

The economic impact of this project is significant, and one of the largest investments in Medina County – bringing in more than \$94 million in economic benefits and supporting over 700 jobs. In addition, our schools will benefit from increased revenue to provide more opportunities to our children.

In addition to the economic benefits, this pipeline will also ensure a reliable supply of U.S. produced natural gas at affordable prices, providing energy security for Medina County. While doing so, this pipeline will be continuously monitored with the latest safety controls such as remote control shutoff valves to make sure our environment is protected.

Approving this pipeline is commonsense, and I urge you to do so, knowing the importance of this project.

Sincerely,

Carolyn Welch
STATBOE OHIO
MEDINA, OHIO



Debra L. Dangel
NOTARY

DEBRA L. DANGELO, Notary Public
Residence - Medina Ohio
State of Ohio
My Commission Expires
June 18, 2020

September 3-2016
I HAVE NO KNOWLEDGE OF THIS
I DID NOT SEND THIS
THIS IS A FRAUD THAT
I HAVE NO PART OF
Carolyn Dwelele

R-567

COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS (cont'd)

20160914-5179 FERC PDF (UNOFFICIAL) 9/14/2016 4:18:31 PM

MEDINA COUNTY, OHIO

AFFIDAVIT

STATE OF OHIO)

COUNTY OF MEDINA) ss:

Now comes Affiant, ^{ELIZABETH}ANN, who being first duly sworn, states and avers upon his

or her own first-hand knowledge as follows:

1. My name is ^{ELIZABETH}ANN KOPFSTEIN, I reside at 333 BIRCH HILL, Ohio
MEDINA, OHIO 44130
(Medina County Ohio).
2. I have not filed, submitted or authorized my name to be used to submit a letter in support of the Nexus gas transmission pipeline appearing on the FERC docket CP16-22-000 and wish that any such letter in my name submitted on my behalf be withdrawn from the docket.
3. I wish that this incident be reported to the Federal Energy Regulatory Commission Inspector General, U.S. Postal Inspector, or a person with authority to investigate whether someone has used my identity in violation of the laws of the United States.

I further Your Affiant Sayeth Naught.

Elizabeth Ann Kopfstein

SWORN TO BEFORE ME and subscribed in my presence this 3rd day of SEPT 2016.



DEBRA L. DANGELO, Notary Public
Residence - Medina Ohio
State of Ohio
My Commission Expires
June 18, 2020

Debra L. Dangelo
NOTARY PUBLIC

R-568

COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS (cont'd)

20160914-5179 PERC PDF (Unofficial) 9/14/2016 4:18:31 PM

30160916-0053 PERC PDF (Unofficial) 09/16/2016

Ann Kopfsstein
333 Birch Hill Dr
Medina, OH 44256

ORIGINAL

FILED
SECRETARY OF THE
COMMISSION

2016 AUG 16 P 3:34

FEDERAL ENERGY
REGULATORY COMMISSION

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426-0001

RE: Docket Number – CP 16-22-000 – NEXUS Gas Pipeline Project

Dear Ms. Bose,

I am writing in support of the NEXUS pipeline and to urge you to approve the construction of this pipeline for Medina County. Clean-burning natural gas can help us create new jobs, generate affordable electricity, protect our environment, and keep energy prices down. But first, this pipeline needs to be built.

Many local officials support the project because of the economic benefits it will bring to our county, and our region. In Medina County alone, the construction of NEXUS will support over 700 jobs and provide more than \$54 million in tax revenue within the first five years.

Although economic development for Medina County is very important, making sure our environment is protected is important as well. It is widely acknowledged that pipelines are the safest form of transportation for natural gas. This pipeline will be continuously monitored and regularly inspected to ensure the protection of the environment and the safety of our friends and neighbors.

Building the 255-mile pipeline will require thousands of new jobs and bring millions in new economic investment. I hope that you will join me in supporting this project for the betterment of our county, and opposing the City of Green's reroute, to ensure Medina County can access all of the economic development potential this pipeline may bring.

9/2/2016

Sincerely,

Ann Kopfsstein

STATE OF OHIO
MEDINA COUNTY



DEBRA L. DANGELO, Notary Public
Residence - Medina Ohio
State of Ohio
My Commission Expires
June 18, 2020

Debra L. Dangelo
NOTARY

I HAVE NO KNOWLEDGE
OF THIS. I NEVER WROTE
OR SENT THIS DOCUMENT.
THIS IS FRAUD. AND A
VIOLATION OF MY RIGHTS

Elizabeth Ann Kopfsstein
ELIZABETH
ANN KOPFSTEIN

R-569

COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS (cont'd)

20160914-5179 FERC PDF (Unofficial) 9/14/2016 4:18:31 PM

MEDINA COUNTY, OHIO

AFFIDAVIT

STATE OF OHIO)
COUNTY OF MEDINA) ss:

Now comes Affiant, Jennifer Syme, who being first duly sworn, states and avers upon his or her own first-hand knowledge as follows:

1. My name is Jennifer Syme I reside at 8543 Westwood Dr Seville Ohio 44273 (Medina County Ohio).
2. I have not filed, submitted or authorized my name to be used to submit a letter in support of the Nexus gas transmission pipeline appearing on the FERC docket CF#16-22-000 and wish that any such letter in my name submitted on my behalf be withdrawn from the docket.
3. I wish that this incident be reported to the Federal Energy Regulatory Commission Inspector General, U.S. Postal Inspector, or a person with authority to investigate whether someone has used my identity in violation of the laws of the United States.

Further Your Affiant Sayeth Naught.

Jennifer Syme

SWORN TO BEFORE ME and subscribed in my presence this _____ day of _____, 2016.

Joseph G. Hyclak
NOTARY PUBLIC

JOSEPH G. HYCLAK
Notary Public, State of Ohio
Recorded in Cuyahoga County
My Commission Expires April 30, 2017

R-570

COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS (cont'd)

20160914-5179 PERC PDF (Unofficial) 9/14/2016 4:18:31 PM

20160809-0027 PERC PDF (Unofficial) 08/09/2016

Jennifer Syme
8393 Westfield Rd
Seville, OH 44273

ORIGINAL

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426-0001

FILED
SECRETARY OF THE
COMMISSION
2016 AUG 9 P 4:28
FEDERAL ENERGY
REGULATORY COMMISSION

RE: Docket Number – CP 16-22-000 – NEXUS Gas Pipeline Project

Dear Ms. Bose,

As a resident of Medina County and a supporter of the NEXUS pipeline, I would like to encourage you to approve the NEXUS project. This project will help us create new jobs, generate affordable electricity, protect our environment, and keep energy prices low.

It is very important to me that the environment be protected, and pipelines have been proven to be the safest, most environmentally friendly way to transport natural gas. Meeting or exceeding federal safety requirements, the NEXUS pipeline will be continuously monitored and regularly inspected.

The Ohio Chamber of Commerce has recognized the economic benefits that NEXUS will bring to our county, and our state – the creation of over 5,000 jobs and more than \$550 million in wages. In Medina County alone, the construction of NEXUS will support over 700 jobs and provide more than \$54 million in tax revenue for our local governments and schools within the first five years.

Please show your support for this important infrastructure project which will help bring good-paying jobs to our county.

Sincerely,

Jennifer Syme

R-571

COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS (cont'd)

20160914-5179 FERC PDF (Unofficial) 9/14/2016 4:18:31 PM

MEDINA COUNTY, OHIO

AFFIDAVIT

STATE OF OHIO)
) ss:
COUNTY OF MEDINA)

Now comes Affiant, _____, who being first duly sworn, states and avers upon his
or her own first-hand knowledge as follows:

1. My name is Eleanor Cromean I reside at 331 Elmer St. Lodi, Ohio 44754
(Medina County Ohio).
2. I have not filed, submitted or authorized my name to be used to submit a letter in
support of the Nexus gas transmission pipeline appearing on the FERC docket
CP#16-22-000 and wish that any such letter in my name submitted on my behalf be
withdrawn from the docket.
3. I wish that this incident be reported to the Federal Energy Regulatory
Commission Inspector General, U.S. Postal Inspector, or a person with authority
to investigate whether someone has used my identity in violation of the laws of
the United States.

Further Your Affiant Sayeth Naught.

Eleanor Cromean 9-6-2016

SWORN TO BEFORE ME and subscribed in my presence this 6TH day of SEPTEMBER
2016.



PAUL J. BAYUS
Notary Public, State of Ohio
My Commission Expires May 12, 2021

Paul J. Bayus
NOTARY PUBLIC

R-572

COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS (cont'd)

20160914-5179 FERC PDF (Unofficial) 9/14/2016 4:18:31 PM

20160822-0090 FERC PDF (Unofficial) 08/22/2016

Eleanor Cremeans
331 Elyria St
Lodi, OH 44254

ORIGINAL

FILED
SECRETARY OF THE
COMMISSION

AUG 22 P 2:59

FEDERAL ENERGY
REGULATORY COMMISSION

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
868 First Street NE
Washington, DC 20426-0001

RE: Docket Number – CP 16-22-000 – NEXUS Gas Pipeline Project

Dear Ms. Bose,

I am writing in support of the NEXUS pipeline and to urge you to approve the construction of this pipeline for Medina County. Clean-burning natural gas can help us create new jobs, generate affordable electricity, protect our environment, and keep energy prices down. But first, this pipeline needs to be built.

Many local officials support the project because of the economic benefits it will bring to our county, and our region. In Medina County alone, the construction of NEXUS will support over 700 jobs and provide more than \$54 million in tax revenue within the first five years.

Although economic development for Medina County is very important, making sure our environment is protected is important as well. It is widely acknowledged that pipelines are the safest form of transportation for natural gas. This pipeline will be continuously monitored and regularly inspected to ensure the protection of the environment and the safety of our friends and neighbors.

Building the 255-mile pipeline will require thousands of new jobs and bring millions in new economic investment. I hope that you will join me in supporting this project for the betterment of our county, and opposing the City of Green's reroute, to ensure Medina County can access all of the economic development potential this pipeline may bring.

Sincerely,

Eleanor Cremeans

R-573

COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS (cont'd)

MEDINA COUNTY, OHIO

AFFIDAVIT

STATE OF OHIO)
) ss:
COUNTY OF MEDINA)

Now comes Affiant, _____, who being first duly sworn, states and avers upon his
or her own first-hand knowledge as follows:

1. My name is JAMES G BENDER, I reside at 7625 STAMER CREEK RD
MEDINA, Ohio
(Medina County Ohio).
2. I have not filed, submitted or authorized my name to be used to submit a letter in
support of the Nexus gas transmission pipeline appearing on the FERC docket
CP #16-22-000 and wish that any such letter in my name submitted on my behalf be
withdrawn from the docket.
3. I wish that this incident be reported to the Federal Energy Regulatory
Commission Inspector General, U.S. Postal Inspector, or a person with authority
to investigate whether someone has used my identity in violation of the laws of
the United States.

Further Your Affiant Sayeth Naught.

James G Bender

SWORN TO BEFORE ME and subscribed in my presence this 01 day of SEPTEMBER
2016.

Vicki L. Howman
NOTARY PUBLIC Vicki L. Howman, Notary Public
State of Ohio
My Commission Expires 7/27/18

R-574

COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS (cont'd)

20160914-5179 PERC PDF (Unofficial) 9/14/2016 4:18:31 PM

20160516-0059 PERC PDF (Unofficial) 08/16/2016

James Bender
7625 Spencer Lake Rd
Medina, OH 44256

 ORIGINAL

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426-0001

FILED
SECRETARY OF THE
COMMISSION
2016 AUG 16 P 3:43
FEDERAL ENERGY
REGULATORY COMMISSION

RE: Docket Number – CP 16-22-000 – NEXUS Gas Pipeline Project

Dear Ms. Bose,

I wish to make you aware of my support for the NEXUS pipeline, and I ask that you do the same. This project will create much-needed jobs and economic growth in Medina County, helping to support families, boost county revenues, and grow our economy. The Ohio Chamber of Commerce has voiced their support for this pipeline and the \$94 million in economic growth and 700 jobs the project will create.

Pipelines are the safest and most environmentally friendly way to transport energy. And, I am supportive of the safety features incorporated into the planning of this pipeline including remote control valves, continuous monitoring and inspections to keep Medina County families safe.

I support increasing our nation's ability to transport and use more of the energy we produce here at home in order to help secure our energy future. In addition to helping with energy independence, it will keep energy prices affordable while growing our economy. Please support the proposed route, as opposed to the City of Green's reroute, as it ensures Medina County can tap into all of the economic development potential this pipeline may bring.

Sincerely,

James Bender

R-575

COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS (cont'd)

MEDINA COUNTY, OHIO

AFFIDAVIT

STATE OF OHIO)
COUNTY OF MEDINA) ss:

Now comes Affiant, , who being first duly sworn, states and avers upon his or her own first-hand knowledge as follows:

1. My name is ALBERT OLIVER reside at 4133 REGAL AVE, Ohio
(Medina County Ohio), BRUNSWICK OHIO 44312
 2. I have not filed, submitted or authorized my name to be used to submit a letter in support of the Nexus gas transmission pipeline appearing on the FERC docket CP#16-22-000 and wish that any such letter in my name submitted on my behalf be withdrawn from the docket.
 3. I wish that this incident be reported to the Federal Energy Regulatory Commission Inspector General, U.S. Postal Inspector, or a person with authority to investigate whether someone has used my identity in violation of the laws of the United States.
- Further Your Affiant Sayeth Naught.

SWORN TO BEFORE ME and subscribed in my presence this 2 day of September 2016.



PATRICIA SYLVESTER
Notary Public, State of Ohio
My Commission Expires
June 18, 2017

NOTARY PUBLIC

COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS (cont'd)

20160816-0019 FERC PDF (Unofficial) 08/16/2016 4:16:31 PM

Albert Oliver
4123 Regal Ave
Brunswick, OH 44212

ORIGINAL

FILED
SECRETARY OF THE
COMMISSION
2016 AUG 16 P 3 25
FEDERAL ENERGY
REGULATORY COMMISSION

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426-0001

RE: Docket Number – CP 16-22-000 – NEXUS Gas Pipeline Project

Dear Ms. Bose,

Please join me in supporting the approval of the NEXUS pipeline which will help bring jobs and energy security to our county.

Many groups such as the Ohio Chamber of Commerce as well as local elected officials have voiced their support for this important infrastructure project. I agree with these groups that NEXUS will provide substantial economic benefits to counties like ours in addition to maintaining reliable, affordable natural gas service.

The economic impact of this project is significant, and one of the largest investments in Medina County – bringing in more than \$94 million in economic benefits and supporting over 700 jobs. In addition, our schools will benefit from increased revenue to provide more opportunities to our children.

In addition to the economic benefits, this pipeline will also ensure a reliable supply of U.S. produced natural gas at affordable prices, providing energy security for Medina County. While doing so, this pipeline will be continuously monitored with the latest safety controls such as remote control shutoff valves to make sure our environment is protected.

Approving this pipeline is commonsense, and I urge you to do so, knowing the importance of this project.

Sincerely,

Albert Oliver

I, ALBERT OLIVER NEVER SET THE
LETTER AND DIDN'T GIVE ANY
AUTHORIZATION TO FILE THIS DOCUMENT
ON MY BEHALF. I CONSIDER THIS
A TOTAL TRAVELISTY.



PATRICIA SYLVESTER
Notary Public, State of Ohio
My Commission Expires
June 18, 2017

[Signature]
Cuyahoga County

[Signature] Sept 9, 2016

R-577

COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS (cont'd)

MEDINA COUNTY, OHIO

AFFIDAVIT

STATE OF OHIO)
) ss:
COUNTY OF MEDINA)

Now comes Affiant, ROBERT, who being first duly sworn, states and avers upon his or her own first-hand knowledge as follows:

1. My name is ROBERT CURTIS; I reside at 4262 SETTERS WAY, Ohio BRUNSWICK, 44212 (Medina County Ohio).
2. I have not filed, submitted or authorized my name to be used to submit a letter in support of the Nexus gas transmission pipeline appearing on the FERC docket CP #16-22-000 and wish that any such letter in my name submitted on my behalf be withdrawn from the docket.
3. I wish that this incident be reported to the Federal Energy Regulatory Commission Inspector General, U.S. Postal Inspector, or a person with authority to investigate whether someone has used my identity in violation of the laws of the United States.

Further Your Affiant Sayeth Naught.

Robert C. Curtis

SWORN TO BEFORE ME and subscribed in my presence this 27TH day of AUGUST 2016.



DEBRA L. D'ANGELO, Notary Public
Residence - Medina Ohio
State of Ohio
My Commission Expires
June 18, 2020

Debra L. D'Angelo
NOTARY PUBLIC

R-578

COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS (cont'd)

ORIGINAL

Robert Curtis
4262 Settlers Way
Brunswick, OH 44212

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426-0001

FILED
SECRETARY OF THE
COMMISSION
2016 AUG 15 P 3 58
FEDERAL ENERGY
REGULATORY COMMISSION

RE: Docket Number – CP 16-22-000 – NEXUS Gas Pipeline Project

Dear Ms. Bose,

I am writing in support of the NEXUS pipeline and to urge you to approve the construction of this pipeline for Medina County. Clean-burning natural gas can help us create new jobs, generate affordable electricity, protect our environment, and keep energy prices down. But first, this pipeline needs to be built.

Many local officials support the project because of the economic benefits it will bring to our county, and our region. In Medina County alone, the construction of NEXUS will support over 700 jobs and provide more than \$54 million in tax revenue within the first five years.

Although economic development for Medina County is very important, making sure our environment is protected is important as well. It is widely acknowledged that pipelines are the safest form of transportation for natural gas. This pipeline will be continuously monitored and regularly inspected to ensure the protection of the environment and the safety of our friends and neighbors.

Building the 255-mile pipeline will require thousands of new jobs and bring millions in new economic investment. I hope that you will join me in supporting this project for the betterment of our county, and opposing the City of Green's reroute, to ensure Medina County can access all of the economic development potential this pipeline may bring.

Sincerely,

Robert Curtis

AUG 23, 2016
I DID NOT SEND THIS. I
KNOW NOTHING ABOUT THIS
DOCUMENT. THIS IS MAIL
FRAUD AND A TRAVESTY.



DEBRA L. DANGELO, Notary Public
Residence - Medina Ohio
State of Ohio
My Commission Expires
June 18, 2020

Robert C. Curtis

ROBERT CURTIS

R-579

COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS (cont'd)

20160914-5179 FERC PDF (UNOFFICIAL) 9/14/2016 4:18:31 PM

SUMMIT COUNTY, OHIO

AFFIDAVIT

STATE OF OHIO)
) ss:
COUNTY OF SUMMIT)

Now comes Affiant, LUKE B. FROHMAYER, who being first duly sworn, states and avers upon his or her own first-hand knowledge as follows:

1. My name is ; I reside at ;
Ohio (Summit County Ohio).
2. I have not filed, submitted or authorized my name to be used to submit a letter in support of the Nexus gas transmission pipeline appearing on the FERC docket CP#16-22-000 and wish that any such letter in my name submitted on my behalf be withdrawn from the docket.
3. I wish that this incident be reported to the Federal Energy Regulatory Commission Inspector General, U.S. Postal Inspector, or a person with authority to investigate whether someone has used my identity in violation of the laws of the United States.

Further Your Affiant Sayeth Naught.

Luke B. Frohmayer
Name

SWORN TO BEFORE ME and subscribed in my presence this

26 day of August, 2016.

Michelle E. Cassidy
NOTARY PUBLIC



MICHELLE E. CASSIDY
Notary Public, State of Ohio
RESIDING, SUMMIT COUNTY
My Commission Expires
NOVEMBER 12, 2020

R-580

COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS (cont'd)

20160815-0057 FERC PDF (Unofficial) 08/15/2016 4:16:51 PM

Luke Frohnepfel
1120 N Howard St
Akron, OH 44310

FILED
SECRETARY OF THE
COMMISSION

2016 AUG 15 P 4:13

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426-0001

ORIGINAL

FEDERAL ENERGY
REGULATORY COMMISSION

RE: Docket Number – CP 16-22-000 – NEXUS Gas Pipeline Project

Dear Ms. Bose,

As a resident of Summit County and a supporter of the NEXUS pipeline, I would like to encourage you to approve the NEXUS project. This project will help us create new jobs, generate affordable electricity, protect our environment, and keep energy prices low.

It is very important to me that the environment be protected, and pipelines have been proven to be the safest, most environmentally friendly way to transport natural gas. Meeting or exceeding federal safety requirements, the NEXUS pipeline will be continuously monitored and regularly inspected.

The Ohio Chamber of Commerce has recognized the economic benefits that NEXUS will bring to our county, and our state – the creation of over 5,000 jobs and more than \$550 million in wages. In Summit County alone, the construction of NEXUS will support over 300 jobs and provide more than \$20 million in tax revenue for our local governments and schools within the first five years.

Please approve this important infrastructure project which will help bring good-paying jobs to our county.

Sincerely,

Luke Frohnepfel

R-581

COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS (cont'd)

20160914-5179 PERC FOR (UNOFFICIAL) 9/14/2016 4:16:51 PM

SUMMIT COUNTY, OHIO

AFFIDAVIT

STATE OF OHIO)

) ss:

COUNTY OF SUMMIT)

Now comes Affiant, Monna J. Arch; who being first duly sworn, states and avers upon his or her own first-hand knowledge as follows:

1. My name is Monna J. Arch; I reside at 517 Pressure Lane
Wilmette, OH 44378
Ohio (Summit County Ohio).
2. I have not filed, submitted or authorized my name to be used to submit a letter in support of the Nexus gas transmission pipeline appearing on the FERC docket CP #16-22-000 and wish that any such letter in my name submitted on my behalf be withdrawn from the docket.
3. I wish that this incident be reported to the Federal Energy Regulatory Commission Inspector General, U.S. Postal Inspector, or a person with authority to investigate whether someone has used my identity in violation of the laws of the United States.

Further Your Affiant Sayeth Naught.

Monna J. Arch
Name

SWORN TO BEFORE ME and subscribed in my presence this

1st day of September (2016).

NOTARY PUBLIC



DAWN WHITSETT
NOTARY PUBLIC
STATE OF OHIO
MY COMMISSION EXPIRES
APRIL 14, 2018

R-582

COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS (cont'd)

20160914-5179 FERC PDF (Unofficial) 9/14/2016 4:18:31 PM

20160816-0072 FERC PDF (Unofficial) 08/16/2016

Monna Arch
517 Treasure Ln
Tallmadge, OH 44278

ORIGINAL

FILED
SECRETARY OF THE
COMMISSION
2016 AUG 16 P 3:43
FEDERAL ENERGY
REGULATORY COMMISSION

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426-0001

RE: Docket Number – CP 16-22-000 – NEXUS Gas Pipeline Project

Dear Ms. Bose,

As a resident of Summit County and a supporter of the NEXUS pipeline, I would like to encourage you to approve the NEXUS project. This project will help us create new jobs, generate affordable electricity, protect our environment, and keep energy prices low.

It is very important to me that the environment be protected, and pipelines have been proven to be the safest, most environmentally friendly way to transport natural gas. Meeting or exceeding federal safety requirements, the NEXUS pipeline will be continuously monitored and regularly inspected.

The Ohio Chamber of Commerce has recognized the economic benefits that NEXUS will bring to our county, and our state – the creation of over 5,000 jobs and more than \$550 million in wages. In Summit County alone, the construction of NEXUS will support over 300 jobs and provide more than \$20 million in tax revenue for our local governments and schools within the first five years.

Please approve this important infrastructure project which will help bring good-paying jobs to our county.

Sincerely,

Monna Arch

R-583

COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS (cont'd)

20160914-5179 FERC PDF (Unofficial) 9/14/2016 4:18:31 PM

SUMMIT COUNTY, OHIO

AFFIDAVIT

STATE OF OHIO

COUNTY OF SUMMIT

Now comes Affiant, David Davis, who being first duly sworn, states and avers upon his or her own first-hand knowledge as follows:

1. My name is _____; I reside at _____, Ohio (Summit County Ohio).
2. I have not filed, submitted or authorized my name to be used to submit a letter in support of the Nexus gas transmission pipeline appearing on the FERC docket: CP #16-22-000 and wish that any such letter in my name submitted on my behalf be withdrawn from the docket.
3. I wish that this incident be reported to the Federal Energy Regulatory Commission Inspector General, U.S. Postal Inspector, or a person with authority to investigate whether someone has used my identity in violation of the laws of the United States.

Further Your Affiant Sayeth Naught.

David Davis
Name

SWORN TO BEFORE ME and subscribed in my presence this

27th day of August 2016.

AMANDA MAE FAGEN
NOTARY PUBLIC



AMANDA MAE FAGEN
Notary Public State of Ohio
My Comm. Expires April 24, 2021

R-584

COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS (cont'd)

20160914-5179 FERC PDF (Unofficial) 9/14/2016 4:18:31 PM

20160815-0066 FERC PDF (Unofficial) 08/15/2016

David Davies
1328 Nesbitt Rd
Northfield, OH 44067

ORIGINAL

FILED
SECRETARY OF THE
COMMISSION
2016 AUG 15 P 4:42
FEDERAL ENERGY
REGULATORY COMMISSION

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426-0001

RE: Docket Number – CP 16-22-000 – NEXUS Gas Pipeline Project

Dear Ms. Bose,

As a resident of Summit County and a supporter of the NEXUS pipeline, I would like to encourage you to approve the NEXUS project. This project will help us create new jobs, generate affordable electricity, protect our environment, and keep energy prices low.

It is very important to me that the environment be protected, and pipelines have been proven to be the safest, most environmentally friendly way to transport natural gas. Meeting or exceeding federal safety requirements, the NEXUS pipeline will be continuously monitored and regularly inspected.

The Ohio Chamber of Commerce has recognized the economic benefits that NEXUS will bring to our county, and our state – the creation of over 5,000 jobs and more than \$550 million in wages. In Summit County alone, the construction of NEXUS will support over 300 jobs and provide more than \$20 million in tax revenue for our local governments and schools within the first five years.

Please approve this important infrastructure project which will help bring good-paying jobs to our county.

Sincerely,

David Davies

R-585

COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS (cont'd)

20160914-5179 FERC PDF (Unofficial) 9/14/2016 4:18:31 PM

SUMMIT COUNTY, OHIO

AFFIDAVIT

STATE OF OHIO)
) ss:
COUNTY OF SUMMIT)

Now comes Affiant, Janet R. Copley who being first duly sworn, states and avers upon his or her own first-hand knowledge as follows:

1. My name is Janet R. Copley I reside at 927 Wallwood Ex. Copley, Ohio (Summit County Ohio).
2. I have not filed, submitted or authorized my name to be used to submit a letter in support of the Nexus gas transmission pipeline appearing on the FERC docket #16-22-000 and wish that any such letter in my name submitted on my behalf be withdrawn from the docket.
3. I wish that this incident be reported to the Federal Energy Regulatory Commission Inspector General, U.S. Postal Inspector, or a person with authority to investigate whether someone has used my identity in violation of the laws of the United States.

Further Your Affiant Sayeth Naught.

Janet R. Copley
Name

SWORN TO BEFORE ME and subscribed in my presence this

9th day of Sept, 2016.

Hal E. Bowers
NOTARY PUBLIC



HAL E. BOWERS, Attorney at Law
Notary Public – State Of Ohio
My Commission has no Expiration Date.
Section 147.03 R.C.

R-586

COMPANIES/ORGANIZATIONS COMMENTS

CO55 – Coalition to Reroute NEXUS (cont'd)

Janet Coburn
827 Wallwood Dr
Cincinnati, OH 45219

FILED
SECRETARY OF THE

2016 AUG 25 P 4 01

Federal Energy Regulatory Commission
388 First Street NE

ORIGINAL

FEDERAL ENERGY
REGULATORY COMMISSION

RE: Docket Number – CP 16-22-000 – NEXUS Gas Pipeline Project

As a resident of Summit County and a supporter of the NEXUS pipeline, I would like to encourage you to approve this important project. It will help generate affordable electricity, protect our environment, and keep energy prices low.

It is very important to me that the environment be protected. The NEXUS pipeline will be the safest, most environmentally friendly way to transport natural gas. Meeting or exceeding federal safety requirements, the NEXUS pipeline will be continuously monitored and regularly inspected.

The Ohio Chamber of Commerce has recognized the economic benefits that NEXUS will bring to our county, and our state – the creation of over 5,000 jobs and more than \$550 million in wages. In Summit County alone, the construction of NEXUS will support over 300 jobs and provide more than \$20 million in tax revenue for our local governments and schools within the first five years.

Please approve this important infrastructure project which will help bring good-paying jobs to our county.

Sincerely,

Janet Coburn
my request is not pending

copy
I did not write this letter or
send anything to Federal Energy Regulatory Commission.

R-587

COMPANIES/ORGANIZATIONS COMMENTS

CO56 – Coalition to Reroute NEXUS

20161007-5046 FERC PDF (Unofficial) 10/7/2016 10:28:24 AM

UNITED STATES OF AMERICA

BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

NEXUS GAS TRANSMISSION, LLC

}
}
}

DOCKET NO. CP16-22-000

MOTION OR REQUEST TO MAKE AVAILABLE TO THE PUBLIC THE PRECEDENT AGREEMENT WITH COLUMBIA GAS OF OHIO, INC. ("COH"); ENGINEERING ANALYSIS SUPPORTING CHOICE OF LOCATIONS; AND DOCUMENTATION ASSOCIATED WITH AGREEMENT

Now comes the Coalition to Reroute Nexus ("CoRN"), a non-profit organization and certain Ohio property owners ("Intervenors"), by and through attorney David A. Mucklow and hereby moves the Federal Energy Regulatory Commission ("Commission") under its responsibility for the siting of interstate natural gas transmission pipelines, to make public the Columbia Gas of Ohio (COH) Precedent Agreement submitted on September 14, 2016 by NEXUS Gas Transmission, LLC ("NEXUS") along with the system engineering analysis supporting the specific locations for interconnects and all documentation and correspondence associated with negotiating this COH Precedent Agreement under certain conditions.

In Support of this Motion the following is submitted:

1. NEXUS allegedly entered into a Precedent Agreement with Columbia Gas of Ohio, Inc. on September 9, 2016 for the equivalent of up to 3% of the daily capacity of the NEXUS Project. NEXUS in its September 14, 2016 filing on this Docket states the primary delivery point is in Sandusky County, OH and a secondary delivery point is in Medina County, OH.

- CO56-1 The Precedent Agreements contain trade secrets and confidential business information of NEXUS and as such, is not considered public information. Making this information public could result in irreparable competitive harm to NEXUS because it contains commercially sensitive information.
- CO56-2 Secondary delivery points (or tee-taps) are discussed in section 2.1.1.2.

R-588

COMPANIES/ORGANIZATIONS COMMENTS

CO56 – Coalition to Reroute NEXUS (cont'd)

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- CO56-2 (cont'd) NEXUS in its September 30, 2016 filing on this Docket in response to the Commission's Environmental Information Request 1, confirms the primary delivery point to the Columbia Gas of Ohio system would be meter station (MR06) proposed at mile post 159.3 on the NEXUS pipeline. There was no mention of the secondary delivery point in Medina County, Ohio.
- CO56-3 2. No further information is available to analyze the purpose, need, necessity or public convenience associated with these locations. In order to issue a certificate of convenience, FERC is required to analyze these factors.
- CO56-4 3. The Sandusky County, OH delivery location is at MP 159.3 of the NEXUS proposed route contained in its Application, which is West downstream of the location where the City of Green Alternative Route ("COGAR") rejoins the NEXUS proposed route. Therefore this location does not conflict with the adoption of the COGAR.
- CO56-5 4. NEXUS now claims that it must deliver gas to Columbia Gas of Ohio Inc. in Medina County, OH near MP 75 of the NEXUS proposed route which possibly brings it into conflict with the adoption of the COGAR unless the connection point is shifted to an equivalent location on the COGAR. Although NEXUS has been claiming that this precedent agreement exists as far back as January 2015; this COH Precedent Agreement is new information. Clearly it is an attempt to bolster support for the proposed NEXUS route because NEXUS has invested considerable sums of money to purchase permanent easements with no claw back provisions for the large sums of money expended. NEXUS has purchased permanent easements for a route which it lacked final approval from the FERC. It is unlikely that NEXUS has informed investors of this fact.

- CO56-3 The Precedent Agreements contain trade secrets and confidential business information of NEXUS and as such, is not considered public information. Making this information public could result in irreparable competitive harm to NEXUS because it contains commercially sensitive information.
- CO56-4 Comment noted.
- CO56-5 The EIS evaluates several route alternatives, including the City of Green Route Alternative that would not serve the tee-tap for Columbia Gas of Ohio in Medina County.

R-589

COMPANIES/ORGANIZATIONS COMMENTS

CO56 – Coalition to Reroute NEXUS (cont'd)

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CO56-6 5. NEXUS, in its mass mailings to stakeholders, elected officials, the media and others, has used maps indicating connection points at the Sandusky County and Medina County COH locations and eleven others in its attempt to persuade the public and the Commission of the alleged demand for the NEXUS Project and the market significance of its proposed route, despite the compelling evidence that Stark, Summit, Wayne, Medina and Lorain Counties are already well supplied by existing distribution infrastructure.

6. In its Draft Environmental Impact Statement dated July 7, 2016 the Commission stated:

"For the purposes of our analysis we recognize the difference between definitive receipt and delivery points based on binding precedent agreements and speculative receipt and delivery points based on the potential for future customers.

All receipt and delivery points, regardless of whether they are definitive or speculative, can have legitimate business purpose; however, granting a Certificate with the authority of eminent domain must be weighed differently for definitive elements of a project than speculative elements. For this reason, we consider the 6 definitive receipt and delivery points on the NGT [NEXUS] Project to be essential to the Project's objective, whereas we do not consider the 13 tee-tap sites to be essential. This is an important distinction because we will not evaluate alternatives in section 3.0 of this EIS if they do not meet the Project's objectives. As such, all alternatives must meet the objective of serving the 6 definitive receipt and delivery points, but they do not need to serve the tee-tap sites."

7. In its September 14, 2016 filing on this Docket NEXUS states:

"...NEXUS and COH have also agreed upon a form of negotiated rate statement that provides for a negotiated rate applicable to service using the primary points described above, and for service to certain secondary delivery points to be located in Medina County, OH. NEXUS will file the negotiated rate agreement with COH, along with its other firm transportation customers who execute negotiated rate agreements for NEXUS Project service, at the appropriate time prior to the in-service date for the NEXUS Project."

This vague language has previously been correctly identified by the Commission as speculative

CO56-7 and most certainly is but a desperate attempt to ignore the superior COGAR. According to NEXUS, the purpose of the NEXUS Project would be to transport 1.5 million Dth/d of Utica and

CO56-6 Comment noted.

CO56-7 The EIS briefly discusses NEXUS' and Texas Eastern's stated purposes. The need for the project this will be determined separately by the Commission when it makes its decision on the Projects (sometime after the Final EIS is issued). Additional discussion about the need for the Projects is in section 1.1 of the EIS and is also available in the Commission's Statement of Policy on the Certification of New Interstate Natural Gas Pipeline Facilities, which can be found on the FERC website at <http://www.ferc.gov/legal/maj-ord-reg/PL99-3-000.pdf>. Clarifying statements can be found by replacing "000" in the URL with "001" and "002."

R-590

COMPANIES/ORGANIZATIONS COMMENTS

CO56 – Coalition to Reroute NEXUS (cont'd)

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CO56-7
(cont'd)

Marcellus shale gas, to markets in northern Ohio, southeastern Michigan, and Dawn, Ontario CANADA. However, approximately 835,000 Dth/d of this capacity (56 percent) has been signed in precedent agreements by NEXUS. Of these agreements 685,000 Dth/d (82 percent) is destined for CANADA and the balance, 150,000 Dth/d (18 percent) is destined for Michigan. NEXUS contends that the need for the NEXUS Project originates from an increase in demand for natural gas in the region for electric generation, home heating, and industrial use, coupled with a decrease of imports of natural gas by traditional supply sources, mainly from western Canada and the Gulf Coast. There is no evidence contained in the docket to support these notions; in fact the evidence is contra. For example, NEXUS' own analysis projected only a 12 bcf/year increase in natural gas demand in northern Ohio in the non-power generation sector over a four year period. This is less than 1% increase per year. Countless hours have been expended studying the NEXUS Project and only one conclusion emerges: there is little unserved demand likely in the foreseeable future that would require natural gas being carried along the NEXUS proposed route between southeast Ohio and the Dawn Hub in Canada. The NEXUS pipeline rests almost entirely upon obtaining substantial contractual obligations from NEXUS affiliates in Michigan and the CANADIAN market. Both of these markets are subsidized by rate payers for the NEXUS project, which skews any true market demand for potential natural gas along this proposed route. Additionally, the natural gas market in CANADA is undergoing transformation with the recent disclosure from TRANSCANADA who is pressing to undercut NEXUS contract rates by as much as 50%.

<http://www.bloomberg.com/news/articles/2016-09-21/transcanada-plan-to-vie-with-u-s-gas-stirs-fear-of-10-year-toll>

COMPANIES/ORGANIZATIONS COMMENTS

CO56 – Coalition to Reroute NEXUS (cont'd)

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http://business.financialpost.com/news/energy/a-battle-brewing-in-toronto-could-decide-the-future-of-canadas-natural-gas-industry?_lsa=2c86-fb35

This presents a viable alternative to NEXUS gas to the Dawn Hub.

8. On November 20, 2015 NEXUS filed an application with the Commission pursuant to Section 7 (c) of the Natural Gas Act seeking a Certificate of Public Convenience and Necessity

CO56-8 to construct the NEXUS pipeline system. In order for the public to evaluate for itself whether there is a Purpose, Need, Necessity or Public Convenience associated with the NEXUS proposed route, the public must have access to the same information used by NEXUS to make its determination. In order to protect the confidentiality of any information contained the relevant documents, the Public recognizes that published information may be sanitized or blocked out, but the information can only be scrutinized if there is some amount of transparency to verify. Experts have already submitted to the docket that any attempts to persuade the Commission that a new delivery point in Medina is necessary are simply not supported by an understanding of the distribution systems in the region. NEXUS could easily comply with its new precedent agreement along the COGAR at various locations and delivery points. This is undisputed based upon expert submissions. CoRN understands that there are cases where a pipeline such as NEXUS needs to be sited though populated areas when there are no practicable alternatives to get to needed markets. NEXUS is not one of those cases. Multiple, practicable, alternative routes, South and West of Canton, OH, have been demonstrated for one and half years that meet the overall project objectives. The fact that NEXUS has defined alleged market connections directly along the route, which they may want to take or not, cannot be taken as a reason to traverse populated areas when a viable alternative exists which equally provides connection

CO56-8 (cont'd)

CO56-8 Comment noted.

R-592

COMPANIES/ORGANIZATIONS COMMENTS

CO56 – Coalition to Reroute NEXUS (cont'd)

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points to the distribution systems of Columbia or Dominion. There is NO PUBLIC NEED OR NECESSITY for these market connections in the populated areas of Summit or Medina Counties because many workable alternatives exist.

9. The COGAR has been proven superior in all environmental and human aspects to the NEXUS proposed route and allows NEXUS to meet the overall objective of delivering gas to markets in Michigan, and Dawn, Ontario CANADA assuming these objectives comply with the Natural Gas Act.

CO56-9

THEREFORE, the following relief is requested:

- A) the Commission make public the COH Precedent Agreement, all accompanying documentation submitted on September 14 and September 30, 2016 by NEXUS. If necessary redact personal information.
- B) the Commission require NEXUS to submit as a public document all correspondence associated with negotiating this COH precedent agreement with redacted personal information.
- C) NEXUS and or COH produce as a public document revealing the pressure and flow analysis on the COH system they completed before September 9, 2016 to support their selection of the specific connection points in order for CoRN and other experts to verify the analysis.
- D) the Commission conduct and publish as a public document a pressure and flow analysis of the COH system to 1) verify that the City of Green Alternate Route Proposal would also provide useable alternate connection points with the COH system, and 2) identify alternate potential connection points consistent with whatever is the objective of the COH precedent agreement.
- E) If the Commission is unable to conduct such an analysis, that Commission appoint an independent third party engineering firm to conduct and publish as a public document a pressure and flow analysis of the COH system to demonstrate alternative connection points.

CO56-9

See response to comment CO56-3. Further, some information related to the pressure and flow of the pipeline may be considered Critical Energy Infrastructure Information. Such information may include specific engineering, vulnerability, or detailed design could be useful to a person planning an attack on critical infrastructure and, therefore, is exempt from mandatory disclosure. More information about the Commission's policy regarding Critical Energy Infrastructure Information is contained in Order Numbers 702, 630, 630-A, 643, 649 and 683.

COMPANIES/ORGANIZATIONS COMMENTS

CO56 – Coalition to Reroute NEXUS (cont'd)

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Respectfully submitted,

/s/David A. Mucklow
DAVID A. MUCKLOW(#0072875)

CERTIFICATE OF SERVICE

I hereby certify on this 7th day of October, 2016 that a copy of the foregoing document was served upon Nexus Gas Transmission, LLC and each person designated on the official service list compiled by the Secretary in this proceeding via email.

/s/ David A. Mucklow
DAVID A. MUCKLOW(#0072875)

COMPANIES/ORGANIZATIONS COMMENTS

CO57 – Sustainable Medina County

20161017-5034 FERC PDF (Unofficial) 10/17/2016 9:23:44 AM

UNITED STATES OF AMERICA
BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

In the Matter Of) Docket No. CP16-22
NEXUS Gas Transmission, LLC) October 17, 2016
)

***MOTION OF INTERVENOR SUSTAINABLE MEDINA COUNTY
FOR IMMEDIATE SUPPLEMENTATION OF DRAFT ENVIRONMENTAL IMPACT
STATEMENT, FOR ADDITIONAL PUBLIC COMMENT PERIOD
AND FOR A PUBLIC COMMENT HEARING***

Now comes Sustainable Medina County ("SMC"), Intervenor herein, by and through counsel, and pursuant to the Rules of Practice and Procedure of the Federal Energy Regulatory Commission ("FERC" or the "Commission"), 18 C.F.R. §§ 385.212 and 385.217(c), moves for an order from the Commission requiring supplementation of the Draft Environmental Impact Statement in the particulars set forth below.

Intervenor SMC further moves the Commission to establish a new general public comment period on the requested supplemental DEIS, and to convene a second round of public comment plenary hearings for the public to weigh in on the new information received from NEXUS during and since the public comment period.

October 17, 2016

Terry J. Lodge
Terry J. Lodge, Esq.
316 N. Michigan St., Suite 520
Toledo, OH 43604-5627
(419) 255-7552
Fax (440) 965-0708
lodgelaw@yahoo.com
Counsel for Sustainable Medina County

COMPANIES/ORGANIZATIONS COMMENTS

CO57 – Sustainable Media County (cont'd)

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MEMORANDUM IN SUPPORT

1. INTRODUCTION

A. The Chippewa D Alternative Pipeline Re-Route

The staff of the Federal Energy Regulatory Commission issued a Draft Environmental Impact Statement ("DEIS" or "Draft EIS") for the proposed NEXUS gas mega-pipeline project on July 8, 2016. Section 3.4.10 of the DEIS identified potential environmental advantages and disadvantages associated with three alternative pipeline routes which deviate from the original route near Chippewa Lake in Medina County, Ohio. FERC Staff recommended that NEXUS closely examine the "Chippewa C Alternate Route" with an eye to possibly selecting that alternative. In response, NEXUS evaluated the Chippewa C Alternate Route for constructability concerns and landowner issues (Figure 3.4.10-4 of the Draft EIS). NEXUS modified the Chippewa C Alternate Route in four areas, ostensibly to avoid construction constraints and further minimize impacts to the natural and human environments. This altered Chippewa C route is variously referred to as the "Optimized Chippewa Lake C Route Variation," "Chippewa D Alternate Route" or "Chippewa D."

By letter directed to affected landowners dated October 6, 2016, FERC for the very first time requested public comments on Chippewa D, which diverges from the originally proposed route at milepost 66.0 and generally runs north and east of it, rejoining the original route at milepost 72.5. Chippewa D deviates from the original route just west of the Interstate 71 crossing and proceeds northwest for approximately 1 mile before turning due west and crossing Wooster Pike. On the west side of Wooster Pike, Chippewa D turns north and crosses Chippewa Road and Maplewood Farm Drive. Approximately 800 feet north of Maplewood Farm Drive, the route

COMPANIES/ORGANIZATIONS COMMENTS

CO57 – Sustainable Media County (cont'd)

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proceeds WNW, bisecting the Medina Country Club golf course turning north and crossing Wedgewood Road. The Chippewa D Alternative Route continues west on the north side of Wedgewood Road for 0.6 mile crossing Lake Road and Technology Lane, then proceeding NNW, crossing Deerview Lane and running parallel to the CSX transportation railway for approximately 0.7 mile, crossing Lafayette Road and turning west, crossing Columbia Road where it intersects with the CSX railway. Finally, Chippewa D converges with the original route just east of the intersection of Carlton Road and Egypt Road.

In the October 6 letter, FERC Staff solicited public comments from a very narrow portion of the public regarding Chippewa D. FERC seeks comments only from landowners whose property would be crossed by the pipeline, and from adjacent property owners. Those groups have been given only until November 7, 2016 to "provide . . . specific comments or concerns about these alternative routes." FERC October 6 letter, p. 2 (complete letter attached). According to information from the Medina County Engineer, approximately 50 households are found in the 150' footprint of Chippewa D, while perhaps 700 households are found within one-half mile on either side of the proposed right-of-way of Chippewa D. Hundreds of new stakeholders now find themselves within a short distance of the proposed pipeline, easily more than 1,000 people.

Chippewa D has not been published nor analyzed within the DEIS. The first mention of it appeared in the docket of this proceeding in NEXUS' "Responses to FERC Staff Recommended Mitigation in the July 8, 2016 Draft Environmental Impact Statement for NEXUS Gas Transmission Project (VOLUME II-A – PUBLIC)," dated July 26, 2016.¹ That document is not a

¹ Found at http://elibrary.ferc.gov/idmws/file_list.asp?document_id=14480643

COMPANIES/ORGANIZATIONS COMMENTS

CO57 – Sustainable Media County (cont'd)

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CO57-1 Comment noted.

CO57-1

part of the Draft EIS, but is merely Spectra Energy, as project applicant's, record responses to questions put to it by the FERC Staff in the DEIS. FERC, as federal lead agency for purposes of the NEPA, appears to be treating the NEXUS response document as part of the DEIS. But the public was not properly given notice of the Chippewa D re-route by the DEIS. Nor is the narrowly-limited grouping from which FERC seeks comments by November 7, 2016 properly the "public" from which comments should be sought, under NEPA.

In the October 6 notification letter, FERC Staff included the pointed suggestion that landowners consider quickly negotiating right-of-way easements with Spectra Energy, or face the potential that Spectra will be conferred eminent domain powers by FERC to sue any laggards. FERC has telegraphed the message to landowners that Chippewa D has been effectively selected even before there has been a completed Final Environmental Impact Statement - or even a lawfully-promulgated Draft EIS.

CO57-1
(cont'd)

Intervenor Sustainable Medina County states that the FERC Staff's decision to not include Chippewa D within the Draft Environmental Impact Statement, coupled with the deliberate curtailment of "public" from which comments are being sought, violates the National Environmental Policy Act. Moreover, Chippewa D is not the first instance of the FERC Staff's violation of NEPA-required public notice and comment at the Draft EIS stage.

B. Multiple Staff Requests for Additional Information in DEIS

In the Draft EIS, the FERC Staff listed 47 proposed conditions necessary to mitigate the environmental effects of the pipeline project. For thirteen (13) of the conditions, including the Chippewa Lake reroute (Condition #14), FERC set a deadline for NEXUS to respond by the end of the public comment period (on or before August 29, 2016). FERC ordered NEXUS to respond

COMPANIES/ORGANIZATIONS COMMENTS

CO57 – Sustainable Media County (cont'd)

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to the following conditions by August 29:

13. Prior to the end of the draft EIS comment period, NEXUS should file with the Secretary:

a. a specific compressor station site on the City of Green Route Alternative between Mps 1.8 and MP 98.7. NEXUS should attempt to avoid or minimize impacts on environmental resources while adequately meeting the requirements of the proposed pipeline system. NEXUS should identify the range of engineering and hydraulic flexibility it has in moving the compressor station site on the route alternative; and

b. minor route adjustments and realignments to the City of Green Route Alternative in order to minimize impacts on residences, forests, and other environmental resources (*Section 3.3.3*)

14. Prior to the end of the draft EIS comment period, NEXUS shall incorporate into the NGT Project route:

a. the Chippewa Lake C Route Variation between MPs 66.1 and 72.5, as depicted in figure 3.4.10-4 of the draft EIS. NEXUS shall file with the Secretary revised alignment sheets and updated land use and resource tables. NEXUS should also provide documentation that newly affected landowners have been notified in accordance with 18 CFR 157.6(d). (*Section 3.4.10*)

b. the Reserve Road Route Variation between MPs 94.6 and 96.0, as depicted in figure 3.4.12-1 of the draft EIS. NEXUS shall file with the Secretary revised alignment sheets and updated land use and resource tables. NEXUS should also provide documentation that newly affected landowners have been notified in accordance with 18 CFR 157.6(d). (*Section 3.4.12*)

15. Prior to the end of the draft EIS comment period, NEXUS shall file with the Secretary an analysis indicating:

a. whether the proposed Hanoverton Compressor Station site at MP 1.4 could be developed without permanently filling or altering the water body on the site, and if not, the types of permanent water body impacts that would be required; and

b. whether Alternative Site A to the Hanoverton Compressor Station, as depicted on figure 3.5.1-1 of the draft EIS, could be purchased and developed without forest clearing, and what impacts would be associated with realigning the proposed pipeline to the site or building suction/discharge lines from the site to the proposed pipeline (*Section 3.5.1*)

16. Prior to the end of draft EIS comment period, NEXUS shall file with the Secretary geotechnical feasibility studies for the Nimisila Reservoir (MP 41.1), Tuscarawas River (MP 48.1), West Branch of the Black River (MP 92.4), and the U.S. Highway 12/RACER site (MP 254.3). (*Section 4.3.2.2*)

17. Prior to the end of the draft EIS comment period, NEXUS shall file with the Secretary an assessment of why HDD is the preferred crossing method for the Sandusky

COMPANIES/ORGANIZATIONS COMMENTS

CO57 – Sustainable Media County (cont'd)

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River (MP 145.9), Maumee River (MP 181.2), and Huron River (MP 250.9), as opposed to an alternative crossing method, such as winter wet trench construction or direct pipe installation. (Section 4.3.2.2)

29. **Prior to the end of the draft EIS comment period**, NEXUS shall provide revised RCPs that accurately show the distance and direction from the construction workspace and pipeline centerline of all structures on Drawings HANO-P-8004-1B (MP 6.3) and WADS-P-8033-1B (MP 113.2). (Section 4.9.4.1)

31. **Prior to the end of the draft EIS comment period**, NEXUS shall file with the Secretary site specific Organic Farm Protection Plans developed in coordination with organic farm landowners and applicable certifying agencies for each certified organic farm that would be crossed or immediately adjacent to the Project that has the potential to experience direct and indirect effects as a result of construction or operation (e.g., pesticide drift, water migration, weeds). The plans shall, at a minimum, identify:

- a. prohibited substances (both during construction and operation);
- b. soil handling procedures;
- c. buffer zones;
- d. noxious invasive species control;
- e. erosion control;
- f. off right-of-way water migration;
- g. restoration methods, including seeding and preventing introduction of disease vectors; and
- h. operation and maintenance practices, including avoidance of herbicides or other agency or landowner approved methods.

The plan shall also describe how properties would be monitored for compliance with the provisions of the plan (e.g., use of an agricultural monitor) during construction. (Section 4.9.5.1)

33. **Prior to the end of the draft EIS comment period**, NEXUS shall file with the Secretary a discussion of how construction and operation of the NGT Project would affect landowners continued participation in the *Conservation Reserve Program*. (Section 4.9.5.3)

34. **Prior to the end of the draft EIS comment period**, NEXUS shall file a revised FSA-enrolled lands table and ensure the table includes the mileposts, tract number, type of program, and acres affected. For any FSA-enrolled lands crossed, provide an update on NEXUS' consultations with landowners and local FSA and NRCS officials regarding the

COMPANIES/ORGANIZATIONS COMMENTS

CO57 – Sustainable Media County (cont'd)

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landowners' continued participation in the program, and any requested mitigation measures. (Section 4.9.5.3)

37. **Prior to the end of the draft EIS comment period**, NEXUS shall file with the Secretary an evaluation of the feasibility of crossing the Chippewa Rail Trail, Chippewa Inlet Trail, North Coast Inland Trail, and Creek Bend Farm using the bore method. If the bore method is not feasible, NEXUS shall file a site-specific alternate crossing plans that identifies the location(s) of a detour, public notification, signage, and consideration of avoiding days of peak usage. (Section 4.9.7.3)

38. **Prior to the end of the draft EIS comment period**, NEXUS shall file with the Secretary an evaluation of the feasibility of extending the bore further west to avoid impacting forest/woodland on the west side of Highway 77. (Section 4.9.7.3)

41. **Prior to the end of the draft EIS comment period**, NEXUS shall file with the Secretary results of file reviews for the 11 other sites identified by NEXUS and site-specific plans to properly manage any contaminated soil or groundwater in compliance with applicable regulations, if necessary. (Section 4.9.9)

43. **Prior to the end of the draft EIS comment period**, NEXUS shall file with the Secretary visual screening plans developed for the Hanoverton, Wadsworth, and Waterville Compressor Stations that would provide screening to nearby residences from the stations. (Section 4.9.10.2)

(Emphasis in original). DEIS at 5-22 to 5-26.

Each of these conditions required Spectra Energy to furnish detailed additional information, analyses and/or plans for the docket. Spectra responded to the Chippewa Lake alternate routes request from the Staff on July 26, 2016.² The company responded to the other DEIS conditions on August 26, 2016, which was the Friday before the end of the public comment

²"Responses to FERC Staff Recommended Mitigation in the July 8, 2016 Draft Environmental Impact Statement for NEXUS Gas Transmission Project (Volume II-A – Public)," http://elibrary.ferc.gov/idmws/file_list.asp?document_id=14480643

COMPANIES/ORGANIZATIONS COMMENTS

CO57 – Sustainable Media County (cont'd)

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period on Monday, August 29, 2016.³

CO57-2

None of these responses of Spectra have been included in the DEIS, nor has the DEIS been revised to include the new information. The public has not been accorded a chance to comment on a supplemented, more complete version of the DEIS. FERC evidently expects the public to have anticipated Spectra's responses would be filed in the docket sometime in the closing weeks of the NEPA process and to have treated them as part of the DEIS for purposes of commenting by August 29, 2016.

II. ARGUMENT

a. Belated responses provided by the Applicant in separately docketed documents are not components of a Draft EIS

The agency's expectations of the public are surrealistic, and violate the explicit and implicit requirements of NEPA. The Draft EIS is supposed to provide "a springboard for public comment." *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349, 109 S.Ct. 1835, 1845 (1989). Spectra Energy's responses were filed in the NEXUS docket as separate documents on a date selected by Spectra. Until the information provided in the responses is vetted and possibly included by FERC Staff in the DEIS, they are not in any way components of the DEIS for which the public may be held responsible for comment. Merely because the responses are in the public domain cannot bootstrap their presence in the FERC Docket into

CO57-2
(cont'd)

being considered as part of the Draft EIS. By not supplementing the DEIS and publishing a new notice of a second comment period for the public at large, FERC has stripped the general public but especially those directly-affected landowners and opponents of NEXUS of their statutory

³"Responses to Draft Environmental Impact Statement for the NEXUS Gas Transmission Project," <http://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=14339477>

CO57-2

Comment noted.

R-602

COMPANIES/ORGANIZATIONS COMMENTS

CO57 – Sustainable Media County (cont'd)

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CO57-2
(cont'd)

right to meaningful participation at this pre-final phase of NEPA proceedings.

“A public comment period is beneficial only to the extent the public has meaningful information on which to comment. . . .” *New Mexico ex. rel. Richardson v Bureau of Land Management*, 565 F.3d 683, 708 (10th Cir. 2009).

NEPA mandates that an agency “take a ‘hard look’ at the impacts of a proposed action.” *Citizens’ Comm. to Save Our Canyons*, 513 F.3d at 1179 (10th Cir.2008) (quoting *Friends of the Bow v. Thompson*, 124 F.3d 1210, 1213 (10th Cir.1997)); *Morris v. U.S. Nuclear Regulatory Comm’n*, 598 F.3d 677, 681 (10th Cir. 2010) (NEPA “requires . . . that an agency give a ‘hard look’ to the environmental impact of any project or action it authorizes”). This examination “must be taken objectively and in good faith, not as an exercise in form over substance, and not as a subterfuge designed to rationalize a decision already made.” *Forest Guardians v. U.S. Fish & Wildlife Serv.*, 611 F.3d 692, 712 (10th Cir. 2010) (quoting *Metcalf v. Doley*, 214 F.3d 1135, 1142 (9th Cir.2000)) (internal quotation marks omitted); *see also* 40 C.F.R. § 1502.2(g) (“Environmental impact statements shall serve as the means of assessing the environmental impact of proposed agency actions, rather than justifying decisions already made.”); *id.* 40 C.F.R. § 1502.5 (“The statement shall be prepared early enough so that it can serve practically as an important contribution to the decision-making process and will not be used to rationalize or justify decisions already made.”).

CO57-2
(cont'd)

Disclosures by Spectra which are aimed at filling in gaps in the DEIS but which do not appear in the Draft EIS itself are not publicly disclosed as required by NEPA for purposes of public comment. The fact that the public has been abandoned to sift for itself through the FERC docket on NEXUS during the comment period to find out whether there are new supplemental

COMPANIES/ORGANIZATIONS COMMENTS

CO57 – Sustainable Media County (cont'd)

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CO57-2
(cont'd) disclosures thwarts the statutory right of the public to generate comments are timely, meaningful, and heard.

b. The circumstances require compilation and publication of a Supplemental DEIS

FERC must provide fundamental due process under both NEPA and the Natural Gas Act. *Louisiana Ass'n of Independent Producers and Royalty Owners v. F.E.R.C.*, 958 F.2d 1101, 2225 (D.C. Cir. 1992). NEPA requires that the public comment opportunity embodied in 42 U.S.C. § 4332 be used to help ensure that the government is aware of, and has considered all, significant environmental effects in formulating its proposed action. *Cf. Conservation Law Found., Inc. v. Busey*, 79 F.3d 1250, 1271 (1st Cir. 1996). "NEPA's public comment procedures are at the heart of the NEPA review process" and reflect "the paramount Congressional desire to internalize opposing viewpoints into the decision making process to ensure that an agency is cognizant of all the environmental trade-offs that are implicit in a decision." *California v. Block*, 690 F.2d at 770-71. "It is only at the stage when the draft EIS is circulated that the public and outside agencies have the opportunity to evaluate and comment on the proposal." *Id.* at 771. "No such right exists upon issuance of a final EIS." *Id.*

CO57-2
(cont'd) The predicament here is that there is an incomplete DEIS. FERC must supplement the DEIS and solicit the additional public information, public investigation, and comment via legal notification of the entire public. Otherwise, FERC's failures to disclose in a DEIS the Chippewa D reroute and information responsive to the Staff's other requests will defeat NEPA's goal of public participation during the decision making process. *Half Moon Bay Fishermans' Marketing Ass'n v. Carlucci*, 847 F.2d 1389-1393 (9th Cir. 1988). See also *Warm Springs Dam Task Force v. Gribble*, 621 F.2d 1017, 1021 (9th Cir. 1980) (purpose of input under NEPA is "to

COMPANIES/ORGANIZATIONS COMMENTS

CO57 – Sustainable Media County (cont'd)

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further the statutory purpose of encouraging widespread discussion and consideration of the environmental risks and remedies associated with the pending project.”).

NEPA regulation 40 C.F.R. § 1502.09(a) requires that “The draft statement must fulfill and satisfy to the fullest extent possible the requirements established for final statements in section 102(2)(C) of the Act. If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion.”

A supplemental DEIS is required if the agency “makes substantial changes in the proposed action that are relevant to environmental concerns,” or “[t]here are significant new circumstances or information relevant to environmental concerns.” 40 C.F.R. § 1502.9(c)(1). If the new information shows that the remaining action will affect the quality of the environment “in a significant manner or to a significant extent not already considered, a supplemental EIS must be prepared.” *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 374, 109 S.Ct. 1851, 1859 (1989). A “supplemental EIS is . . . required where new information ‘provides a seriously different picture of the environmental landscape.’” *City of Olmsted Falls v. FAA*, 292 F.3d 261, 274 (D.C.Cir. 2002).

“Circulation of a grossly inadequate statement as the draft of (an FEIS) could conceivably frustrate the goal of obtaining informed agency and public comment on the environmental consequences of a proposed project, and in some circumstances this could amount to a violation of the responsible agency’s duty” under NEPA. *Lathan v. Brinegar*, 506 F.2d 677, 693 (9th Cir. 1974) (*en banc*). Actual prejudice may result from a deficiency in the DEIS, where, for example, “omissions leave the agency without public comment on a material environmental aspect of a project and leave the relevant public without information about a proposed project, such

COMPANIES/ORGANIZATIONS COMMENTS

CO57 – Sustainable Media County (cont'd)

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deficiency may not be curable by the FEIS.” *National Committee for the New River v. F.E.R.C.*, 373 F.3d 1323, 1329 (D.C. Cir. 2004).

III. CONCLUSION: A SUPPLEMENTAL DEIS AND ADDITIONAL COMMENT OPPORTUNITY ARE OBLIGATORY

Where the information in the initial EIS is so incomplete or misleading that the decision-maker and the public could not make an informed comparison of the alternatives, revision of an EIS may be necessary to provide “a reasonable, good faith, and objective presentation of the subjects required by NEPA.” *Johnston v. Davis*, 698 F.2d 1088, 1095 (10th Cir.1983) (revision of EIS necessary where use of artificially low discount rate resulted in unreasonable comparison of alternatives to proposed project); *see also National Wildlife Federation v. Andrus*, 440 F.Supp. 1245, 1254 (D.D.C.1977) (EIS deficient where several alternatives were not treated in the EIS and the EIS did not set forth reasons why these alternatives were rejected).

CO57-2
(cont'd)

Intervenor SMC moves the Commission to order supplementation of the Draft EIS and associated legal notice to the public for a renewed comment period, because the responses provided by NEXUS as to the Chippewa D reroute, the Staff's analysis of Chippewa D, and the numerous other matters delineated in NEXUS' August 26, 2016, 159-page response to FERC questions were omitted from the DEIS.

WHEREFORE, Sustainable Medina County prays the Federal Energy Regulatory Commission order the Staff immediately to compile and publish a Supplemental Draft Environmental Impact Statement in this matter; to provide legal notice of a second DEIS public comment period as required by NEPA regulations; and to schedule a second round series of public comment hearings without restriction as to those who may offer comments.

COMPANIES/ORGANIZATIONS COMMENTS

CO57 – Sustainable Media County (cont'd)

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Respectfully,

Terry J. Lodge
Terry J. Lodge, Esq.
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Toledo, OH 43604-5627
(419) 255-7552
Fax (440) 965-0708
lodgelaw@yahoo.com
Counsel for Sustainable Medina County

CERTIFICATE OF SERVICE

In accordance with the requirements of Section 385.2010 of the Commission's Rules of Practice and Procedures, I hereby certify that I have this day, October 17, 2016, caused a copy of the foregoing document to be served upon each person designated on the official service list compiled by the Commission's Secretary in this proceeding.

Terry J. Lodge
Terry J. Lodge, Esq.
Counsel for Sustainable Medina County

COMPANIES/ORGANIZATIONS COMMENTS

CO58 – Council of Sisters Servants of the Immaculate Heart of Mary

Jane Herb, IHM, Monroe, MI.

I am writing on behalf of the Leadership Council of the Sisters, Servants of the Immaculate Heart of Mary, of Monroe, Michigan – a Catholic women's religious community of 325 vowed Sisters and 120 associates. The IHM Sisters have been residents of Monroe County since 1845. We are committed to collaborating with others in shaping public policies that will foster ecological co-responsibility and are concerned about the environmental impact that the proposed Nexus Pipeline would have on Monroe County.

CO58-1 While the pipeline only runs through a small portion of the county, we believe that it would be in the interest of the residents of Monroe County for FERC to provide a scoping meeting regarding the Nexus Pipeline. While scoping meetings have taken place in neighboring counties one has not been provided, to our knowledge, for Monroe County Residents. Holding a public scoping meeting would give Monroe County residents the opportunity to ask questions and to voice our concerns about the potential impact of the pipeline on our communities.

Therefore, we request that a scoping meeting take place soon and prior to any final decision made by your agency about the Nexus Pipeline.

Sincerely,

Jane Herb, IHM, Ph.D.

On behalf of the Leadership Council

Sisters, Servants of the Immaculate Heart of Mary

Monroe, Michigan

CO58-1

Comment noted. The nearest public scoping and comment meetings to Monroe County were held in Tecumseh, Michigan, which is about 10 miles away from the proposed route in Monroe County. Residents of Monroe County were welcome to attend this or any of the other public scoping or comment meetings.

COMPANIES/ORGANIZATIONS COMMENTS

CO60 – Ohio State University

20161104-5140 FERC PDF (Unofficial) 11/4/2016 3:30:21 PM



THE OHIO STATE UNIVERSITY

Administration & Planning

Planning and Real Estate

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November 4, 2016

Nathanial J. Davis, Sr.
Deputy Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 20426

Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 20426

Re: OEP/DG2E/Gas 2
NEXUS Gas Transmission, LLC
Docket No. CP16-22-000

Dear Mr. Davis and Ms. Bose:

I am writing you with regard to FERC's October 6, 2016 letter requesting comments or concerns relating to certain alternatives for the proposed NEXUS Gas Transmission Project from Columbiana County, Ohio to Wayne County, Michigan under Docket No. CP 16-22 (the "FERC Letter"), whereby The Ohio State University (the "University") was notified that its properties were identified as potentially being affected by the path of an alternative pipeline route (referred to in the FERC Letter as the "Chippewa D Alternative Route"). The Chippewa D Alternative Route is a revision of the Chippewa C Alternative Route (collectively, the "Proposed Alternative Routes").

This letter sets forth the University's objection to the Proposed Alternative Routes. The University makes no comment as it relates to the project as a whole, and the comments provided herein are only in connection with the Proposed Alternative Routes.

CO60-1 The Proposed Alternative Routes cross two separate areas of land owned by the University. The first is known as the Mellinger Research Farm, which is located at 6855 West Old Lincoln Way, Wooster, Ohio 44691 ("Mellinger Farm"). The second is known as the Beef and Sheep Research Unit, which is located at 5743 Fredericksburg Road, Wooster, Ohio 44691 ("Fredericksburg Farm"). Mellinger Farm is more than 300 acres in size and was established by the Mellinger family nearly 200 years ago. In 2002, Mellinger Farm was gifted to the University for development of a long-term research, education, and demonstration program for integrated systems of forestry, crops and livestock. The Fredericksburg Farm is also used for long-term agricultural research purposes and additionally serves as the primary feed and forage production farm and animal waste recycling center in support the University's beef and sheep research efforts.

CO60-1

The two farms mentioned are along the City of Green Alternative, not Chippewa C or Chippewa D. Impacts associated with these two research farms are discussed in section 3.3.4 of the EIS.

R-609

COMPANIES/ORGANIZATIONS COMMENTS

CO60 – Ohio State University (cont'd)

20161104-5140 FERC PDF (Unofficial) 11/4/2016 3:30:21 PM



THE OHIO STATE UNIVERSITY

CO60-1
(cont'd)

As a land-grant university founded in 1870 under Congress's Morrill Act of 1862, one of the University's primary missions is to perform agricultural research on its unique land holdings. This research benefits the citizens of Ohio and across the United States. The Mellinger and Fredericksburg Farms are integral parts of this work. Since 2014, the Mellinger Farm has been the site of a USDA National Institute of Food and Agriculture (NIFA) research program studying the scientific, economic, and social aspects of a transition from a monoculture crops operation to diversified cropping system. Dr. Casey Hoy, Director of Agroecosystem Management Program is the Principal Investigator. In addition, the University has carefully installed over 60 acres of specialized subsurface drainage systems to improve Mellinger Farm's suitability for replicated research projects. The Proposed Alternative Routes would cross directly through the center of this USDA NIFA research area, destroying those improvements and the research that is currently taking place. The Fredericksburg Farm is also used for field research that requires study areas of 10 to 30 acres in size. Recent USDA funded projects at that site have included: (1) a 20-acre study used to develop methods of protecting wheat farms across the United States from the incursion of UG99 and related races of the wheat stem rust pathogen; (2) a 20-acre study to develop effective means to apply pesticides to control Asian Soybean Rust and Soybean Aphids in across Ohio; and (3) a 10-acre study that was one piece of a multi-state, multi-year project to develop methods to control Gray Leaf Spot and Northern Corn Leaf Blight across the United States. All of these projects contributed to the security of our nation's food supply and provided vital information to Ohio's agricultural industry, which remains the single largest contributor to the state's economy.

Beyond current impacts, the Proposed Alternative Routes for the pipeline would make future research of the kind conducted at both Mellinger Farm and Fredericksburg Farm very difficult, if not impossible. This is because after soil is disturbed by pipeline construction, its natural structure is destroyed, making it useless for replicated agricultural crops research. The pipeline will also reduce the size of the fields impacted, effectively removing them from the University's inventory of available farm-scale research fields. Furthermore, continued future intrusions onto the farms for pipeline monitoring and maintenance of the easement area would create significant potential for contamination and interference with active research protocols and would prevent the University from being able to invest in additional research infrastructure in the proposed pipeline easement areas. This would clearly diminish the sites' usefulness for purposes associated with the University's land grant mission and hinder its ability to appropriately serve farmers and agricultural producers in the state.

When looked at in its entirety, the types of damage that would be done by allowing the Nexus pipeline to cross Mellinger Farm and Fredericksburg Farm cannot reasonably be quantified. This is because agricultural land suitable for academic research is a finite resource making it extremely difficult to simply recreate the work elsewhere. With this in mind, we urge you to prevent the Nexus pipeline from ruining these important public assets that directly contribute to the health and long-term viability of Ohio's number of economic driver - agriculture.

Beyond the negative research impacts mentioned above, Mellinger Farms is also subject to an Agricultural Easement Agreement entered into with the Ohio Department of Agriculture. In the USDA's 1997 Census of Agriculture, it found that Ohio had lost one-third of its total agricultural land, and the State of Ohio therefore delineated a conservation policy to preserve and promote agricultural land. Accordingly, included within the Mellinger Farms Agricultural Easement is a restriction on any industrial or commercial activity. Allowing the installation of the Nexus pipeline

COMPANIES/ORGANIZATIONS COMMENTS

CO60 – Ohio State University (cont'd)

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THE OHIO STATE UNIVERSITY

CO60-1
(cont'd)

across Mellinger Farm would clearly be in conflict with the goals of the Easement and with State of Ohio policies that call for the preservation of agricultural land.

We would also like to bring to your attention the cumulative impact on agricultural research at the University due to multiple developers using University land for pipeline development. This is the third pipeline that the University has received notices on from FERC in recent months, with the proposed ET Rover pipeline already poised to destroy the existing public use of a good portion of the Fredericksburg Farm. As mentioned above, the disruption to these research areas, including to the soil and other pristine elements of the land, cannot be measured in dollars and cannot be repaired through measures after the fact.

While the University appreciates many of the benefits that pipeline projects can bring, the cumulative effect of multiple pipelines on its research farms would unreasonably diminish its ability to fulfill its mission as a land grant institution and would impede its continued efforts to support the agricultural producers of Ohio. The agriculture and food processing related industries rely on the research that the University conducts to better serve the people of Ohio and together are the largest contributor to Ohio's economy. Please do not allow the Nexus pipeline to disrupt this beneficial partnership.

Finally, as an instrumentality of the State of Ohio, the University is limited in its authority under State law to grant easements in the use of its land. The Ohio General Assembly has only provided authority to the University, through the Ohio Department of Administrative Services, to grant easements on university land when the purpose is compatible with the uses and needs of the University. Even in those instances, the term of the easement is limited to a period not to exceed twenty-five years.

Please note that this letter is being delivered without prejudice to any rights the University may have, and the University expressly reserves all of its rights, powers, privileges and remedies as may be provided at law or in equity.

Sincerely,

Peter L. Jenkins
Director of Real Estate
The Ohio State University

c; Jay Kasey, Senior Vice President of Administration and Planning
Lonnie King, Dean of The College of Food, Agriculture, and Environmental Sciences
Keith Myers, Associate Vice President of Planning and Real Estate
Dr. David Benfield, Associate Vice President of Agricultural Administration
Ken Scaife, Assistant to the Director of OARDC - Agricultural Operations

INDIVIDUALS/LANDOWNERS

IND1 – Kyle Hubbard

	<p>Kyle Hubbard, Waterville, OH.</p>
IND1-1	<p>After reading the EIS, you seem to have bruising of the knees problem. In Waterville alone there is an issue with the ground around the river and the solution is to move the pipeline but you will only listen to the pipeline company for suggestions. If you move the pipeline to the spot suggested you will cross at a spot that has less river width and potentially cause less damage but i am guessing the FERC has not put a dime into finding it out as they only take money from</p>
IND1-2	<p>the corporations and do not devote time to ensure what is best for the public. You only say market and not what market, Ontario is promoting that a majority of the pipe is going there, how is this for the public good. Michigan is saying that DTE wants taxpayers to pay for it, how does this generate money for taxpayers? Rover is laying a similar line, how does this line add to the area? One young man almost lost his life in May because you cannot ensure the lines are safe, how do you expect anyone to want an export pipeline in their backyard or against their house.</p>
IND1-3	<p>This is not nimby this is growing frustration with the government and how they treat the public. If it is not for the public why is it being force upon us.</p>

- IND1-1 See section 4.3.2.2 for discussion on mitigation procedures for waterbody crossings.
- IND1-2 See section 1.1 for a discussion of the Project purpose and need.
- IND1-3 Section 4.13 addresses safety impacts associated with the proposed Project.

INDIVIDUALS/LANDOWNERS

IND2 – Cheryl Bourland

R-613

Cheryl Bourland, Waterville, OH.

IND2-1 Fear of toxic fume leaks from a proposed compressor station to be located in Waterville Township near Waterville, Ohio has many residents of this beautiful area concerned. Why would our government officials and environmental agencies allow this to happen? Nexus is a for profit business located in Texas so when they chose a site to locate this compressor station near 5 community schools, numerous day care facilities, and a population of 11,000 you would think that logic would take over and concern for the health of local residents, especially young children, would be the priority. Unfortunately, the Federal Energy Regulatory Commission and Environmental Protection Agency have failed to offer to protect people time and time again! The interest of Natural Gas industries outweighs the rights of individuals to enjoy clean air. Please consider the needs of the residents of Waterville, Whitehouse and Waterville Township and allow the residents to continue to enjoy clean air. Residents of this area, like myself, are very concerned about Nexus's plans to construct a compressor station and a pipeline.

IND2-1 There was an incident in Pennsylvania where a pipeline explosion occurred, the town had 4,000 people and the nearest home was 500 yards away. A resident suffered burns in the explosion and the siding of a home located 500 yards away from the mishap had its siding melted off. We have schools and daycare facilities located less than a mile from the proposed compressor station. Many homes are even closer. If that (explosion) happened here, more people would be seriously hurt!

Please consider the health and safety of our children over corporate profits for companies like Nexus. Would you feel comfortable if your children had to breathe in the same toxic emissions?

IND2-1 Section 4.12.1 of the EIS addresses the operating emissions from the compressor stations and demonstrates that each compressor station would not result in significant impacts on air quality, including from leaks or venting.

IND2-2 Section 4.13 addresses safety impacts associated with the proposed project, including the identification of a potential impact radius should an incident occur, and historic incident data to demonstrate the low likelihood of an incident.

INDIVIDUALS/LANDOWNERS

IND3 – Laura and Don Kalman

20160716-0027 FERC PDF (Unofficial) 07/18/2016

 ORIGINAL

Laura & Don Kalman
8061 Chatham Road
Medina, Ohio 44256

July 12, 2016

Federal Energy Regulatory Commission Staff:

We are writing because of concerns related to Docket # CP16-22-000. This involves the construction of the Nexus Pipeline in Ohio which is designed to go through very populated- and nice-suburban areas on its way to Canada. It is to be a 3 foot in diameter very pressurized gas line which will have compressor stations in suburban areas spewing toxins- among other gases- into the air. It is our understanding the pipeline at times goes within 79 feet of someone's house. Many of these homes are lovely suburban homes - and the pipeline will ruin the enjoyment of the couple acres of land these people may possess. We all know their property values will be in the negative numbers if this is built!

If there is a gas leak- and we all know the infrastructure will not be well maintained long-term- it may cause many deaths and injuries.

Please insist this pipeline be rerouted through the less populated, more rural alternative the community has requested but the companies involved in the pipeline construction have refused to consider.

Sincerely,


Laura & Don Kalman

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SECRETARY OF THE
COMMISSION
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FEDERAL ENERGY
REGULATORY COMMISSION

IND3-1 See the response to comment CO8-17.

IND3-2 See section 4.10.8 for a discussion of potential impacts to property values.

IND3-3 Section 4.13 addresses safety impacts associated with the proposed PrHoject, including DOT regulations regarding maintenance of the pipeline and DOT inspections throughout operation of the pipeline.

R-614

INDIVIDUALS/LANDOWNERS

IND4 – Gail Tompkins

Gail Tompkins, Medina, OH.

We are on a property in York Township, Medina County, Ohio. We bought this property in 1999 and after working all our lives, finally built our "home". We knew there was a high pressure gas storage well on our 11 acres. We cannot do anything within a 300' radius of the well, and they also have a driveway for access. We receive \$66 per year for this property that we pay taxes on.. Now Nexus wants to put in a gas line on the other side of us, and perhaps across our property. We will be in the middle of the "blast zone" of both. What about our safety and that of our grandchildren? Not to mention the devaluing of our property and home! Something has to be done! We are helpless to all of this!

IND4-1

IND4-2

- IND4-1 Section 4.13 addresses safety impacts associated with the proposed Project.
- IND4-2 See section 4.10.8 for a discussion of potential impacts to property values.

INDIVIDUALS/LANDOWNERS

IND5 – Frank Zaski

R-616

Frank Zaski, Franklin, MI.

IND5-1

The Nexus draft EIS is incomplete. The final EIS must include evaluations of DTE's new MILFORD JUNCTION LOOP bypass pipeline and DTE's BELLE RIVER MILLS COMPRESSOR STATION upgrade.

It appears these major projects are essential parts of the Nexus and Rover pipeline systems and necessary for them to move gas to Canada.

The Nexus greenfield pipeline flows from SE Ohio to Willow Run, Michigan. Nexus gas then flows through two existing DTE pipelines,

One DTE pipeline flows 130,000 Dth/d capacity of Nexus gas to Vector at MILFORD JUNCTION and then through BELLE RIVER MILLS on to Union St. Clair pipeline and on to Dawn. The other DTE pipeline flows 325,000 Dth/d capacity of Nexus gas through BELLE RIVER MILLS and to the Union St. Clair pipeline to Dawn. See map P 28 <http://www.dtegasstorage.com/pdfs/customerMeeting2009.pdf>

NEXUS also filed an application with FERC for a certificate to acquire a lease that would allow NEXUS to transport supplies from the MILFORD and BELLE RIVER receipt points to the international border. <https://www.snl.com/InteractiveX/article.aspx?ID=35787802&KPLT=2>

The BELLE RIVER MILLS COMPRESSOR STATION is being upgraded to move this additional Nexus and Rover gas to Canada. DTE and Vector pipelines meet at Belle River and connect with Union's St. Clair pipeline to Dawn. The upgrade is the addition of two new compressor units which adds a combined horsepower rating of 17,045 HP bringing the total station horsepower to 53,745 HP.

<https://efile.mpsc.state.mi.us/efile/docs/17999/0114.pdf>

<http://www.dtegasstorage.com/pdfs/customerMeeting2009.pdf>

<http://www.vector-pipeline.com/About-Us/Interconnects.aspx>

Vector has stated the necessity of Belle River to move Nexus gas in a presentation: "Nexus will be utilizing Vector's system to transport gas from Milford & Belle River to Dawn."

<http://www.vector-pipeline.com/~media/EepEqMep/Site%20Documents/Vector/News%20Releases/2015%20Customer%20Meeting%20Presentation.pdf?la=en>

The draft EIS includes an evaluation of the Milford Compressor Station, but not the MILFORD JUNCTION LOOP which is the installation of 3,750 feet of 30" diameter pipeline and associated valves to provide a bypass pipeline around the Milford Junction Station. This addition will most likely facilitate the flow of Nexus gas.

Perhaps not a coincidence, the Milford loop has an in-service date of September 2017 and Nexus will be completed and ready to operate in November 2017. See P 688 <https://efile.mpsc.state.mi.us/efile/docs/17999/0114.pdf> also <https://efile.mpsc.state.mi.us/efile/viewcase.php?casenum=18041&submit.x=0&submit.y=0>

IS DTE TRYING TO FUND NEXUS PROJECTS ON THE BACKS OF THEIR RATEPAYERS?

IND5-1 Section 1.1 provides a discussion of the purpose and need for the Projects.

INDIVIDUALS/LANDOWNERS

IND5 – Frank Zaski (cont'd)

R-617

NEXUS is joint venture of DTE Energy's unregulated affiliate, DTE Gas Storage & Pipelines, and an affiliate of Spectra Energy Partners. Each is investing \$1 billion in this 1.5 Bcfd gas pipeline.

In current rate hike applications before the Michigan Public Service Commission (MPSC), DTE Gas is asking that their ratepayers to pay \$42.1 million for the Belle River upgrade and \$9 million for the Milford Junction loop. DTE does not mention the need to move Nexus gas through these facilities. They only state reliability reasons. While these projects may improve reliability, both appear necessary for the Nexus and Rover projects. DTE is also asking for over \$200 million for other Nexus projects. <https://efile.mpsc.state.mi.us/efile/docs/17999/0114.pdf>

<https://efile.mpsc.state.mi.us/efile/viewcase.php?casenum=18041&submit.x=0&submit.y=0>

Overall, DTE is asking their ratepayers to SUBSIDIZE Nexus for over \$250 million for the benefit of their unregulated affiliate. DTE Electric is also attempting to pile substantial Nexus reservation costs on their ratepayers. This 25% share of DTE's investment, plus substantial fees, are particularly abusive to their ratepayers considering DTE Gas and DTE Electric have agreed to take a maximum of only 10% of Nexus gas, and not even until after 2022, if then. (DTE said they had to raise their take of Nexus capacity to this level in order to justify this pipeline). Over 50% of Nexus gas is planned for Canada.

Plus, DTE is a 40 percent owner of Vector. Vector will also carry considerable Rover gas as well through DTE's Milford and Belle River facilities. It appears, DTE ratepayers will also be subsidizing Rover.

FERC, please consider DTE's Milford Junction Loop bypass pipeline and their Belle River Mills Compressor Station in the EIS. They are essential parts of Nexus (and Rover) pipelines.

IND5-2 | Also consider DTE's request to have their current/captive customers substantively subsidize Nexus.

Frank Zaski, I am a DTE ratepayer

IND5-2 The manner in which NEXUS intends to finance the proposed Project is outside of the scope of this EIS.

INDIVIDUALS/LANDOWNERS

IND6 – Nancy Ferguson-Land

20160722-0029 FERC PDF (Unofficial) 07/22/2016

NEXUS

FILED
SECRETARY OF THE
COMMISSION

2016 JUL 22 P 3:58

FEDERAL ENERGY
REGULATORY COMMISSION

TO: Kimberly D. Bose
Secretary of Commission
Federal Energy Regulatory Commission
888 1st. St. NE
Washington, D. C. 20426

ORIGINAL

FROM: Mrs. Nancy M. Ferguson-Land
45100 Peck Wadsworth Road
Wellington, Ohio 44090

Docket PF-15-10-000
Docket PF-15-11-000

UPDATES LETTER MAILED JUNE 2015

This letter concerns FERC's proposal to allow Spectra Energy to construct the Nexus pipeline in order to transport Utica and Marcellus shale gas to Ontario, Canada. As are many Lorain County landowners, I am against the 255- mile pipeline.

Last Thursday, July 14, 2016, I received the DRAFT ENVIRONMENTAL IMPACT STATEMENT CD discussing the NEXUS Gas Transmission Project and TEAL Project and was shocked to discover my name listed twice on Page A-52!

I am co-owner of a 310-acre farm which has been in my family for over seventy years. The farm grows soybeans, corn, and wheat, is inhabited by bald eagles, deer, red fox, and coyotes, and, for decades, has had a COLUMBIA GAS EASEMENT WITH PIPELINES CROSSING THE ENTIRE FARM! The farm does not need any more gas pipelines!

Members of CORN have been working against the pipeline installation by hiring lawyers, contacting county commissioners, and placing large signs in their yards. However, I strongly feel that these concerned citizens should not be allowed to suggest my property as an alternate route.

In essence, I do not want FERC to give Nexus the permission to install pipeline on my property for the following reasons...

Page 1

R-618

INDIVIDUALS/LANDOWNERS

IND6 – Nancy Ferguson-Land (cont'd)

20160722-0029 FERC PDF (Unofficial) 07/22/2016

- - -

NEXUS

Columbia Gas already has pipelines on my property.

- IND6-1 | The habitats of bald eagles and other wild animals on the farm would be destroyed.
- IND6-2 | The farm's monetary value would be reduced.
- IND6-3 | Crops in the fields would be damaged or lost.
- IND6-4 | The lines could leak and contaminate the farm's creek which flows into the Black River and empties into Lake Erie.
- IND6-5 | The lines could leak and cause a fire which happened in Wellington four years ago.

Sincerely,
Mrs. Nancy M. Ferguson-Land

++

IND6-1 The types of impacts on wildlife habitat (including bald eagle habitat), property values and agricultural crops would be similar on the City of Green Alternative as the proposed route. Sections 4.6, 4.10.8, and 4.9.2 describe the nature of these impacts. The facilities proposed for the NGT and TEAL Projects are natural gas pipeline facilities. As such, they do not present the same environmental contamination risks as crude oil or other liquids pipelines in the event of a leak or rupture. See section 4.13 for a discussion of pipeline reliability and safety, including the potential impacts from a pipeline leak or rupture. Based on our review, we did not find the City of Green Route Alternative provides a substantial environmental advantage when compared to the corresponding segment of the proposed route and did not recommend that it be incorporated as part of the Projects.

IND6-2 See response to comment IND006-1.

Prior to construction, NEXUS shall file with the Secretary a 5-year post-construction monitoring program to evaluate crop productivity in areas impacted by the construction of the Project. NEXUS shall include in the program a commitment to file with the Secretary quarterly reports for a period of 5 years following construction documenting any crop-related problems and describing any corrective action taken to remedy those problems. The program shall stipulate that if any landowner agrees that revegetation and crop productivity are successful prior to the 5-year requirement, NEXUS shall provide documentation in its quarterly reports indicating which landowners have agreed that monitoring is no longer necessary.

IND6-3 See response to comment IND006-1.

Prior to construction, NEXUS shall file with the Secretary an *Agricultural Impact Mitigation Plan (AIMP)* detailing construction and restoration measures to be implemented on the NGT Project to address agricultural issues unique to Ohio and Michigan. For construction and restoration measures in Ohio, NEXUS shall consult with the Ohio Department of Agriculture (ODA) on construction procedures to be used in agricultural land in Ohio and shall file with the Secretary any measures that result from coordination with the ODA.

Prior to construction, NEXUS shall file with the Secretary a 5-year post-construction monitoring program to evaluate crop productivity in areas impacted by the construction of the Project. NEXUS shall include in the program a commitment to file with the Secretary quarterly reports for a period of 5 years following construction documenting any crop-related problems and describing any corrective action taken to remedy those problems. The program shall stipulate that if any landowner agrees that revegetation and crop productivity are successful prior to the 5-year requirement, NEXUS shall provide documentation in its quarterly reports indicating which landowners have agreed that monitoring is no longer necessary.

IND6-4 See response to comment IND6-1.

IND6-5 See response to comment IND6-1.

INDIVIDUALS/LANDOWNERS

IND7 – Jeanne Warchola

20160722-0030 FERC PDF (Unofficial) 07/22/2016

Pf15-10

FILED
SECRETARY OF THE
COMMISSION

2016 JUL 22 P 3:58

FEDERAL ENERGY
REGULATORY COMMISSION

ORIGINAL

July 15, 2016

Nathaniel J. Davis

Deputy Secretary, Federal Energy Reg. Comm.

888 First St NE

Room 1A

Washington, DC 20426

Dear Secretary Davis,

I am writing to ask that you please no allow the new NEXUS pipeline to go through my small community of southern Medina county Ohio.

I am certain you have received a lot of strongly worded mail asking the same thing. I do not have a lot to say, and I do not wish to burden you further: I just want to ask that you please, please not approve the NEXUS pipeline through southern Medina.

IND7-1 | I know there are other much more rural, less populated routes that NEXUS can use. There has to be some compromise- they have to move away from our community to a more rural venue. There are quite a few residential homes along it's proposed route, and NEXUS ought to be made to move just a little don't you think?

Thank you for your time and thank you for reading this.

Best Regards,

Jeanne Warchola
Jeanne Warchola

7444 Ryan Ro

Medina, Ohio 44256

330-769-3518

IND7-1

See section 3.3 for an evaluation of several rural route alternatives, including the Rover, Southern, City of Green, Canton A, Canton B, Canton C, and Waterville route alternatives.

R-620

INDIVIDUALS/LANDOWNERS

IND8 – Bonnie Taylor

IND8-1

Bonnie Taylor, New Franklin, OH.

I would like to inform you that all my neighbors have been contacted by letters from Nexus but we have not. Since the pipe line route has not changed it will be within 50ft of our well water.

IND8-1 See section 4.3.1.2 for a discussion of impacts and mitigation relating to groundwater resources.

INDIVIDUALS/LANDOWNERS

IND9 – Eli P. Gingeridi

20160728-0007 FERC PDF (Unofficial) 07/28/2016

CP16-22

☐ ORIGINAL

Hello, in regards
of the Nexus Gas Pipe line

I did get a map of
CP16-22-000 Route, which is on a big scale

FILED
SECRETARY OF THE
COMMISSION
JUL 28 2016
FEDERAL ENERGY
REGULATORY COMMISSION

IND9-1

Could you please send me

a more detailed map of

our Area, ?? so I can see
where abouts it would affect

my Property if it would be

Adopted use, got Plan's to

built a few green house's and I don't

want to build them in there

Path, over →

IND9-1

Route maps are included in Appendix B of the EIS.

R-622

INDIVIDUALS/LANDOWNERS

IND9 – Eli P. Gingeridi (cont'd)

20160728-0007 FERC PDF (Unofficial) 07/28/2016

I would greatly appreciate
your response.

Sincerely Eli P. Gingeridi
9403 Kline Rd
West Salem Ohio
44387

Docket Number
CP 16-22-000

R-623

INDIVIDUALS/LANDOWNERS

IND10 – Claude Doering

R-624

Claude Doering, Homerville, OH.

7/28/2016

I am writing to you regarding the NEXUS Gas Pipeline, CP16-22-000. I have read the EIS you have prepared and I am responding to inform you that I am opposed to the City of Greene Route Alternative. As depicted the pipeline will cross my farm thus robbing from me a part of my family's livelihood for years to come.

Homer Township is an area that supplies fresh food to the Cleveland/Akron area as well as Medina County. My farm, as well as the Amish neighbor's farms that will be impacted, is high value land used for the production and sale of vegetables, livestock, maple syrup as well as many other foods. These aren't large farms with conventional rowcrops and every square foot counts.

Briefly I will explain my concerns.

IND10-1 Soil is not dirt. I am an organic farmer and I have worked on the fertility and structure of my soil for 23 years. Despite the techniques the contractors say they will use they will still destroy the productivity of my fields for the rest of my life. My fields have been systematically tilled at a cost of \$35,000-\$40,000. I am not naive enough to believe the pipe will not interfere with my drainage after more than one hundred of them are cut. Additionally, I have underground irrigation lines that I do not want disturbed.

IND10-2

IND10-3 I also have 24 acres of forest that I use for organic maple syrup that the pipeline will bisect. The trees that I will lose may be compensated for, (at what price?), but their future lost productivity will not. I have no use for a permanent easement through my woods that is cleared every 3 years. The method of clearing also concerns me as the terrain is not conducive to mowing.

IND10-4 As an aside, one day this line will be abandoned. No matter where it is put it will be a nuisance at best. At worst it will be a liability, not for NEXUS, but for the landowners who are getting this forced on them. This pipeline will cause my family undue harm.

On behalf of my family, my farm and the customers who depend on me for their food I ask you to use the NEXUS Preferred Route.

Sincerely,

Carnigaern Farm

Claude Doering
11660 Holshoe Rd
Homerville, OH 44235

IND10-1 The types of impacts on organic farms, drain tiles, and forests would be similar on the City of Green Route Alternative as the proposed route. Section 4.9.5.1, 4.9.5.4, and for 4.9.2 describe the nature of these impacts. However, based on our review, we did not find the City of Green Route Alternative provides a substantial environmental advantage when compared to the corresponding segment of the proposed route and did not recommend that it be incorporated as part of the Projects.

IND10-2 See response to comment IND10-1.

IND10-3 See response to comment IND10-1.

IND10-4 See section 2.6 for a discussion of pipeline operations and maintenance.

INDIVIDUALS/LANDOWNERS

IND11 – Karen Fridenstine

Karen Fridenstine, Oberlin, OH.	
IND11-1	Preferred Nexus pipeline route would be the North border of our land beside the Buckeye pipeline, Dominion East Ohio Gas Line, and North Coast Gas Transmission Line. Sharing easement space is greatly desired to reduce the amount of land being taken. Current Real Estate purchasers interest in this land will be even more compromised should Nexus Pipeline use the South option next to Reserve Housing Development.
IND11-2	Any taking of our land results in a reduction of property valuation. Potential development marketing has been ongoing more than 5 years.

- IND11-1
- Comment noted.
- IND11-2
- See section 4.10.8 for a discussion of the impacts of constructing a new pipeline on property values.

INDIVIDUALS/LANDOWNERS

IND12 – Gary Fleischman

Gary Fleischman, East Sparta, OH.

Docket Number: CP16-22-000 FERC City of Green Route Alternative

Dear FERC,

This comment is in response to the City of Green Route Alternative for the Nexus Gas Transmission line. We live on a farm on 9030 Ridge Ave SE East Sparta, Ohio, and received notification that our land was included in the alternative route for this project. As property owners, we have concerns and would like the FERC to reconsider this alternative route.

- IND12-1 1. Our property is every bit as valuable as the Green properties and it will impact our right to have future development on our property or to sell as it will divide our property in half.
- IND12-2 2. We moved to a rural area for the beauty and peace. With this project there will be compressor stations needed and "pig" launchers/catchers to clean the lines approximately every 2miles. We would not permit these to be on our property and would not like them close and have to hear the "noise" of the equipment.
- IND12-3 3. Our house would be within 600 feet of this line. We are not interested in the danger of a 36-inch gas line so near our children and home when other alternatives were already determined as a better route by your commission.
- We are opposed to the alternative route so close to our home. We are willing to meet/discuss our concerns further if needed.
- Sincerely,
- Gary and Rhonda Fleischman
- 330-866-3621

- IND12-1 Comment noted. Based on our review, we did not find the City of Green Route Alternative provides a substantial environmental advantage when compared to the corresponding segment of the proposed route and did not recommend that it be incorporated as part of the Projects.
- IND12-2 Compressor Stations and pig launcher/receivers are not needed every 2 miles. Pig launch/receivers are not considered significant noise sources during operation. The noise impacts from operating the compressor stations for the Projects are discussed in section 4.12.2 of the EIS.
- IND12-3 See response to comment IND12-1.

INDIVIDUALS/LANDOWNERS

IND13 – John D. Harvey

R-627

John D. Harvey, Seville, OH.

My name is John Harvey and I am a property owner in Ohio and reside near the Chippewa/Ryan quadrant division of the proposed NEXUS pipeline. I am writing to express my concerns and opposition to the NEXUS proposed variation to the FERC recommended pipeline, let alone the presence of this pipeline near recently developed residential neighborhoods.

I was notified by a letter from NEXUS dated July 22nd, 2016 that they would like me to sign a survey authorization so that NEXUS could enter my property to evaluate my land for pipeline construction. I did not receive this letter in my mailbox until the evening of July 27th, 2016. On July 28th, a Mr. Lowell Parlow, a Senior Right of Way Agent for NEXUS Gas Transmission, LLC showed up at my father's farm (James. D. Harvey, which is located to south of my property and also along this new route proposed by NEXUS) and asked us to sign the release paperwork for right to survey. First and foremost, I find this very unprofessional with a complete lack of respect for any property owner to be given less than one week notice to review the documents that they would like signed and then show up at the person's door one day after receipt of the letter asking them to please sign. This gives the property owners insufficient time to review the request, let alone seek counsel to protect their rights as property owners.

Secondly, for NEXUS to recommend another reroute from the route proposed by FERC shows a complete lack of disregard for the commission's proposed route concerns. With easements already in place along highways, railways, and power transmission lines, the pipeline could easily follow these paths with minimal need for further easements. Or this pipeline could be place within other pipeline corridors like ones in Wayne County, which would minimize concerns and safety of citizens along the proposed pipeline route. They are clearly going against FERC recommended pathway. Also in this proposed reroute they are saying they are avoiding forest crossings, yet this entire pipeline is going across wooded areas along the 255 mile pipeline. This could be completely avoided by construction in a pipeline corridor.

Lastly, Mr. Lowell explained that if this new route went through the land owners would give a 50 foot easement (125 feet during construction) for construction of the pipeline. He stated that the owners would be compensated for this easement. He stated that if we did not sign the documents allowing them to survey could delay the project and cause them to incur a 17 million dollar monthly penalty if the project is not completed as scheduled. When I asked about land owner compensation for loss of property value, he stated that there would be no loss of property value due to this new pipeline. With this I would argue is a complete disregard of the truth. My property, along with my fathers and our joining neighbors, Sean and Christine McCann, are situated between two recently constructed developments built in the very southern end of Montville Township. In these developments are homes valued at \$300,000-600,000 dollars. When these developments were first started, the land was acquired at a rate of over \$11,000/acre. If this pipeline is allowed to be placed across these lands, the buildable value of these properties will be greatly diminished for multiple reasons. One is the fact that the development of these lands will be restricted by the easement since this pipe would run at an angle across all of these adjacent properties. Secondly, trying to sell buildable land to someone for construction of a new home that sits next to a high volume, high pressure transmission gas line is a detriment to the property value. So for NEXUS to say they will incur millions in losses if

IND13-1 Comment noted.

IND13-2 As discussed in section 3.0, we frequently evaluate alternatives that minimize the creation of new rights-of-way (i.e., greenfield routes) by routing pipelines within or adjacent to existing rights-of-way. Installation of new pipeline along an existing, cleared right-of-way (such as another pipeline, electric transmission line, road, or railroad) may be environmentally preferable to construction along a new right-of-way, and construction effects and cumulative impacts can normally be reduced by use of a previously cleared right-of-way. Likewise, long-term or permanent environmental impacts may be reduced by avoiding the creation of new right-of-way through previously undisturbed areas. Many of the route alternatives and variation evaluated in section 3.0 are partly or entirely co-located with other rights-of-way. Our recommendations for the incorporation of route variations are in section 3.4.

IND13-3 See section 4.10.8 for a discussion of the impacts of constructing a new pipeline on property values.

INDIVIDUALS/LANDOWNERS

IND13 – John D. Harvey (cont'd)

IND13-3
(cont'd)

the line is not completed but that property owners will not lose value is quite hypocritical. No sane person would invest in a home located this close to a transmission line, as we have seen what can happen to these lines when they fail in both Pennsylvania and California.

I respectfully urge you to please require NEXUS to follow FERC recommendations, or even better have them construct this pipeline in a pipeline corridor, further away from residential developments. Please feel free to contact me about this matter at any time if you would like to discuss my and others concerns.

Sincerely,

John D. Harvey Ph.D.

7305 Wooster Pike

Seville, OH 44273

H:(330)722-7242

C:(330)687-1700

R-628

INDIVIDUALS/LANDOWNERS

IND15 – Linda J. Bernat

20160801-0024 FERC PDF (Unofficial) 08/01/2016

July 25, 2016

 ORIGINAL

Linda J. Bernat
4677 Honeymoon Drive
North Canton, OH 44720

Federal Energy Regulatory Commission
888 First St, NE 3-P
Washington, DC 20426
Ref. Docket CP16-22-000

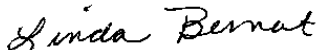
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SECRETARY OF THE
COMMISSION
2016 AUG -1 A 11:42
FEDERAL ENERGY
REGULATORY COMMISSION

Dear Sir or Madame,

IND15-1 | I am an elderly widow with well water and a septic tank on my property. I oppose the Nexus
IND15-2 | pipeline because I believe it may cause problems with my drinking water and septic tank. Also,
our area has many trees and wildlife, including possibly endangered species, which would be
disturbed by the installation of a pipeline.

IND15-3 | My city, the City of Green, has worked hard to relocate the Nexus pipeline away from our area.
I hope you realize the Nexus pipeline offers no benefit to our community and could only create
problems which I do not have the money to address. Please do not allow the pipeline to be built
in our area.

Sincerely,



Linda J. Bernat

- IND15-1 See section 4.3.1.2 for a discussion of mitigation procedures for groundwater resources including water supply wells. Construction and operation of the pipeline are not expected to impact septic systems that are not within the construction zone.
- IND15-2 See section 4.6 for a discussion of potential impacts to wildlife and section 4.8 for a discussion of impacts to threatened and endangered species.
- IND15-3 Project activities will not take place within 660 ft. of eagle nests (the disturbance buffer defined by the FWS). See section 4.6.6 and the *Migratory Bird Conservation Plan* for a discussion of impacts to eagles.

R-629

INDIVIDUALS/LANDOWNERS

IND16 – Janelle Palmer

Janelle Palmer, Ypsilanti, MI.

IND16-1

IND16-2

I am writing to oppose the building of the Nexus pipeline, in particular the placement of the pipeline. I am very concerned with the proximity to residential areas and schools. I personally live just a few blocks from the proposed route and feel this is very unsafe for my daughter and family. Though employees from the pipeline company state the process is safe, we all know there are many instances where accidents happen and I feel a larger buffer area is necessary for projects of this magnitude. I also question whether this pipeline is even necessary. Finally, the fact that the majority of the gas will be sent to Canada is very concerning, since we are taking the risk of having the gas sent through our area.

Please consider re-routing away from densely populated areas, or even rejecting this new pipeline.

IND16-1 Section 4.13 addresses safety impacts associated with the proposed Project.

IND16-2 Comment noted.

INDIVIDUALS/LANDOWNERS

IND17 – Raymond and Annetta Lengyel

07/25/16

To Whom It May Concern:

ORIGINAL

- IND17-1 | This letter is an effort to justify the Butler Road route variation of the Nexus Pipeline. (CP16-22-000)
- IND17-2 | The proposed route has wider and deeper trenching in High-Yielding ground (long term crop loss), to go under the creek which is a habitat for migrating fish/monarch butterfly. Milkweed grows on the bank of the creek. There is also a loss of two septic drain lines that go into the creek supplying water to fish in dry season.
- IND17-3 | There is a danger to safety, welfare and value of three households that the "reroute" would diminish.
- IND17-4 | Also, there is a loss of potential building lot value due to the closeness of the proposed route, and a greater loss to the value of our farms because the pipeline goes through the center of our properties.

The variation route creates less ground disturbance due to open trenching through grass waterways and less productive ground also lessening the value loss to the farm. There would be less cost to Nexus and the pipeline would not interfere with septic drain lines or creek habitat.

Sincerely,

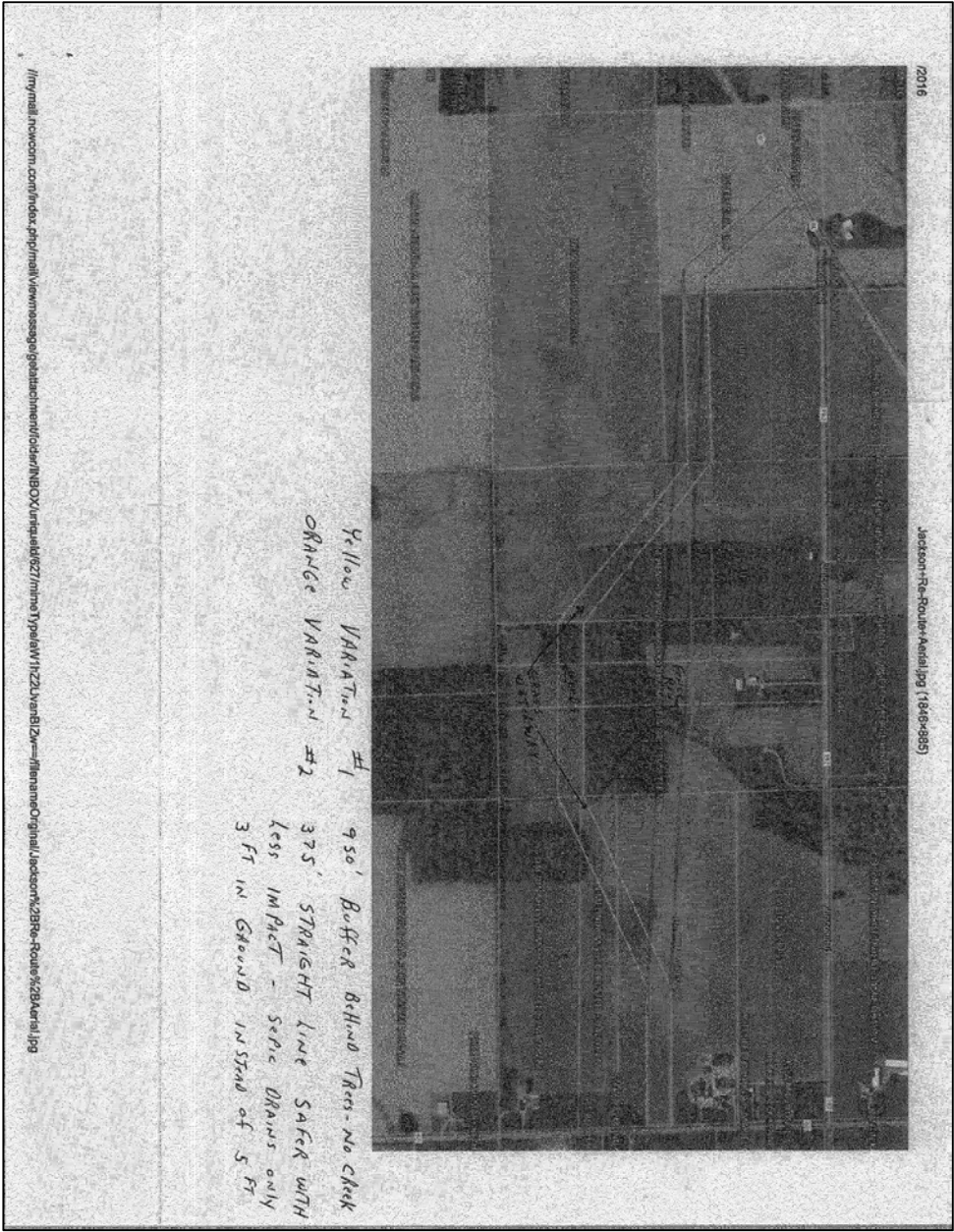
Raymond and Annetta Lengyel

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SECRETARY OF THE
COMMISSION
2016 AUG -2 P 2:14
FEDERAL ENERGY
REGULATORY COMMISSION

- IND17-1 | See section 3.4.15 for an updated discussion of the Butler Road Route Variation.
- IND17-2 | See section 3.4.15 for an updated discussion of the Butler Road Route Variation.
- IND17-3 | See section 3.4.15 for an updated discussion of the Butler Road Route Variation.
- IND17-4 | See section 3.4.15 for an updated discussion of the Butler Road Route Variation.

INDIVIDUALS/LANDOWNERS

IND17 – Raymond and Annetta Lengyel



INDIVIDUALS/LANDOWNERS

IND17 – Raymond and Annetta Lengyel

3.4.13 Butler Road Route Variation

The Butler Road Route Variation was developed at the request of a landowner with concerns about the proposed route crossing their land. This variation proposed by the landowner would reroute the proposed pipeline behind a forested area which would act as a buffer between the landowner's residences and would not limit the use of their land for farming. The route variation diverges from the NGT mainline at MP 102.4 and rejoins NGT mainline at MP 103.7 (see figure 3.4.13-1 and table 3.4.13-1).

TABLE 3.4.13-1		
Analysis of the Butler Road Route Variation		
Factor	Route Variation	Proposed Route
Length (miles)	1.4	1.4
Greenfield Construction (miles) ^a	1.4	1.4
Agricultural Land (acres) ^b	21.2	25.8

^a Based on the absence of adjacent or parallel rights-of-way within 300 feet of the pipe centerline.
^b Based on a 125-foot-wide construction right-of-way in agricultural land.

The Butler Road Route Variation is 1.4 miles in length, which is the same as the proposed route. The environmental effects of the route variation and proposed route are similar, except that the route crosses slightly less agricultural land than the proposed route. Based on our environmental review of both routes, we do not find the Butler Road Route Variation provides a significant environmental advantage when compared to the corresponding segment of the proposed route and do not recommend that this variation be incorporated as part of the Projects.

R-633

INDIVIDUALS/LANDOWNERS

IND18 – Stacey Kaczorowski

Stacey Kaczorowski, Waterville, OH.

To whom it may concern:

IND18-1

I am a homeowner in Waterville, Ohio with a son and a baby on the way. I decided to live here long before hearing about a pipeline in my community being within three miles of our schools. Everything I have read about this pipeline has me very concerned for my family's health and safety, and should Nexus be able to go forward with this project, I will put my house up for sale. I do not feel it is fair for me to have to relocate and for my son to have to switch school districts, but I must keep his best interest in mind. It is really a shame that government committees such as the EPA and FERC will not protect us from harmful invasions, but I have NO DOUBT there is plenty of money, kickbacks, and threats being made by Spectra to get this done. Greed matters more to Spectra and FERC than the well-being of our children. Any person with a shred of common sense understands this will harm the residents, and the right thing to do would be to not allow it, but corruption is everywhere and FERC is no exception. So years down the road when all these cancer clusters form, how will you feel about your part in this? Will you rationalize it to yourself and say you could not have done anything to stop this? Will you take any responsibility when explosions happen or leaks occur? As I write this letter, I believe that FERC is going to approve this pipeline. I am doubtful that anything we have to say will matter to you since after everything is said and done, you will go home and still have your job and your home. I am the one who will lose money on my home and have to find somewhere else to live, and my son will have to readjust to new junior high school where he does not know anyone. But if your children and grandchildren are ever diagnosed with cancer, you can tell them that money is all that really matters to you. This pipeline will destroy our environment and everyone knows it. You know it, so why don't you do the right thing and not permit it?

IND18-2

Thank you,

Stacey Kaczorowski

IND18-1 Section 4.13 addresses safety impacts associated with the proposed Project.

IND18-2 See section 4.10.8 for a discussion of potential impacts to property values.

INDIVIDUALS/LANDOWNERS

IND19 – Ryan Motter

Ryan Motter, Waterville, OH

To whom it may concern:

IND19-1 I am writing this letter to FERC to express my concern over the Nexus Pipeline proposed to run through Waterville, Ohio. After researching similar compressor stations and the chemicals and effects on the ecosystem and community, I see this pipeline as posing great risks to our community. Waterville is such a heavily populated area, and I am appalled anyone would even consider allowing it so close to homes and schools of so many people. Who will be monitoring the emissions from the compressor station? Who will be reporting when emissions exceed the acceptable standards? I was told Spectra would monitor the emissions themselves. This is unacceptable to me for obvious reasons. They won't report their own violations of emission standards. How will our small fire department be able to respond to an explosion of such high magnitude? Explosions have occurred in other states where pipelines were built, so how can we feel safe? You were elected by tax paying citizens to protect us, and the residents clearly do not want this pipeline in our community. A permit should not be granted for Nexus until our concerns are all addressed about our safety.

IND19-2

IND19-3

IND19-4

Thank you,
Ryan Motter

- IND19-1 Section 4.12.1.3 includes conservative AERSCREEN modeling results that demonstrates that the Waterville Compressor Station would comply with the NAAQS, which were established to protect human health, including sensitive populations.
- IND19-2 As discussed throughout section 4.12.1, NEXUS would comply with all monitoring and reporting requirements required by state and federal permits, and permitting agencies may conduct periodic inspections. The OEPA maintains the air permitting program in Ohio.
- IND19-3 Sections 4.10.5 and 4.13 address local emergency response, including DOT requirements to develop emergency response plans in coordination with state and local officials. These emergency procedures would provide for adequate means of communication, notification, and coordination with appropriate fire, police, and other public officials, as well as for the availability of personnel, equipment, tools, and materials needed to respond to an emergency.
- IND19-4 Section 4.13 addresses safety impacts associated with the proposed Project.

INDIVIDUALS/LANDOWNERS

IND20 – JoAnne VanSparrentak

JoAnne VanSparrentak, Grand Rapids, OH.

I am one of among many who oppose the nexus pipeline and especially the compressor station.

IND20-1

I am chemically and electrically sensitive (and I know of many others who are too).

While many people can tolerate certain levels of chemicals, electricity, sounds, etc, many people can not.

There is no acceptable limit or thresh hold.

Do you put some people's lives at stake, do you propose to affect and sicken countless people?

IND20-2

There is a nursing home in the vicinity of your proposed compressor station, and there are countless other elderly sick people living in their homes in the area. Elderly people are more susceptible to irritants.

Are you to make their lives a living nightmare?

I, among many, do not want your compressor station anywhere near my home, or anyone's home that would be affected by your pollution, be it noise, electrical or emissions.

IND20-1

Section 4.12.1.3 demonstrate that all compressor stations associated with the proposed projects would comply with the NAAQS, which were established to protect human health, including sensitive populations such as children, the elderly, and those with chronic respiratory problems. Section 4.12.2 of the EIS demonstrates that operation of each compressor station would result in noise impacts below our 55 dBA Ldn criterion. This criterion was established based on annoyance levels, and would prevent noise impacts from interfering with a conversation being held outdoors. This level is well below noise levels that can cause hearing damage.

IND20-2

See the response to comment IND20-1.

INDIVIDUALS/LANDOWNERS

IND21 – Rosella Pierce

20160905-0019 FERC PDF (Unofficial) 09/05/2016

August 1, 2016

Rosella and Ray Pierce
635 Ott Drive
Clinton, OH 44216

ORIGINAL

Federal Energy Regulatory Commission
888 First St, NE 3-P
Washington, DC 20426
Ref. Docket CP16-22-000

Dear Sir or Madame,

We are both 88 years old and have hired a local attorney to represent us against Nexus. We could have used that money for our medical needs. The cost of the attorney, though, will be minimal compared to any damages Nexus might do to our property, including our water well and septic system. Also, we have many trees and wildlife on our land which would be disturbed by the installation of a pipeline.

The neighboring City of Green has done a nice job trying to relocate the Nexus pipeline. Please do not let the Nexus pipeline come through Summit County.

Sincerely,

Bonnie A. Pierce

Rosella Pierce

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SECRETARY OF THE
COMMISSION
2016 AUG -5 P 4:51
FEDERAL ENERGY
REGULATORY COMMISSION

IND21-1 See section 4.10.8 for a discussion of potential impacts to property values.

IND21-2 See section 4.3.1.2 for a discussion of mitigation procedures for groundwater resources including water supply wells. Construction and operation of the pipeline are not expected to impact septic systems that are not within the construction zone.

R-637

INDIVIDUALS/LANDOWNERS

IND22 – Frank Zaski

R-638

Frank Zaski, Franklin, MI.

IND22-1 The Michigan Attorney General (AG) has serious concerns that DTE is attempting to take advantage of their customers for the sake of Nexus. DTE Electric and DTE Gas have asked the Michigan Public Service Commission (MPSC) to approve DTE's loading of substantial and unjustified Nexus costs on to ratepayers.

IND22-2 FERC must investigate these Michigan AG's concerns regarding Nexus:

- * Doubtful cost benefits of Nexus
- * Lack of exploration of alternative gas sources
- * Why additional DTE support is needed to justify Nexus
- * Clear evidence Nexus agreement is an AFFILIATE TRANSACTION
- * Possible MPSC Code of Conduct violation
- * Improper SUBSIDIZATION of DTE Pipeline Company by DTE ratepayers
- * How the MILFORD BYPASS pipeline cost recovery request relates to Nexus
- * DTE's refusal to fill requests for Nexus information

Quotations for the AG's DTE ELECTRIC Cost Recovery Plan Brief: July 6, 2016

Company failed to prove that its NEXUS proposal is reasonable and prudent and will minimize PSCR expenses.

The [DTE] analysis shows very clearly that THE ADDITIONAL NEXUS PIPELINE CAPACITY COSTS EXCEED ANY POTENTIAL BENEFITS FROM LOWER GAS PRICES THROUGH THE YEAR 2024. Any significant savings, if they materialize, would not start until 2030, or 12 years after the start of transportation service on NEXUS.

Company did not enter into any serious negotiations with the two major competitors to NEXUS, the ANR East Pipeline and Rover Pipeline.

And the COMPANY HAS NOT ADEQUATELY PROVEN THAT IT HAS FULLY EXPLORED ALL AVAILABLE OPTIONS TO TRANSPORT MARCELLUS-UTICA GAS INTO MICHIGAN AT THE LEAST POSSIBLE COST, which could very well subject customers to costs that are not reasonable and prudent.

They [DTE] seem to imply that WITHOUT THE SUPPORT OF DTE ELECTRIC AND DTE GAS, which combined represent 10% of the total capacity of the pipeline, NEXUS MAY NOT BE BUILT

IND22-1 Comment noted.

IND22-2 Section 1.1 discusses the Project purpose and need.

INDIVIDUALS/LANDOWNERS

IND22 – Frank Zaski (cont'd)

R-639

The CUMULATIVE COST OF THE CAPACITY CONTRACTED WITH NEXUS that the Company plans to charge PSCR customers will reach approximately \$355 MILLION from 2017 through 2037.

There is no near-term need to sign for incremental interstate transportation capacity unless new, lower-cost transportation capacity can replace current arrangements of higher cost.

THE RECORD EVIDENCE CLEARLY SHOWS THAT THE NEXUS AGREEMENT IS AN AFFILIATE TRANSACTION between DTE Electric and DTE Pipeline Company, a subsidiary of DTE Energy, which is the parent company of DTE Electric. Given that the proposed transaction is subject to the MPSC Code of Conduct, the Commission must impose a higher level of scrutiny to the proposed agreement.

IND22-3 | There is a strong likelihood, as currently structured and proposed, that THE NEXUS AGREEMENT WILL RESULT IN THE IMPROPER SUBSIDIZATION OF DTE PIPELINE COMPANY BY DTE ELECTRIC'S RATEPAYERS, who will be bearing the burden of a net loss for the vast majority of the NEXUS contract.

<https://efile.mpsc.state.mi.us/efile/docs/17920/0116.pdf>

Quotations for the AG's DTE GAS Cost Recovery Plan Brief: July 27, 2016

IND22-4 | The Commission should reject the inclusion of any [NEXUS] capital expenditures in rate base in this rate case given that the COMPANY HAS REFUSED to provide sufficient evidence and support that those costs are economically justified. (Page 51)

Furthermore, the Company has entered into a lease agreement with NEXUS Gas Transmission Company whereby NEXUS will lease transportation capacity from DTE Gas for NEXUS to move gas through DTE Gas' transmission facilities on behalf of its OTHER CUSTOMERS.

REPEATED EFFORTS to obtain the lease agreement have gone UNHEEDED as of the date of this testimony. It is curious that the COMPANY WOULD NOT OPENLY DISCUSS the existence of a lease agreement and its terms in filed testimony in this case when NEXUS discusses it openly in its filed application with the FERC. (Page 49)

The COMPANY HAS REFUSED to answer questions as to whether or not the agreement for reimbursement covers all the facilities improvements, [should Nexus be cancelled] (Page 49)

IND22-3 Comment noted.

IND22-4 Comment noted.

INDIVIDUALS/LANDOWNERS

IND22 – Frank Zaski (cont'd)

R-640

They [MPSC Commission] should also take a closer look at how the MILFORD BYPASS pipeline fits into the nexus proposals. (Page 51)

<https://efile.mpsc.state.mi.us/efile/docs/17999/0120.pdf>

Comments:

FERC must investigate the Michigan Attorney General's claims listed above. Do they violate FERC assumptions, regulations and policies?

Is DTE's apparent lack of TRANSPARENCY with the Michigan Attorney General a concern to FERC?

DTE GAS is petitioning the MPSC to have DTE customers pay over 25% of their Nexus costs (\$201 million plus \$51 million in related projects), yet they may take only 5% (75,000 Dth/d) of Nexus capacity.

DTE ELECTRIC is petitioning the MPSC to charge their customers over \$320 million in Nexus reservation costs (20 years, 365 days per year, all the way back to the Marcellus/Utica region) for capacity they will not fully need until after 2022, if then.

IND22-5 | FERC NEEDS TO MAKE THEIR OWN DETERMINATION regarding the role of Nexus and the addition of the Milford Bypass pipeline and the Belle River Mills Compressor Station upgrade. DTE wants their ratepayers to fund 100% of these multi-million dollar projects which, in addition to a few other benefits, appear to be required to move Nexus gas to Dawn. They are in the direct path of Nexus gas from Willow to Dawn. The Michigan AG already has concerns about Milford.

I am a DTE customer and do not want my DTE utility payment to subsidize projects that unfairly benefit Nexus and their affiliates: DTE Pipeline, Spectra, Vector, Union Gas, Dawn Hub and 13 interconnects in Ohio.

Frank Zaski

Franklin, Michigan

Former work group member of the Michigan 21st Century Energy Plan, Michigan Climate Action Commission and Midwest Governors Association Renewable Energy Advisory Group.

IND22-5 Section 1.1 discusses the Project purpose and need.

INDIVIDUALS/LANDOWNERS

IND23 – James Donald Harvey

R-641

James Donald Harvey, Seville, OH.
August 8, 2016

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 first Street NE
Washington, D.C. 20426

RE: NEXUS Gas Transmission LLC Docket # CP16-22

Dear Ms. Bose:

IND23-1

As residents of the Chippewa/Ryan quadrant of the proposed NEXUS pipeline alternate route, we are deeply disturbed that the now preferred alternate route will, if pursued, slice our 110-acre farm in half, causing major issues for the 80 Arabian horses we raise and for the beef cattle that my son, John Harvey, also raises on the family farm.

IND23-2

If this plan is ultimately approved it will cause undue hardship for our Arabian horse business; our ability to sell the farm for future housing development or as a farm; our ability to sell any one of the four family homes on the property; not to mention the safety issues for our homes and those in the housing development contingent to the east side of the property; the possible contamination of our well water or disruptions to the water table. This is not a wide open area. It is an area surrounded by residential houses on three sides.

IND23-3

IND23-4

IND23-5

Other issues include disruption of crops that we grow for our own animals, which would necessitate purchasing hay and/or corn normally grown on this land; containment of the animals that graze on the entire property; and potential contamination of water the animals drink from a stream running through the property or in three lakes on the property that are stocked with fish and used for swimming.

This property, held in a Trust, has been in my family for the past 55 years. We are not giving permission for surveys or any other intrusion on our property and will join the lawsuits against this invasion by the NEXUS organization.

We respectfully request that the Federal Energy Regulatory Commission oppose and immediately stop this potential route for the NEXUS pipeline.

Sincerely,

James Donald Harvey
Owner, Harvey Arabian Horse Farm
7487-7521 Wooster Pike Road
Seville, OH 44273
330-722-7781

IND23-1

Farming and grazing would be prohibited within the work area during construction. Where necessary, landowners would be compensated for lost crop production and may need to make alternative arrangements for grazing. Following construction, impacted farm land (except certain specialty crops, such as fruit and Christmas trees) would be restored to pre-construction conditions allowing continued use of the land for farming and grazing. See section 4.9 for a more detailed discussion of land use impacts and mitigation.

Prior to construction, NEXUS shall file with the Secretary an *Agricultural Impact Mitigation Plan (AIMP)* detailing construction and restoration measures to be implemented on the NGT Project to address agricultural issues unique to Ohio and Michigan.

IND23-2

See section 4.10.8 for a discussion of potential impacts that a pipeline may have on property values and resale.

IND23-3

Pipeline safety in the proximity to residential development is a primary concern raised by many stakeholders. DOT safety standards are intended to ensure adequate protection regardless of proximity to development. The pipelines and aboveground facilities associated with the NGT and TEAL Projects must be designed, constructed, operated, and maintained in accordance with these safety standards. See section 4.13 for a discussion of pipeline reliability and safety.

IND23-4

See response IND21-4 above.

IND23-5

See response IND23-1 above.

Prior to construction, NEXUS shall file with the Secretary an *Agricultural Impact Mitigation Plan (AIMP)* detailing construction and restoration measures to be implemented on the NGT Project to address agricultural issues unique to Ohio and Michigan. For construction and restoration measures in Ohio, NEXUS shall consult with the Ohio Department of Agriculture (ODA) on construction procedures to be used in agricultural land in Ohio and shall file with the Secretary any measures that result from coordination with the ODA.

Prior to construction, NEXUS shall file with the Secretary a 5-year post-construction monitoring program to evaluate crop productivity in areas impacted by the construction of the Project. The program shall stipulate that if any landowner agrees that revegetation and crop productivity are successful prior to the 5-year requirement, NEXUS shall provide documentation in its quarterly reports indicating which landowners have agreed that monitoring is no longer necessary.

INDIVIDUALS/LANDOWNERS

IND24 – John D. Harvey

John D. Harvey
7305 Wooster Pike
Seville, Ohio 44273
July 30, 2016

ORIGINAL

CP16-22
FILED
SECRETARY OF THE
COMMISSION
2016 AUG 18 P 4:07
FEDERAL ENERGY
REGULATORY COMMISSION

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street N.E.
Washington, D.C. 20426

RE: NEXUS Gas Transmission LLC Docket # CP16-22-000
Private land owner opposition to the proposed reroute of the FERC recommended NEXUS pipeline.

Dear Ms. Bose:

My name is John Harvey and I am a property owner in Ohio and reside near the Chippewa/Ryan quadrant division of the proposed NEXUS pipeline. I am writing to express my concerns and opposition to the NEXUS proposed variation to the FERC recommended pipeline, let alone the presence of this pipeline near recently developed residential neighborhoods.

I was notified by a letter from NEXUS dated July 22nd, 2016 (first page attached below) that they would like me to sign a survey authorization so that NEXUS could enter my property to evaluate my land for pipeline construction. I did not receive this letter in my mailbox until the evening of July 27th, 2016. On July 28th, a Mr. Lowell Parlow, a Senior Right of Way Agent for NEXUS Gas Transmission, LLC showed up at my father's farm (James. D. Harvey, which is located to south of my property and also along this new route proposed by NEXUS) and asked us to sign the release paperwork for right to survey. First and foremost, I find this very unprofessional with a complete lack of respect for any property owner to be given less than one week notice to review the documents that they would like signed and then show up at the person's door one day after receipt of the letter asking them to please sign. This gives the property owners insufficient time to review the request, let alone seek counsel to protect their rights as property owners.

Secondly, for NEXUS to recommend another reroute from the route proposed by FERC shows a complete lack of disregard for the commission's proposed route concerns. With easements already in place along highways, railways, and power transmission lines, the pipeline could easily follow these paths with minimal need for further easements. Or this pipeline could be place within other pipeline corridors like ones in Wayne County, which would minimize concerns and safety of citizens along the proposed pipeline route. They are clearly going against FERC recommended pathway. Also in this proposed reroute they are saying they are avoiding forest crossings, yet this entire pipeline is going

IND24-1 Comment noted.

IND24-2 As discussed in section 3.0, we frequently evaluate alternatives that minimize the creation of new rights-of-way (i.e., greenfield routes) by routing pipelines within or adjacent to existing rights-of-way. Installation of new pipeline along an existing, cleared right-of-way (such as another pipeline, electric transmission line, road, or railroad) may be environmentally preferable to construction along a new right-of-way, and construction effects and cumulative impacts can normally be reduced by use of a previously cleared right-of-way. Likewise, long-term or permanent environmental impacts may be reduced by avoiding the creation of new right-of-way through previously undisturbed areas. Many of the route alternatives and variation evaluated in section 3.0 are partly or entirely co-located with other rights-of-way. Our recommendations for the incorporation of route variations are in section 3.4.

IND24-3 See response to comment IND24-2.

R-642

INDIVIDUALS/LANDOWNERS

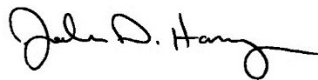
IND24 – John D. Harvey (cont'd)

IND24-3
(cont'd) across wooded areas along the 255 mile pipeline. This could be completely avoided by construction in a pipeline corridor.

IND24-4
Lastly, Mr. Lowell explained that if this new route went through the land owners would give a 50 foot easement (125 feet during construction) for construction of the pipeline. He stated that the owners would be compensated for this easement. He stated that if we did not sign the documents allowing them to survey could delay the project and cause them to incur a 17 million dollar monthly penalty if the project is not completed as scheduled. When I asked about land owner compensation for loss of property value, he stated that there would be no loss of property value due to this new pipeline. With this I would argue is a complete disregard of the truth. My property, along with my fathers and our joining neighbors, Sean and Christine McCann, are situated between two recently constructed developments built in the very southern end of Montville Township. In these developments are homes valued at \$300,000-600,000 dollars. When these developments were first started, the land was acquired at a rate of over \$11,000/acre. If this pipeline is allowed to be placed across these lands, the buildable value of these properties will be greatly diminished for multiple reasons. One is the fact that the development of these lands will be restricted by the easement since this pipe would run at an angle across all of these adjacent properties. Secondly, trying to sell buildable land to someone for construction of a new home that sits next to a high volume, high pressure transmission gas line is a detriment to the property value. So for NEXUS to say they will incur millions in losses if the line is not completed but that property owners will not lose value is quite hypocritical. No sane person would invest in a home located this close to a transmission line, as we have seen what can happen to these lines when they fail in both Pennsylvania and California.

I respectfully urge you to please require NEXUS to follow FERC recommendations, or even better have them construct this pipeline in a pipeline corridor, further away from residential developments. Please feel free to contact me about this matter at any time if you would like to discuss my and others concerns.

Sincerely,



John D. Harvey Ph.D.
7305 Wooster Pike
Seville, OH 44273
H:(330)722-7242
C:(330)687-1700

IND24-4 See section 4.10.8 for a discussion of the impacts of constructing a new pipeline on property values.

INDIVIDUALS/LANDOWNERS

IND24 – John D. Harvey (cont'd)

NEXUS GAS TRANSMISSION, LLC
P.O. Box 480
Sharon Center, OH 44274
330.952.0124 main
844.589.3655 toll free



July 22, 2016

Harvey John Douglas
7305 Wooster Pike
Seville OH 44273

Re: NEXUS Gas Transmission, LLC Proposed Project
FERC Docket No. CP16-22-000
Tract Number(s): CLA-OH-ME-0001.004
Tax Parcel Number(s): 03011C24040
Property located in: Medina County

Dear Landowner,

As you may be aware, the NEXUS Gas Transmission Project ("NEXUS") proposes to construct an approximately 255-mile interstate natural gas transmission pipeline to deliver 1.5 billion cubic feet per day (Bcf/d) of clean-burning natural gas from receipt points in eastern Ohio to increase energy supply diversity, security and reliability in the Ohio, Michigan and Ontario markets. DTE Energy Co. and Spectra Energy Corp. are the lead developers of NEXUS. NEXUS is an interstate natural gas transmission company which filed an Application in November 2015 seeking a Certificate of Public Convenience and Necessity ("Certificate") from the Federal Energy Regulatory Commission ("FERC" or "Commission") pursuant to Section 7(c) of the Natural Gas Act (15 U.S.C. §§ 717-717w). NEXUS' principal place of business is 5400 Westheimer Court, Houston, Texas 77056.

The Application specifies the proposed mainline route which includes approximately 208 miles of new pipeline in Columbiana, Stark, Summit, Wayne, Medina, Lorain, Huron, Erie, Sandusky, Wood, Lucas, Henry, and Fulton Counties, Ohio; and approximately 47 miles of new pipeline in Lenawee, Monroe, Washtenaw, and Wayne Counties, Michigan. The Project also includes the construction of four new compressor stations in Columbiana, Medina, Sandusky, and Lucas Counties in Ohio. The Project will provide transportation services through facilities that are safe, efficient, and capable of being operated and maintained with effects on the environment that can be adequately mitigated. Upon receipt of Commission approval for the Project, NEXUS anticipates construction to commence in early 2017 with Project facilities completed and placed in service by November 2017.

To date, FERC has conducted public scoping meetings on potential environmental impacts associated with the route proposed by NEXUS and to allow interested parties an opportunity to comment on NEXUS' proposed application. On July 8, 2016, FERC issued a Draft Environmental Impact Statement (DEIS) as a part of the agency's formal review of the Project in order to evaluate potential environmental impacts of the Project. Up until now, neither FERC nor NEXUS has contacted you because your property is not located along the NEXUS preferred route as filed with FERC. In the DEIS, however, FERC has directed NEXUS to review certain minor Route Variations which would route the pipeline through your area and could affect your property should it be adopted (*see attached maps*). You are receiving this letter because your property is within the study corridor being considered for one of the NEXUS Route Variations.

www.nexusgastransmission.com

R-644

INDIVIDUALS/LANDOWNERS

IND25 – Douglas Schwall

Douglas Schwall, North Canton, OH.

IND25-1 I wish to go on record as being adamantly opposed to the proposed route of the Nexus natural gas transmission pipeline through the city of Green in Summit county, Ohio. The city of Green has documented an array of negative economic and environmental impacts to the city and its residents and
IND25-2 has offered an alternative southern route that greatly minimizes or eliminated the adverse result of constructing and maintaining a pipeline of this magnitude through this segment of Summit county. I urge the FERC to carefully consider the alternative southern route proposed by the City. It seems clear that this alternative route presents the opportunity to provide the necessary means of transporting natural gas where needed without severely impacting the resident in particular and the city of Green in general.

IND25-1 See section 3.3.3 for a discussion of the City of Green Route Alternative. Based on our review, we did not find the City of Green Route Alternative provides a substantial environmental advantage when compared to the corresponding segment of the proposed route and did not recommend that it be incorporated as part of the Projects.

IND25-2 See response to comment IND25-1.

INDIVIDUALS/LANDOWNERS

IND33 – Cynthia Bailey

IND33-1

Cynthia Bailey, North Canton, OH.

I am opposed to the nexus pipeline, in or near my property or anywhere in Green for that matter. For the obvious environmental consequences, socio-economic health and the safety concerns that that type of pipeline presents. It is not in the best interest of my community or the property owners to have it here. Stay off my property!

IND33-1 Comment noted.

INDIVIDUALS/LANDOWNERS

IND37 – Dave Nichols

IND37-1

Dave Nichols, Whitehouse, OH:

I live along Swan Creek in Whitehouse Ohio. A couple of years ago I wanted to add some stone along the creek bed which runs through my property. It took me six months to get the needed approvals through Fish and wildlife and Army Corp of Engineers. As it turns out, Swan Creek is home to five (5) species of fresh water mussels, one of which is on the endangered list and the other four are on the watch list. These creature are extremely sensitive to any environmental changes including chemical and noise. If the concern for our residents and children is not enough, maybe this will have some impact on the decision. has this issue been brought up or looked into?

Dave Nichols

Whitehouse Ohio

nicholsdc@roadrunner.com

IND37-1

Extensive field surveys conducted for protected mussel species in 2015 and 2016 along the Project route. See section 4.8.1.1 for a discussion of protected mussel species.

INDIVIDUALS/LANDOWNERS

IND40 – Paul Wohlfarth

Paul Wohlfarth, Ottawa Lake, MI.
Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE Washington, DC 20426-0001
RE: Docket Number —CP 16-22-000 —NEXUS Gas Pipeline Project
Dear Ms. Bose,

Please join me in NOT supporting the approval of the NEXUS pipeline which will help bring no local pipeline jobs and will bring energy exports to our county while contributing to climate change. Many groups such as the Waterville Chamber of Commerce as well as local elected officials have voiced their skepticism for this unneeded infrastructure project. I agree with these groups that NEXUS will provide substantial environmental pollution to counties like ours in addition to maintaining exporting our finite resource, creating more demand making this resource less affordable. The economic impact of this project is significant, and one of the largest investments in Lucas County —bringing industrialization to the Oak Openings recreation area. In addition, our Anthony Wayne schools will be showered in pollutants making it a cancer hotspot for our children. No amount of tax revenue is worth that! In addition to the temporary economic benefits, this pipeline will also ensure a reliable supply of U.S. produced natural gas to Canada and beyond, raising prices through increase demand, providing unaffordable energy insecurity for Lucas County. While doing so, this pipeline will be continuously monitored with the latest safety remote controls from Texas, such as remote control shutoff valves to make sure Spectra Energy Texas workers are protected from the toxic Waterville compressor station releases. Approving this pipeline is nonsense, and I urge you to protect the environmentally rare area of the Oak Openings for future generations.

Sincerely,
Paul Wohlfarth

- IND40-1 See section 4.10.9 for a discussion of economic and tax revenues associated with the Project. This section also discloses the number jobs and total economic impacts of the project long-term during operations.
- IND40-2 Section 1.1 provides a discussion of the purpose and need for the Projects.
- IND40-3 See the response to comment FA2-34.
- IND40-4 Land uses in most locations would be allowed to revert to previous use. See sections 4.5.1, 4.6.1.1, and 4.6.3 for a discussion of the Oak Openings Region.
- IND40-5 See the response to comment CO8-17.

INDIVIDUALS/LANDOWNERS

IND51 – Maggie Kantola

Maggie Kantola, Ypsilanti, MI.

IND51-1 I urge you to reconsider the Nexus Pipeline. It is slated to be constructed near my home and my

IND51-2 infant daughter's daycare center and nearby schools. My family and I are very concerned about

our home value depreciating as a result of this project. If it must go through, please consider re-

routing the placement to prevent potential problems in residential areas.

IND51-1 Comment noted.

IND51-2 See section 4.10.8 for a discussion of potential impacts to property values.

INDIVIDUALS/LANDOWNERS

IND52 – Dawson G. Alsdorf

R-650

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Dawson G. Alsdorf
5053 Millersburg Road, Wooster, Ohio 44691
216-256-8971 jalsdorf@outlook.com

August 10, 2016

Kimberly D. Bose, Secretary
Nathaniel J. Davis, Sr., Deputy Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, D.C. 20426

Documents. CP 16-22-000, CP16-23-000,
CP16-24-000, CP16-102-000

Ref: Federal Energy Regulatory Commission
Draft Environmental Impact Statement
Nexus Gas Transmission Project and
Texas Eastern Appalachian Lease Project

Dear Ms. Bose and Mr. Davis,

I have degrees in agronomy (soils, conservation and crop production) from the Pennsylvania State University and the Ohio State University. And I was involved in the development of the Ohio State University's Agricultural Technical Institute, an applied technology college located in Wooster, Ohio. I have modeled farm technology, improved crop production yields and implemented conservation practices on my farm over the past forty three years.

The above is mentioned only to introduce the very significant impact the construction of the Nexus Gas Transmission Pipeline will have on the future productivity and stability of the soils through which it passes. It will cause extensive environmental damage in the soil. And the cost to return the soil to its original condition cannot be forecast. It will depend on the contractors' skills, the weather and everyone's commitment to reduce the soil compaction. Construction of this magnitude can require a minimum of more than 20 years to return the soils to their current level of production. This is not a restoration that can be done by equipment, materials, etc. and it only reflects on the limited knowledge of those who think this is possible. In many cases the more a human tries, the worse he makes it.

Some of Nexus' statements for their handling of the soils are very counterproductive. They compact the soil more and destroy the habitat for any living matter. Soils are nature's creation

IND52-1

See section 4.2.2 of the EIS for a discussion of general impacts and mitigation to soils. Construction and operation of the NGT and TEAL Projects would have some impacts on soil resources, most of which would be temporary. Prior to construction, NEXUS shall file with the Secretary an *Agricultural Impact Mitigation Plan (AIMP)* detailing construction and restoration measures to be implemented on the NGT Project to address agricultural issues unique to Ohio and Michigan. Specifically, the *AIMP* should address plans for segregating topsoil in areas where the depth of topsoil is greater than 12 inches; triple stripping topsoil, subsoil, and substratum; and ensuring that excess spoil removed from the right-of-way during backfilling consists of substratum, and then, if needed, subsoil. For construction and restoration measures in Ohio, NEXUS shall consult with the Ohio Department of Agriculture (ODA) on construction procedures to be used in agricultural land in Ohio and shall file with the Secretary any measures that result from coordination with the ODA. Any comments received from ODA shall also be filed with the Secretary.

Prior to construction, NEXUS shall file with the Secretary a 5-year post-construction monitoring program to evaluate crop productivity in areas impacted by the construction of the Project. NEXUS shall include in the program a commitment to file with the Secretary quarterly reports for a period of 5 years following construction documenting any crop-related problems and describing any corrective action taken to remedy those problems. The program shall stipulate that if any landowner agrees that revegetation and crop productivity are successful prior to the 5-year requirement, NEXUS shall provide documentation in its quarterly reports indicating which landowners have agreed that monitoring is no longer necessary. This documentation shall include the landowner name, tract number, and the date of agreement.

IND52-2

General impacts and mitigation for soils is discussed in section 4.2.2 and the applicants' *E&SCPs*.

IND52-3

See sections 4.2.1.4 and 4.2.2 for a discussion of compaction prone soils and proposed mitigation measures.

Prior to construction, NEXUS shall file with the Secretary an *Agricultural Impact Mitigation Plan (AIMP)* detailing construction and restoration measures to be implemented on the NGT Project to address agricultural issues unique to Ohio and Michigan.

Prior to construction, NEXUS shall file with the Secretary a 5-year post-construction monitoring program to evaluate crop productivity in areas impacted by the construction of the Project. NEXUS shall include in the program a commitment to file with the Secretary quarterly reports for a period of 5 years following construction documenting any crop-related problems and describing any corrective action taken to remedy those problems.

INDIVIDUALS/LANDOWNERS

IND52 – Dawson G. Alsdorf (cont'd)

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FERC DRAFT ENVIROMMENTAL STATEMENT-- NEXUS GAS TRANSMISSION PIPELINE

IND52-3 (cont'd)) and it has taken many years to develop the porosity required for good production. Soils cannot be moved without compacting them.

IND52-4 Soils are a dynamic. The impact of trenching would have much the same impact as a giant tornado above ground. The scars will remain, sometimes forever. Nothing man can do above ground will totally erase the giant trail of the wind's destruction. The same is true for the destruction done by trenching. The damage to the soil and loss of productivity for the farmer would mirror the above ground damage of the tornado.

There is absolutely no way that man can restore the soil to its prior condition. The digging of the ditch and running over it with heavy construction will cause compaction of the soil.

Soils vary, sometimes over very short distances. They were created by nature over very long periods of time. Important Terminologies:

SOIL TEXTURE-the inorganic particles of sand, silt and clay. Soils vary in their percentage of each of the particles.

1. Sand-the largest size particle, which is easily recognized by the naked eye, is important for soil drainage.
2. Silt-much smaller in size. Could be microscopic. Important for the formation of soil aggregates.
3. Clay-very small in size, microscopic, flat shaped particles. Function in the soils nutrient holding capacity to support growth.

MICROBES-very small, living micro-organisms, mainly single cell. Very instrumental in the decay of any former living materials. Productive soils will have more living organisms than there are people in the world. These organisms provide the plant roots with nutrients and are also instrumental in forming the soil aggregates. (Defined below)

ORGANIC MATTER-all carbon containing material in the soil originating from the decomposition of former living plant, animal or microbial material. Range in size from invisible single chain carbon molecules to decomposing plants and animals. Important to providing plants with nutrients and in the formation of plant aggregates.

SOIL STRUCTURE-the formation of the sand, silt, clay and decomposed organic matter into aggregates.

AGGREGATES-the porous macro and micro combinations of sand, silt and clay held together by the carbon chains from microbes and decaying organic matter.

BULK DENISITY-total weight of a given volume of any soil. Productive soils are comprised of 50% solid, physical materials and 50% air space (micro and macropores)

IND52-4 See sections 4.2.1.4 and 4.2.2 for a discussion of compaction prone soils and proposed mitigation measures.

Prior to construction, NEXUS shall file with the Secretary an *Agricultural Impact Mitigation Plan (AIMP)* detailing construction and restoration measures to be implemented on the NGT Project to address agricultural issues unique to Ohio and Michigan.

Prior to construction, NEXUS shall file with the Secretary a 5-year post-construction monitoring program to evaluate crop productivity in areas impacted by the construction of the Project. NEXUS shall include in the program a commitment to file with the Secretary quarterly reports for a period of 5 years following construction documenting any crop-related problems and describing any corrective action taken to remedy those problems.

INDIVIDUALS/LANDOWNERS

IND52 – Dawson G. Alsdorf (cont’d)

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FERC DRAFT ENVIROMMENTAL STATEMENT-- NEXUS GAS TRANSMISSION PIPELINE

- 1. Macropores—visible air space in the soil. Important for drainage and aeration.
- 2. Micropores-provide the air space in and between the aggregates allowing the tiny root hairs of a plant to get nutrition, through cation exchange capacity with the clay and organic matter. These micropores also hold the water necessary for plant uptake. Example: A productive yield of corn requires 20 to 25 inches of water. Normal rainfall during the growing season is 15-18 inches. Some of that just runs through the maropores and drains from the soil. The balance of the water needed comes from the micropores.

IND52-3 (cont'd) The critical damage done by ditching and running over the soil with heavy equipment is COMPACTION. The soils bulk densities are dramatically reduced. This pore space created by nature over long periods of time provides a direct contact between the plant roots and the soil surface. It allows for the plants to breathe via their root hairs-- it is their source of air and water.

COMPACTION cancels this direct exchange of air for the plant roots. Plant roots suffocate. Without the communication with the soil surface, the plant roots do not get the required amount s of water to facilitate the cation exchange with the soil particles. Nor do they have the water to sustain their existence. So they suffocate and dry up.

Only nature can completely restore these soils to provide them with macropores and micropores that connect to the above the ground atmosphere for air and water.

IND52-5 The traffic over the soil along with the ditching will have a major impact on the yields of any agronomic crop. Any reimbursement offered by Nexus will in no way offset the losses.

Your very careful study before granting the Nexus easement would be very much appreciated. The pipeline will be destructive to nature and will steal monies from the farmer.

Sincerely,

Dawson G. Alsdorf

IND52-5 As specified in NEXUS' *Erosion and Sediment Control Plan (E&SCP)*, revegetation shall be considered successful in agricultural areas when upon visual survey, growth and vigor are similar to adjacent undisturbed portions of the same field, unless the easement agreement specifies otherwise. As discussed in section 4.9.3, an easement agreement between a company and a landowner typically specifies compensation for losses resulting from construction, including losses of resources and damages to property.

Prior to construction, NEXUS shall file with the Secretary a 5-year post-construction monitoring program to evaluate crop productivity in areas impacted by the construction of the Project. NEXUS shall include in the program a commitment to file with the Secretary quarterly reports for a period of 5 years following construction documenting any crop-related problems and describing any corrective action taken to remedy those problems.

INDIVIDUALS/LANDOWNERS

IND53 – Rich Potter

R-653

	rich potter, Waterville, OH.
IND53-1	I am writing this comment regarding the Nexus pipeline project, FERC docket # CP16-22-000 ("pipeline") and to express my concerns that the pipeline and the compressor station will have an extremely negative and devastating impact on my community and my property. This comment states substantial reasons why the pipeline should be re-routed to an area that is less densely populated.
IND53-2	The pipeline will be going through a densely populated area of approximately 18,000 people according to the 2010 census for the 3 primary zip codes that comprise the cities of Waterville and Whitehouse and the village of Monclova. This area, commonly known as the Anthony Wayne area, is also the name of the school district serving these cities and surrounding areas and named after General Mad Anthony Wayne, a local icon and the leader of the Battle of Fallen Timbers, the site of which is just northeast of the pipeline route.
IND53-3	Health – Studies have shown that emissions from compressor stations have led to long-term health problems in the populations surrounding these stations. The proposed site of the compressor station is approximately 2.5 miles from the Finzel Road main campus of the Anthony Wayne local school district, a district with approximately 4,400 students. In addition there is a nursing home and assisted living facility, Browning Masonic, less than 2 miles from the site. There are 2 other nursing homes within the radius of the site that will be impacted by the emissions. The prevailing winds blow from west to east and the emissions will be blown straight into the city of Waterville with 7,600 residents. Furthermore, the contaminants that may reach the water table from the excessive blasting and clearing of land and the effects of "de-watering" of the immediate areas surrounding the pipeline path will most certainly result in health issues from bacterial and other contaminations. I am requesting that FERC perform a study on the health impact of the area within 5 miles of the site.
IND53-4	
IND53-5	
IND53-6	Water – I am especially concerned about water safety along the path of the pipeline. My understanding is that Nexus will have to "de-water" the areas along the pipeline. This causes me grave concern given the fact that my well is the only source of water to me and my neighbors. There are numerous residential wells along and near the path of the pipeline and the blasting and digging that will occur in order to bury the pipeline will have an impact on the water table. I have lived in my home for 13 years with absolutely no issues with the well and its water, and the proposed path of the pipe is 400 yards from my home. I obviously have no
IND53-7	alternate access to water should the water become polluted or unusable in any way. I would like to know if Nexus will reimburse me for the cost of obtaining water through alternate means if their pipeline results in any alteration of water quality or pressure from the baseline that currently exists? Nexus must be compelled to provide me and all the residents along the pipeline route with access to municipal water sources if our water is changed in any way as a result of their impact on the fresh water table. FERC should study the effects of water
IND53-8	alteration to residential wells along the path of the pipeline and issue detailed "de-watering" plans to residents along the path of the pipeline. In addition, should this be approved by FERC,
IND53-9	I would like FERC to legally obligate Nexus, et al to provide good, clean water to any residents affected by the "de-watering" and its impact on the fresh water table. I personally do not have

IND53-1	Comment noted.
IND53-2	Fallen Timbers Battlefield is approximately 4.2 miles north of the proposed route.
IND53-3	See the response to comment CO8-17.
IND53-4	See section 4.3.1.2 for a discussion of impacts and mitigation relating to groundwater resources. Section 4.3.2.2 presents mitigation procedures in the event that blasting is required. Any blasting will adhere to mitigation procedures presented in the <i>Blasting Plan</i> for the Project.
IND53-5	See the response to comment CO8-17.
IND53-6	See section 4.3.1.2 for a discussion of mitigation procedures for groundwater resources including water supply wells.
IND53-7	See section 4.3.1.2 for a discussion of impacts and mitigation procedures for groundwater resources including water supply wells.
IND53-8	See section 4.3.1.2 for a discussion of impacts and mitigation procedures for groundwater resources including water supply wells.

INDIVIDUALS/LANDOWNERS

IND53 – Rich Potter (cont'd)

R-654

the resources to pay for a water link-up to a municipal water source or to pay for large tanks of water to be stored on my property.

- IND53-10 Safety – The compressor proposed site is located in Waterville township. The safety forces in that area are generally staffed by volunteers. The nearest fire and ems station is approximately 5 miles by road from the Whitehouse, Waterville, and Providence locations. There are many households within the accident zone of the compressor site which would overwhelm fire & rescue alone. And the safety of the area residents is further compromised by the time delay resulting in greater loss. In addition the site is located just south of the US 24 by-pass which is a main highway from Toledo, Ohio to Fort Wayne, Indiana. An accident at the compressor site may shut down a vital roadway. Also, according to the Nexus Proposed Mainline Pipeline document, the pipeline will be running parallel to large electrical powerlines beginning around Schadel Road and extending into Waterville. I am concerned about the safety effects if a pipeline accident occurs next near the powerlines resulting in exposed powerlines, a tower failure, and also a potential long-term loss of power for the surrounding areas. We have had power outages due to weather in the past and the response time from Toledo Edison has ranged from very quick to over 15 hours in June, 2015. Will any power outages affect the greater populations in Toledo, Maumee, Perrysburg, etc.?
- IND53-11
- IND53-12

- IND53-9 See section 4.3.1.2 for a discussion of impacts and mitigation procedures for groundwater resources including water supply wells.
- IND53-10 Table 4.10.5-1 lists the number and distance to local fire departments, hospitals and police/sheriff departments in counties affected by the projects. Section 4.10.5 and 4.13 address local emergency response, including DOT requirements to develop emergency response plans in coordination with state and local officials. These emergency procedures would provide for adequate means of communication, notification, and coordination with appropriate fire, police, and other public officials, as well as for the availability of personnel, equipment, tools, and materials needed to respond to an emergency.
- IND53-11 Section 4.13.1 states that NEXUS would be required to work with first-responders to coordinate response efforts. NEXUS would periodically conduct emergency drills to test staff readiness and identify areas of improvement. In the event that a compressor station accident results in roadway closure, NEXUS would make the necessary repairs if it is found to be the responsible party.
- IND53-12 A pipeline incident could potentially result in exposed power line wires and/or loss of power if power lines were directly impacted. As discussed in section 4.13.1, NEXUS and Texas Eastern would work implement an emergency response plan and work with emergency responders, as required by 49 CFR 192 to minimize the impacts associated with a pipeline incident. Determining whether a power outage would occur, to what extent, and for how long depends on various factors and would be highly speculative.

INDIVIDUALS/LANDOWNERS

IND54 – Holly Potter

R-655

holly potter, Waterville, OH.

- IND54-1 Economic – The economic impact of the pipeline and compressor station will be devastating to the area. In addition to a 25%+ decrease in property values, the local municipalities will struggle to maintain populations as news spreads that these areas are experiencing health problems and safety issues from the pipeline and compressor station. Residents will not be able to sell their homes, e.g. baby boomers, which will further depress property values and
- IND54-2 economic distress. Waterville is experiencing retail growth around the St. Rt. 64-US 24 interchange with Kroger leading the way and a Meijer store planned in the future. This economic growth will stop as population demographics change as a result of the pipeline issue.
- IND54-3 The result of the loss of the property values and the stagnant, possibly negative, economic growth (or contraction) will be a reduction in the county real estate taxes that provide support to the Anthony Wayne local school district and Lucas County itself. The school district receives approximately 63% of their revenues from real estate taxes and is forecasted to reach 65% by 2020 (AW 5 year forecast dated 10-2015). A 25% reduction in property value, while not dollar for dollar, would result in a budget deficit of approximately \$6.0 million results in a drastic scaling back of teachers, programs, and a general decrease in education quality for Anthony Wayne schools. In 2013, Forbes Magazine rated AW schools as one of the top 20 school districts in the NATION when considering academic performance and local home values. This spiraling effect of economic contraction will feed upon itself and result in the loss of a once vibrant, growing community with excellent schools.
- IND54-4 Natural Resources - The area is rich in natural resources and possesses the Maumee Forest, the Oak Openings Region, and public park system, the Toledo Metroparks, which includes Oak Openings Metropark (the largest park in the Metropark system) and Farnsworth Metropark, that the pipeline is running directly through. The scars that the pipeline and its surrounding easement zone will leave in these beautiful natural wonders will be with us forever. In addition, the safety of the patrons that use these parks is of utmost concern as these parks draw people from the surrounding communities and also from the greater Toledo area. The park system is a natural and year-round economic resource for this area and continues to expand. The Blue Creek Conservation Area was recently added and is located just ¼ mile north of the pipeline route. This is also the site of Nature's Nursery, the region's wildlife rehabilitation center. According to a survey conducted by the Metroparks, about half of Lucas County residents say they visit a Metropark at least once a month, and almost 70 percent say they visit four to 11 times per year. Nearly 3 million people passed through the gates of the Metroparks in 2013. Furthermore, 94 percent said the Metroparks improve the quality of life in our community; 90 percent said the park system contributes to the overall health of individuals; 87 percent said the parks contribute to water and air quality; 82 percent agreed that they help recruit and retain visitors, businesses and residents and are important to economic development; 82 percent also said that supporting Metroparks is an investment in property values.
- Each one of the reasons indicated above does not exist in a vacuum by itself. A fatal blow to one area will most certainly impact the others. I respectfully request that FERC take into consideration that the whole is greater than the sum of the parts and the decision should be

- IND54-1 See section 4.10.8 for a discussion of potential impacts to property values.
- IND54-2 See section 4.10.3 for a discussion on population baselines in the study area as well as Project related impacts on study area populations due to influx of non-local workforce.
- IND54-3 Section 4.10.8 discusses potential impacts to property values. Section 4.10.9 describes the economic benefits of the NGT and TEAL Projects in the form of payroll and tax revenues.
- IND54-4 See section 4.9.7.3 for a discussion on Metroparks (Farnsworth Metropark and Towpath Trail). Both metroparks would be crossed using the HDD method, and recreational uses of the park and trail would not be affected by operations. See sections 4.5.1, 4.6.1.1, and 4.6.3 for a discussion of the Oak Openings Region. The Blue Creek Conservation Area (Blue Creek Park and Nature's Nursery) are located about 1.2 miles north of MP 185. The NGT Project will not impact Blue Creek Park or Nature's Nursery. Section 4.13 addresses safety impacts associated with the proposed Project.

INDIVIDUALS/LANDOWNERS

IND54 – Holly Potter (cont'd)

IND54-5 | made from a holistic point of view. The pipeline should be re-routed to a less densely populated area for the reasons given above.

IND54-5 Comment noted.

INDIVIDUALS/LANDOWNERS

IND55 – Carolyn Hamrick

Carolyn Hamrick, W. Salem, OH.

- IND55-1 Re. "City of Green Route Alternative" (Ohio). We stand in opposition to the Alternative Route and its imposition upon our property. This is a working farm and the proposed alternative route would cross our property and impact our livelihood. Additionally, we do not agree to selling one parcel of land from the property to accommodate any part of this pipeline, nor do we want to be anywhere within a 5-mile radius of any compressor station, and its allowable carcinogenic pollutants. Such a project has the potential to create health and safety hazards, devalue our property, infringe on the farm and aggravate current health issues of the occupants of our home.
- IND55-2
- IND55-3 We have not seen ANY public comment meeting scheduled for areas that would be affected by the proposed Route Alternative, such as Homerville or West Salem, Ohio -- only meetings scheduled in areas opposed to the original route. We have received NO detail as to the exact Route Alternative (map which was provided is unclear) nor any proposed compressor stations along the Route Alternative. We do know that it would require a section of our property, if approved. We are unwilling to sell any portion of our property to allow such a project. We would live in a town industrialized zone if we wanted our home located amidst private, for-profit polluting enterprises, specifically the NEXUS pipeline. We say NO to the Green Route Alternative.

- IND55-1 Comment noted. Based on our review, we did not find the City of Green Route Alternative provides a substantial environmental advantage when compared to the corresponding segment of the proposed route and did not recommend that it be incorporated as part of the Projects.
- IND55-2 See response to comment IND55-01.
- IND55-3 See response to comment IND55-01.

INDIVIDUALS/LANDOWNERS

IND69 – Miriam A. Connolly

IND69-1

IND69-2

IND69-3

Miriam A Connolly, ypsilanti, MI.

Our home is the closest home on the proposed placement of this gas pipeline. Our family is vehemently opposed to this project. We woke up today to find stakes less than 30 feet from our home, where we sleep! When we purchased our home in 2010, we were told that the land behind it, containing swans, a pond and other wildlife was protected land and would not be disturbed. We wouldn't have bought this home if 7 years later, we would be sleeping directly next to a gas pipeline. We are citizens who pay taxes, follow the law and now we are being told that we can do nothing but send an email. This line is in my yard, next to my children's school and I have no recourse as a homeowner or a human being or a family?! I'm originally from Flint and have seen government officials discount the lives of voters and taxpayers and human beings.

This pipeline would not be in place if it were in the very yards of their homes, threatening their lives, water, or children. I am an educated woman but I cannot put into words how victimized and helpless this makes our family feel. I do know that if there is anything that goes awry with this pipeline, there is no escape for our family or for the children located in the school directly next to it. We know that our concerns are not just unreasonable fears. Neighborhoods have been destroyed and people have died, water has been impacted, wildlife has been displaced and land destroyed. Human beings!!!! we deserve the right to make real decisions about our home and our safety!

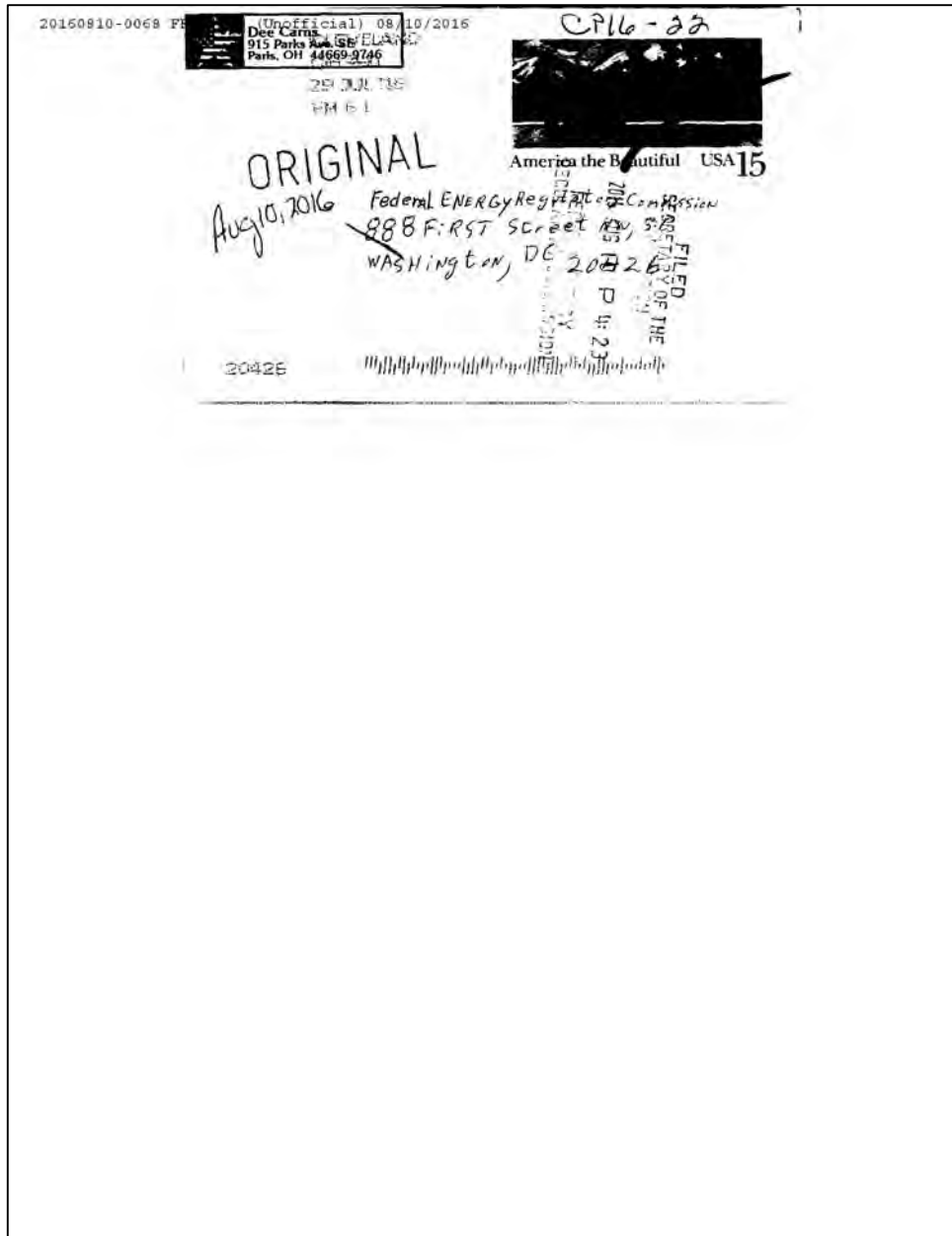
- IND69-1

IND69-2

IND69-3
- Residential impacts and mitigation are discussed in section 4.9.4.1. Structures within 50 feet of the construction workspace are listed in appendix K-2.

Residential impacts and mitigation are discussed in section 4.9.4.1. Structures within 50 feet of the construction workspace are listed in appendix K-2. Section 4.13 addresses safety impacts associated with the proposed Project.

Section 4.13 addresses safety impacts associated with the proposed Project.

IND78 – Dee Carns

INDIVIDUALS/LANDOWNERS

IND78 – Dee Carns (cont'd)

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IND78-1

YOU SENT ME A CD (DOCKET NO. CP16-22-000)
I DO NOT HAVE A COMPUTER COULD YOU SEND ME
A HARD COPY ON PAPER AND ANY OTHER INFO
ON WHAT THIS IS ABOUT
AND A PHONE NUMBER
FOR QUESTIONS. THANK YOU

D. CARNS
915 PARKS AVE. SE.
PARIS OH: 44669

IND78-1 Comment noted.

INDIVIDUALS/LANDOWNERS

IND79 – Annette Gilson

annette gilson, rochester hills, MI,

IND79-1 | I am writing in opposition of the Proposed NEXUS natural gas pipeline, docket # CP16-22-000, due to the vast negative environmental threats it poses. We all know that many pipelines spill oil and gas regularly. Our community wants to support clean alternative energy to invest in a future that doesn't pollute the planet and our communities.

IND79-2 |

Thank you,

IND79-1 Section 4.13 addresses pipeline reliability.

IND79-2 Comment noted.

INDIVIDUALS/LANDOWNERS

IND80 – Brian Chidsey

R-662

Brian Chidsey, Medina, OH,

IND80-1

I wish to comment about the proposed NEXUS pipeline that is proposed to cross my church's property, Chippewa Lake Baptist Church at 5326 Chippewa Rd, Medina, OH 44256. The proposed route is just 50' in front of our "Tabernacle". It is an open air building that is used for children programs every Wednesday evening during the summer along with our "Camp Chippewa" which is a weeklong children camp where we have over 50 children from the community attend every August. The children play on the land right where this proposed route would go.

IND80-2

A little over a year ago we were first approached by NEXUS about the pipe line. At that time someone came to our church and spoke with our Pastor. Our Pastor expressed a concern about the safety of the children. At that time this person stated this would be taken into consideration and if possible the pipeline would cross along the back side of the property. It appears to me that NEXES has no regard with our 1st amendment right or our children's safety but just wants to put this pipeline wherever it is convenient to them.

Respectfully,

Brian Chidsey

IND80-1

Section 4.9.7.4 discusses impacts to Chippewa Lake Baptist Church. Following construction, the church property would be restored, and areas outside of the permanent right-of-way would be returned to pre-construction conditions in accordance with NEXUS' *E&SCP*. Section 4.13 addresses safety impacts associated with the proposed Project.

IND80-2

Section 4.9.7.4 discusses impacts to Chippewa Lake Baptist Church. Following construction, the church property would be restored, and areas outside of the permanent right-of-way would be returned to pre-construction conditions in accordance with NEXUS' *E&SCP*. Section 4.13 addresses safety impacts associated with the proposed Project.

INDIVIDUALS/LANDOWNERS

IND81 – Hans A Wittrock

IND81-1

IND81-2

Hans A Wittrock, Shelby Twp, MI.

I am writing to oppose the Proposed NEXUS natural gas pipeline, docket # CP16-22-000, because many pipelines spill oil and gas regularly, which destroys the ecosystems around such disaster sites. Rehabilitating these disaster sites puts additional strain on government funds and resources that could be used elsewhere. Our community wants to support clean alternative energy to invest in a future that doesn't pollute the planet and our communities.

<http://www.ferc.gov/docs-filing/ecomment.asp>

- IND81-1

IND81-2
- Section 4.13 addresses pipeline reliability.

Comment noted.

INDIVIDUALS/LANDOWNERS

IND82 – Nicole Minard

IND82-1

IND82-2

IND82-3

IND82-4

Nicole Minard, Milan, MI

I want to voice my opinion on the Nexus Pipe Line. I know that the little people may have no opinion in the eyes of big corporate money and making big money for towns. But the Nexus Pipe Line is bad for everyone. It may have some positive because of money. But for one second instead of putting money first put the planet and other living beings first. If a pipe burst, the impact on the environment and living beings will be in danger, or lead to eventual cancer and death and other very serious detrimental issues. The land will be useless. People and animals will be sick and dying. Finding renewable sources for energy is a better option. We need to find better ways for energy instead of destroying the environment with fracking and pipes. The selfishness that the cities have shown and the careless for it's people and land... It will cause people to leave. It will cause people who care about their wellbeing to leave. It will make others inform the public about this and the cities population will dwindle. I hope that things will work out for the best. But I honestly don't hold out much hope for greedy humans who only think of profit in the end.

- IND82-1
- Comment noted.
- IND82-2
- Section 4.13 addresses safety impacts associated with the proposed Project.
- IND82-3
- Comment noted.
- IND82-4
- Comment noted.

INDIVIDUALS/LANDOWNERS

IND83 – Ellery J. Langkamp, Greer M. Kabb-Langkamp, Carl Langkamp

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ELLERY J. LANGKAMP
GREER M. KABB-LANGKAMP

465 Comet Lane
Clinton, OH 44216
330-882-5053
Fax: 330-882-5053

Email: sunsale465@gmail.com
gmkabb@gmail.com

August 10, 2016

Nathanial J. Davis, Deputy Secretary
Federal Energy Regulatory Commission
888 First St. NE, Room 1A
Washington, DC 20426

RE: Nexus Gas Transmission LLC
Docket # CP16-22-000
Nexus Pipeline Project

We are writing to emphasize our support for FERC's recommendation to Nexus to "make minor route adjustments and realignments to the City of Green Route Alternative in order to minimize impact on residences, forests and other environmental resources."

- IND83-1 | **We strongly support the City of Green Alternate Route as it is a much safer corridor for the Nexus Pipeline.** We own property at the southeast segment of Nimisila Reservoir. Nimisila Reservoir is known for its pristine condition, with gas motors prohibited lest the fishing and birding opportunities be corrupted by the toxins emitted from the gas motors. Now Nexus
- IND83-2 | is planning to tear up the land close to the reservoir to construct a 36 inch round pipeline which, if it were to explode, would essentially kill all fish and fowl within a half mile radius at least! Even the construction efforts would harm the environment surrounding the reservoir and its inhabitants and the Nimisila Creek watershed. Nexus states it would be digging down "ONLY 7 to 10 FEET" which supports our concerns for the safety of the pipeline specifically in the southwest corner of the City of Green and Summit County for the following reasons:
- IND83-3 |
 - **The plan is to dig between TWO CLASS I DAMS – with the potential for significant damage to both Comet Lake & Nimisila Reservoirs in addition to the damage to homes and lives. This pipeline is less than 1000 feet between these dams and would**

- IND83-1 | Comment noted. Based on our review, we did not find the City of Green Route Alternative provides a substantial environmental advantage when compared to the corresponding segment of the proposed route and did not recommend that it be incorporated as part of the Projects.
- IND83-2 | Comment noted. See section 4.13 for a discussion of pipeline reliability and safety. See sections 4.5, 4.6, 4.7, and 4.8 for a discussion of potential impacts on vegetation, wildlife, fisheries, aquatic resources, and special status species.
- IND83-3 | See discussion in section 4.3.2.2 that describes mitigation procedures to minimize or avoid impacts to surface waters. Construction and operation of the Project are expected to have no impact on dams.

R-665

INDIVIDUALS/LANDOWNERS

IND83 – Ellery J. Langkamp, Greer M. Kabb-Langkamp, Carl Langkamp (cont'd)

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- IND83-4 • **decimate the area!** All of the residents in our neighborhood depend on well water and septic systems. The construction of the pipeline in close proximity to these properties could compromise the integrity of the private water wells and septic systems.
- IND83-5 • All properties within the blast range as well as the Nimisila Metro Park property would be demolished if an explosion were to occur as well as creating havoc for the birding and fishing in the area. Nimisila Reservoir is home to the migratory pattern of the Purple Martins, of which the Portage lakes area (including New Franklin) is the designated Purple Martin capital of Ohio. Nimisila is also home to many other migratory birds, water resources and Category 3 wetlands. *Per your own report "Wetlands that are assigned to Category 3 have "...superior habitat, or superior hydrological or recreational functions"*
- IND83-6
- IND83-7
- IND83-8 • During construction AND in the event of an explosion, there would be **NO EXIT** from Comet Lane OR Noreast Road. Both are dead end lanes at the S curve of Comet Road, with no access to ingress or egress in the case of an emergency. Rescue teams would be unable to save the residents or their property on these two roads, especially because the two dams would also collapse. Many residents in the area are senior citizens and would perish as a result.
- See the devastation that occurred recently in Pennsylvania from a 36 inch ruptured pipeline:
<http://www.ohio.com/news/nation/local-activists-demand-reform-after-pennsylvania-natural-gas-pipeline-explodes-1.679358>
- IND83-9 We share Summit County and the City of Green's opposition to this pipeline construction so close to homes, schools and businesses when a viable option exists. Summit County is the third densest county in the State of Ohio, making the construction of a pipeline through it an illogical and highly dangerous proposition, with no consideration on Nexus' part to the hazards to both humans and the environment. According to recent documents Nexus has made MINOR changes which will do little, if anything to minimize the trauma to the environment and economic growth of our community. We urge you to review the presentation prepared by the City of Green which highlights the many problems should the existing Nexus route be approved: <http://bit.ly/GREEN2016>
- Our other concerns specific to this area include:
- IND83-10 • **The City of Green and Summit County** would receive NO public or private benefits, as the pipeline is planned to carry natural gas to Canada yet incur significant expense for the maintenance of properly trained first responders should an explosion occur. Much of the City of Green does not have fire hydrants making containment of an explosion even more treacherous.
- IND83-11 • **MAPS Air Museum:** This excellent museum is next to the Akron Canton Airport and in the line of the planned Pipeline. This pipeline would severely impact the adjacent Akron Canton Airport which is in the process of undergoing massive expansion.
- **The CAK (Akron-Canton) AIRPORT:** This growing airport is only 2500 feet from the pipeline and is South East (DOWN WIND) from the pipeline. A rupture during a busy day of air travel would result in death and destruction beyond compare!

- IND83-4 See section 4.3.1.2 for a discussion of mitigation procedures for groundwater resources including water supply wells. Construction and operation of the pipeline are not expected to impact septic systems that are not within the construction zone.
- IND83-5 Section 4.10.5 addresses public services and emergency response planning.
- IND83-6 See section 4.6.6 and the *Migratory Bird Conservation Plan* for a discussion of potential impacts on migratory birds.
- IND83-7 The Nimisila Reservoir is not crossed by the NGT Project. The route avoids the reservoir, and crosses south of the area by a minimum distance of 0.1 mile near MP 41.2. Additionally, the nearest three (3) wetlands to the reservoir that are crossed by the NGT Project are classified as Categories 2, 1, and 2, respectively.
- The wetland crossing for feature A16-2 is 0.1 mile southeast the Nimisila Reservoir at MP 41.2, and is classified as a Category 2 wetland per ORAM scoring protocols.
- The wetland crossing for A15-49 is 0.25 feet south of the Nimisila Reservoir at MP 41.2, and is classified as a Category 1 wetland per ORAM scoring protocols.
- At MP 41.9 the wetland crossing for A14-122 is 0.25 mile south of the Nimisila Reservoir, and is classified as a Category 2 wetland per ORAM scoring protocols.
- IND83-8 Section 4.9.7 discusses impacts to roadways and mitigation measures. Section 4.13.3 addresses public safety impacts associated with the proposed Project.
- IND83-9 Comment noted. Based on our review, we did not find the City of Green Route Alternative provides a substantial environmental advantage when compared to the corresponding segment of the proposed route and did not recommend that it be incorporated as part of the Projects.
- IND83-10 Section 4.10.9 addresses economic and tax benefit impacts of the proposed Projects and section 4.10.5 discusses public service. Section 4.13 also addresses additional potential safety impacts.
- IND83-11 The MAPS Air Museum is located 0.6 mile southeast of the pipeline near MP 37.2 on airport property. Due to the distance between the NGT Project and the museum, impacts on the museum would not occur.

INDIVIDUALS/LANDOWNERS

IND83 – Ellery J. Langkamp, Greer M. Kabb-Langkamp, Carl Langkamp (cont'd)


20160812-5031 FERC PDF (Unofficial) 8/11/2016 7:42:04 PM

- IND83-12
- **Camp Y-Noah:** Adjacent to the Nimisila Reservoir, Camp Y-Noah is a YMCA camp that has been home to thousands of children over the years. To construct a pipeline so close to the Camp endangers the children, the horses, the water, and the overall safety of this residential camp should an explosion occur.
- IND83-13
- **Restaurants and businesses in the area:** Market District, the Twisted Olive, and other business would be severely impacted by the pipeline without any redeeming value to the community. See the attached article about the economic impact to the City of Green. The lost revenue alone would be exponential!
<http://www.ohio.com/news/local/report-says-nexus-pipeline-will-cost-green-schools-113-million-in-lost-revenue-over-50-years-1.681048>
- IND83-14
- An in-depth study conducted by Cleveland State University supports the City of Green's assertion of the economic impact of the Nexus Pipeline through the City of Green:
<http://www.cityofgreen.org/uploads/csu-economic-impact-study.pdf>


The National Environmental Policy Act (NEPA) requires that FERC take into account the environmental impacts. Clearly, the currently planned Pipeline route through the City of Green and its surrounding southern Summit County communities will impact ALL of the areas identified by NEPA if Nexus pipeline construction and operation were to proceed as planned. The impact areas would include geology and soils, water resources, wetlands, vegetation and wildlife, birds, land use, socio-economics, public safety, and air quality and noise.

- IND83-15
- There are reasonable, less populated, alternative routes that would impact fewer homes, schools, businesses, wetlands, and environmentally sensitive natural resources. The City of Green has submitted a detailed recommended alternative route that we urge FERC to consider. This southern route along Route 30 would minimize economic and environmental impact at minimal expense to the Nexus People people. A reroute of the pipeline project is the only way to insure the safety of our water systems, wildlife areas, and most importantly, the citizens of Green and Summit County.

Sincerely yours,


Ellery J. Langkamp
463 Comet Lane
Clinton (Green), OH 44216


Greer M. Kabb-Langkamp
465 Comet Lane
Clinton (Green), OH 44216


Carl J. Langkamp
511 Comet Lane
Clinton (Green), OH 44216

- IND83-12
- Section 4.9.7 discusses impacts on Recreation and Special Interest Areas and section 4.13 addresses safety impacts associated with the proposed Project.
- IND83-13
- The study referenced in the article provided, focused on the City of Green and identified the economic impacts the NGT project would have on the city including impacts to property values, commercial growth, and tax revenues. We did not find the study particularly compelling for the reasons stated in section 3.3.3.
- IND83-14
- Comment noted.
- IND83-15
- See section 3.3.3 for a discussion of the City of Green Route Alternative. Based on our review, we did not find the City of Green Route Alternative provides a substantial environmental advantage when compared to the corresponding segment of the proposed route and did not recommend that it be incorporated as part of the Projects.

R-667

INDIVIDUALS/LANDOWNERS

IND84 – Karen Arft

R-668

IND84-1

20160911-0015 FERC PDF (Unofficial) 09/11/2016

ORIGINAL

August 2, 2016

Nathaniel J. Davis, Sr, Deputy Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 204265

Dear Sir:

My farm is one Nexus is crossing with their pipeline (docket number CP16-22-000). I am NOT against the pipeline, as there is already one on my property. It was the route they were taking until this spring. That one crosses a corner of my property and there is one house near by which is already at risk from the previous pipeline. Then they changed the route west of that and now it is running between four houses, putting all of them at risk while crossing right through the middle of my land. All this is very disturbing for me. It not only doesn't make sense, it is far more expensive for Nexus as it probably doubles the amount of materials to do this route, plus the cost per acre paid to me. I have already lived through a pipeline blowup which was ¾ mile away and blew plugs out of the walls, had to evacuate and did damage miles away. The four houses it goes between are only ¼ mile away at the most.

Please reconsider the route for the good of EVERYONE concerned, including Nexus.

Karen G. Arft

Karen G. Arft
10378 Sutton Road
Britton, MI 49229
517-759-2609
doghouse.kga@verizon.net

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SECRETARY OF THE
COMMISSION
2016 AUG 11 P 4: 04
FEDERAL ENERGY
REGULATORY COMMISSION

IND84-1 Minor route variations are discussed in section 3.4. Reliability and safety, including pipeline accident data, is discussed in section 4.13.2.

INDIVIDUALS/LANDOWNERS

IND85 – John McGehee

R-669

John McGehee, Ypsilanti, MI.
August 12, 2016
Federal Energy Regulatory Commission
Comments specific to docket CP16-22-000
Pipeline proximity to the Lincoln Consolidated School District Central Campus

According to figure 1.1-79 of the NEXUS GAS TRANSMISSION PROJECT RESOURCE, REPORT 1,
General Project Description, FERC Docket CP16-22-000, January 2015.

IND85-1 | The pipeline path at marker number 237, Willis Road east of Whittaker is less than 1000 feet from the Lincoln Consolidated School District central campus. Lincoln Consolidated Schools have 4 buildings on that corner that will be less than 1000 feet from marker 237. The buildings are: Brick Elementary (which contains Central/Business Offices, Lincoln Golden Ages Senior Center and Elementary School), Bishop Elementary, Model Early Childhood Center and Lincoln Maintenance Building. More than 2000 students and staff occupy those spaces daily during the school year.

IND85-2 | Proposed pipeline path is in the landing and takeoff approach corridor for the Willow Run and Detroit Metropolitan Airports. This additional risk factor increases the chances that an accident could be catastrophic to areas beyond the 1000 foot pipeline radius of safety. I ask that FERC request that the proposed path/location of the Nexus pipeline be altered to provide a safe distance from the Lincoln Consolidated School District and outside of the landing and takeoff corridor of the Willow Run and Detroit Metropolitan Airport.

Here is a perfect opportunity for you, the commission, to demonstrate to the public your commitment to public safety over big corporation profit. Local residents do not have the financial resources to compete with the funds and resources available to DTE and associated pipeline construction companies. It is up to you, our governmental watchdog, to protect the safety of our residents and communities.

Thank you,

John McGehee
5810 Country Lane
Ypsilanti, Michigan 48197

IND85-1 | Section 4.13.1 addresses safety standards including those associated with schools.

IND85-2 | Section 4.13.1 discusses safety standards. The pipeline design would comply with necessary safety standards.

INDIVIDUALS/LANDOWNERS

IND86 – Ronald Hood

Ronald L Hood, Waterville, OH.

8/12/2016 ronhood98@msn.com

As an engineer with an advanced engineering degree; I am used to configuring and approving projects. Safety and human concern is paramount. Cost and cash are not. If a project impact in any way the status of the environment or the well being of humans; it should be rejected. It is not satisfactory to say that an event is not possible due to the design, a risk assessment was required. If the risk assessment said it was possible even if in a remote possibility; the project was stopped. Humans must be paramount in all decisions, especially citizen of this country. Cash must not count, even if it is Canadian.

IND86-1 We know that the Nexus Compressor station, being placed within a 3 mile radius of thousands of people is NOT a good design. In fact, it is unbelievable. Justify the pipe line all you want, but get the station out of harm's way to citizens. This station will impact health, environment and the potential for horrific, cataclysmic failure. It poisons the air, it induces vibrations, it impacts water tables, and it is vulnerable to outside hackers since it will be wireless connected to information systems. If you think not – remember STUXNET.

Display your brilliance and not you lack of concern for Citizens. Relocate the Compression station to an area where humans are not in the 3-5 mile radius.

Thank you

Ron Hood

IND86-1 Section 4.12.1.3 demonstrate that all compressor stations associated with the proposed projects would comply with the NAAQS, which were established to protect human health. Terrorism is discussed in section 4.13.4.

INDIVIDUALS/LANDOWNERS

IND87 – Sandra Purcell

Sandra purcell, Britton, MI. August 12, 2016
Regarding DOCKET#CP16-22-000

Just purchased my home in Feb of this year, that I plan on spending the rest of my life in. Love the area, love my property...until this past weekend. I got a trial newspaper in my mailbox. I read it. Come to find out that NEXUS is wanting to put a 36 inch pipeline in under M50 (the road my home is on) exactly 9/10ths of mile to the west of my dream home!! Un acceptable!!!! Real estate agents, loan officers, inspectors.....no one...not a sole has said anything about this. Now my home is in blast range they say..So, I went to what was supposed to be a meeting in Tecumseh MI Thursday the 11th. It was supposed to be an information meeting about the pipeline. No meeting. Just FERC people, police, and protestors. This is a bunch of garbage and I want it re- routed through a deserted area. The pipeline sounds like a scam. Michigan taxpayers should NOT be responsible for this mess! It has ruined my future. Home insurance will go up, taxes will go up.....and for what??? For me to be scared everyday

IND87-1 Comment noted. Alternatives are discussed in Section 3.0. Road crossings are discussed in section 2.3.2.

INDIVIDUALS/LANDOWNERS

IND88 – Pidwell

IND88-1

Pidwell, Clinton, OH.

Please stop Nexus from coming through the City of Green, Ohio. We have shown Nexus an alternative route that won't cause as much harm as their proposed route and they refuse to listen for their economic gain. The future damage to our city far outweighs a temporary increase in jobs. We are helpless without your support.

Don't let this Big Business push us around.

IND88-1 Comment noted. Based on our review, we did not find the City of Green Route Alternative provides a substantial environmental advantage when compared to the corresponding segment of the proposed route and did not recommend that it be incorporated as part of the Projects.

INDIVIDUALS/LANDOWNERS

IND89 – Phil Hemenway

Phil Hemenway, Ann Arbor, MI.
Nathaniel J. Davis, Sr. Deputy Secretary
Federal Energy Regulatory Commission
888 First Street, NE, Room 1A
Washington, DC 20426

RE: NEXUS CP 16-22-000

Dear Sr. Secretary Davis:

Please consider my public comments concerning the DEIS for the Nexus Pipeline, Docket CP16-22-000. In general the DEIS is inadequate, ignores important environmental facts, requires further scope in study, and should be more transparent to citizen review and comment. Washtenaw County and the surrounding area possess outstanding natural resources, including rich agricultural land, key watersheds, and clean air, which together comprise a living environment of unmatched value. Our landscape includes farms, forests, fields, lakes, ponds, streams, and wetlands that sustain critical habitats and a rich diversity of plant and animal species.

IND89-1 My comments are as follows:

A) I did not see reference to a significant study performed by the Washtenaw County Metropolitan Planning Commission entitled, Washtenaw County Fragile Lands Report, 1981. A comprehensive EIS should include reference to this important study which includes, in part, an inventory of wetlands and sensitive agricultural resources in Washtenaw County. It is important to mention that the majority of agricultural areas in Augusta Township are classified as Prime Farmland, the highest classification.
<http://www.worldcat.org/title/washtenaw-county-fragilelands/oclc/35259382> Washtenaw County.

B) The EIS should include full compliance to Michigan Wetlands Protection Act and related regulations.

IND89-2 I. This would include a more comprehensive Wetlands Impact study to evaluate the entire project scope for regulated wetlands before commencing work in Michigan and additionally obtaining the necessary permits from the MDEQ before commencing activities in or around wetlands. Michigan's Wetland Protection Act, which is now known as Part 303 of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, authorizes the State of Michigan through its Michigan Department of Environmental Quality to oversee and regulate certain wetlands located in the state.
http://www.ewashtenaw.org/government/drain_commissioner/dc_webPermits_DesignStandards/dc_Rules/section-vi-areas-of-special-concern.pdf

II. Following a comprehensive Wetlands study a full public comment period is conducted with local review and public comment to allow citizen oversight. This is part of the wetlands Protection Act process.
III. FERC should demand full compliance to the Michigan Wetlands Protection Act Permits and all related procedures.

IND89-3 IV. FERC should demand full compliance to the Washtenaw County Grading/Soil Erosion Sedimentation Control Act. (Act 347 (now Part 91 of Act 451), 1972)
http://www.ewashtenaw.org/government/drain_commissioner/dc_websoilerosion/sesc-ordinance-2011.pdf

IND89-4 V. The application as submitted fails to sufficiently discuss, delineate, or analyze wetlands resources in Washtenaw County. The scope of review should be expanded at a minimum to include the effects to important waterways such as:
a) Huron River

IND89-1 See the following sections of the EIS for a comprehensive list of wetlands that occur within to the proposed corridor, and were recently delineated:

- section 4.4.2.2

- section 4.4.3.1

- table 4.4.3-1

- table 4.4.3-2

- table 4.4.3-3

Note that approved wetland delineation data that is over 5 years old is considered out-of-date and inaccurate by regulatory agencies such as the USACE (Regulatory Guidance Letter 90-06), therefore a citation for the referenced 1981 document is not required.

IND89-2 Wetland impacts are discussed in section 4.4.2. The Project would be required to obtain all applicable federal, state, and local permits.

IND89-3 NEXUS will implement their *E&SCP*, which is based on FERC's *Plan and Procedures*. FERC's *Plan and Procedures* are a set of construction and mitigation measures that were developed in collaboration with other federal and state agencies and the natural gas pipeline industry to minimize the potential environmental impacts of the construction of pipeline projects in general.

IND89-4 See discussion in section 4.3.2.2 regarding mitigation procedures for construction near waterbodies as well as waterbody construction to minimize or avoid impacts to surface waters.

INDIVIDUALS/LANDOWNERS

IND89 – Phil Hemenway (cont'd)

R-674

- IND89-4 (cont'd) | b) Paint Creek
c) Stoney Creek and Stoney Creek Watershed
http://www.michigan.gov/deq/0,4561,7-135-3313_3687-10801--,00.html
- IND89-5 | C) Comprehensive Analysis of Pipeline Failure Modes and Subsequent Effects of Failure, (ability to rapidly evacuate populations)
I. As part of this evaluation, FERC must require a thorough analysis of pipeline failure modes in particular their effects near public buildings and places of education. The analysis would include the ability to evacuate large groups of youngsters and teens (K-12) in the case of a fire or explosion.
II. The result of such findings and subsequent analysis must be fully documented and publicly disclosed as part of a comprehensive EIS. See below.
<http://www.phmsa.dot.gov/pipeline/library/reports/pipeline-failureinvestigation-reports>
III. Close co-operation with the Lincoln Consolidated School District should be mandatory.
- IND89-6 | D) Emergency Response Preparedness and Capability for local fire departments
I. FERC must require full evaluation of emergency response capabilities. According to the U.S. DOT Pipeline and Hazardous Materials Safety Administration, an emergency plan is required that establishes procedures for handling emergency events such as gas leaks, fires, and explosions, and that establishes protocols for communication and coordination with local fire, police, and public officials. Many of the smaller townships, if not all, along the pipeline route are served by volunteer part time fire and emergency responders. These individuals are courageous and dedicated to protecting their communities, however, they may be lacking necessary personnel, specialized training, facilities, equipment and unique knowledge necessary to appropriately respond to the unique nature of highly flammable fuels, pipeline ruptures, explosions, or other serious incidents that can occur with pipelines and compressor stations.
<https://www.gpo.gov/fdsys/pkg/PLAW-112publ90/pdf/PLAW-112publ90.pdf>
Section 25.
II. Demand appropriate actions to protect the health safety and welfare of affected citizens.
- IND89-7 | E) As a former elected official and Planning Commissioner in Augusta Township, Washtenaw County, I feel that FERC should demand compliance with local planning commissions in the subject townships for master plan compliance and zoning revisions, where required, in affected Counties that would include citizen review and comment like any other major undertaking in the townships. In particular that there is significant industrialization of agricultural areas that are a violation of current zoning and master plans.
a. City of Milan
b. Augusta Township
<http://augustatownship.org/PDFs/ATMP%202007.pdf>
c. York Township
d. Ypsilanti Township
e. City of Ypsilanti
f. Milan Township(Monroe County)
g. Lenawee County(affected Townships)
<http://www.legislature.mi.gov/documents/mcl/pdf/mcl-Act-33-of-2008.pdf>
The pipeline route in many areas is located in zoned Agriculture areas and is subject to local zoning laws which allow public utility stations only by special permit. Such uses require site plan approval with

- IND89-5 | Section 1.1 provides a discussion of the purpose and need for the Projects.
- IND89-6 | Section 4.10.5 addresses public services and emergency response planning.
- IND89-7 | As discussed in section 1.5 of the EIS, FERC encourages cooperation between project proponents and state and local authorities, including on matters of zoning. However, state and local agencies, through the application of state and local laws, may not prohibit or unreasonably delay the construction or operation of facilities approved by FERC. Any state or local permits issued with respect to jurisdictional facilities must be consistent with the conditions of any authorization issued by FERC.

INDIVIDUALS/LANDOWNERS

IND89 – Phil Hemenway (cont'd)

R-675

- IND89-7 (cont'd) | appropriate public comment. FERC should require compliance with local zoning and master plans.
- IND89-8 | F) Designated Trout Streams in Washtenaw County
a. According to FO-210.08, DESIGNATED TROUT STREAMS FOR THE STATE OF MICHIGAN, Under the authority of Section 48701(o), being Sections 324.48701(o) of the Michigan Compiled Laws, the Paint Creek is a designated trout stream. This fact is not indicated in the DEIS(3.2.1).
b. Paint Creek in Augusta Township is a designated trout stream and is deserving of the protection afforded such a resource.
https://www.michigan.gov/documents/dnr/FO-210-07_182400_7.pdf
Page 43
[http://broom02.revolv.com/main/index.php?s=Paint%20Creek%20\(Washtenaw%20County,%20Michigan\)&item_type=topic](http://broom02.revolv.com/main/index.php?s=Paint%20Creek%20(Washtenaw%20County,%20Michigan)&item_type=topic)
https://www.michigan.gov/documents/daq/wrd-sw-as-tmdl-paintcreekbiota_451058_7.pdf
- IND89-9 | G) Map Resolution
a. Improve image resolution of public documents to allow adequate study by private citizens, the current map resolutions are insufficient and do not provide a level of detail need for precise review.
- IND89-10 | H) Comprehensive Analysis of Pipeline Failure Modes and Subsequent Effects of Failure for leakage into the Huron River
a. We don't need to look very far to see the effects of pipeline failure in Kalamazoo (2010) and the potential in the Straits Of Mackinac.
b. The EIS should include the effects of pipeline failure for these waterways including computer modeling and also economic effects of the destruction of this natural resource. These are significant defects in the application, further demonstrating that an expanded EIS is needed.
- Thank you for the opportunity to submit these objections, concerns, and comments.
Respectfully submitted,
Phil Hemenway
Ann Arbor, MI 48108
2096 Maple Park Drive
313-505-9785
phemenwa@gmail.com

- IND89-8 | See discussion in section 4.3.2.2 regarding mitigation procedures for construction near waterbodies as well as waterbody construction to minimize or avoid impacts to surface waters.
- IND89-9 | Comment noted.
- IND89-10 | Impacts to surface waters are discussed in section 4.3.2. NEXUS will develop, maintain, and implement emergency response plans as required by DOT regulations.

INDIVIDUALS/LANDOWNERS

IND90 – Gregg Hardy

IND90-1

Gregg Hardy, North Canton, OH.

I wanted to express my concern for the Nexus Pipeline. This proposed pipeline will be right up on the back of my property, as I am right next to the Cleveland Museum Nature Preserve. I am concerned about the environmental consequences, economic health of my community, and the safety concerns the pipeline presents. I believe the long term existence will negatively impact my family, and my community both physically and monetarily. Please reroute this pipeline somewhere else.

Thanks, Gregg
Hardy

IND90-1 Alternatives are discussed in section 3.0.

INDIVIDUALS/LANDOWNERS

IND91 – Bernice Hamric

IND91-1

Bernice Hamric, North Canton, OH.
I am not in favor of the current Nexus Project coming through Green for the following reasons:
It should be rerouted around Green where it will have less of an economic impact.
The pipeline would be too close to residential areas.
The pipeline will be a cash cow for Nexus and therefore their argument of the reroute costing more money should be a moot point.
Our property values would take too much of a hit with the pipeline while they line their pockets with cash.

IND91-1 The types of impacts on property values would be similar on the City of Green Route Alternative as the proposed route. Section 4.10.8 describes the nature of these impacts. Based on our review in section 3.3.3, we did not find the City of Green Route Alternative provides a substantial environmental advantage when compared to the corresponding segment of the proposed route and did not recommend that it be incorporated as part of the Projects.

INDIVIDUALS/LANDOWNERS

IND92 – Paul Morris

R-678

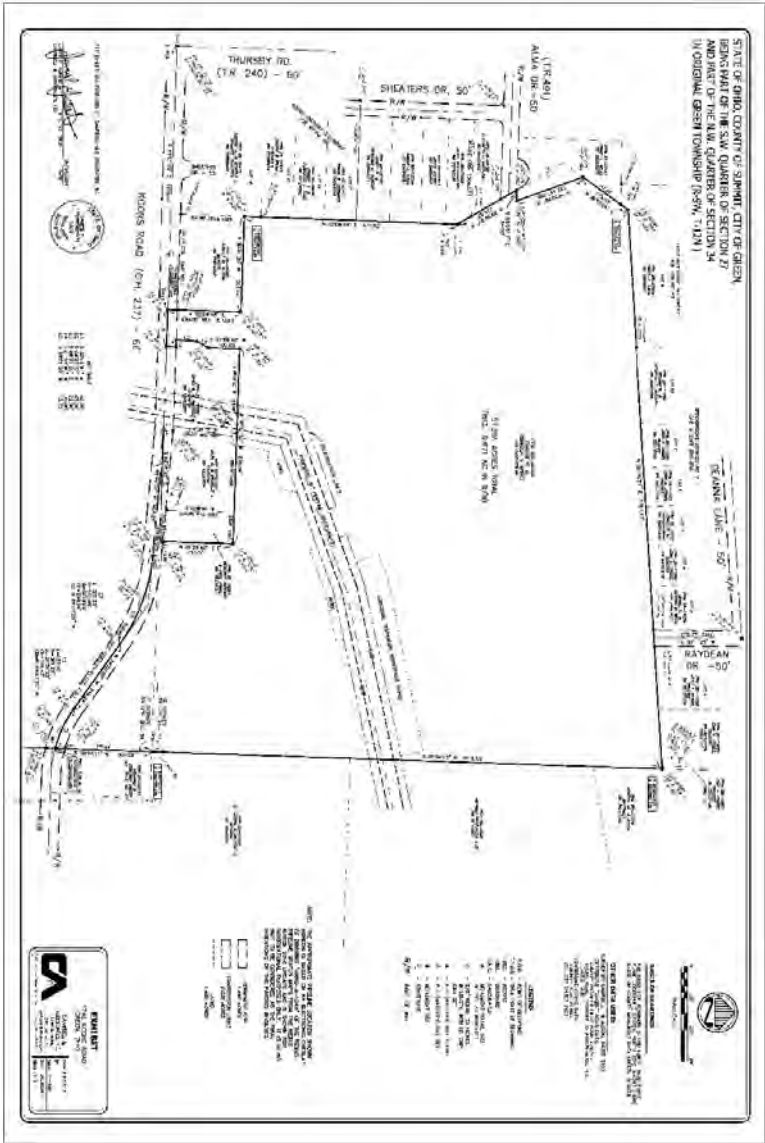
- IND92-1 Paul Morris, Ann Arbor, MI
I believe we need to focus our limited national resources on longer-term solutions like renewable energies, rather than encourage more fossil fuel infrastructure expansion, which only offers short-term benefits and defers the larger challenges to future generations.
- IND92-2 Pipelines like these can adversely impact property values, farmlands, woodlands, wetlands, and waterways. This particular project would run very close to schools such as Lincoln Consolidated schools in Washtenaw County Michigan, adding additional potential risks.
- IND92-3 As I understand it, the majority of the natural gas that this project would carry would primarily be obtained from Pennsylvania and Ohio natural gas fields via Hydraulic Fracturing (fracking). Hydraulic Fracturing has serious environmental consequences and many long-term uncertainties. Very often there is no clearly identified savings required for future contingencies (environmental impact clean-up projects, etc).
- IND92-4 If we as a country DO decide that projects like this are worth the environmental and other risks, then the BENEFITS of those risks should remain here, and not be exported to other countries, just so a few individuals can make a short-term profit. This project would enable exporting the natural gas rather than ensuring it is directly used in the US.
- Please do NOT approve this unnecessary and risky project. Thank you,
- Paul Morris

- IND92-1 See response to comment CO47-02.
- IND92-2 Property values are discussed in 4.10.8. Agricultural areas are discussed in section 4.9.5 and prior to construction, NEXUS shall file with the Secretary an *Agricultural Impact Mitigation Plan (AIMP)* detailing construction and restoration measures to be implemented on the NGT Project to address agricultural issues unique to Ohio and Michigan. Forested areas are discussed in section 4.5.2. Wetland impacts are discussed in section 4.4.2. Surface waters are discussed in section 4.3.2. Impacts to schools and residential areas are discussed in 4.9.2.
- IND92-3 Impacts related to natural gas production are discussed in section 4.14.3.
- IND92-4 Comment noted.

INDIVIDUALS/LANDOWNERS

IND93 – Eugene Martz

IND93-1



IND93-1 Comment noted.

INDIVIDUALS/LANDOWNERS

IND94 – Nicholas Triola

IND94-1

Nicholas triola, Uniontown, OH.
No Pipeline.

IND94-1 Comment noted.

INDIVIDUALS/LANDOWNERS

IND95 – Paul Fledderjohann

R-681

Safety and Quality Concerns for Nexus High Pressure Pipeline (see attached charts) - Reference Docket No. CP16-22-000

I am writing this letter to express my concerns regarding the safety of the Nexus High Pressure Pipeline that is running through the City of Green. The pipeline and the "Above Ground Main Valve Line" is within 1000' of our house located at 1038 Killinger Rd.

- The Layout and Design of this pipeline is Not Safe -Too many Bends
For every bend "Two circumferential welds are required" (doubles the number of welds which adds risk) Modifications to the uniformity of pipe causes a loss of structural integrity. High Pressure Main Line Valve is located in the Middle of Green on Killinger Rd. in a heavy residential area
- Where the pipeline crosses Killinger Rd. to Arlington Road (highly populated) is only 1300 feet If the Safe Blast Zone is approximately 1300 feet on both sides of the pipeline Just in the Killinger Rd/Arlington Rd/Koons/Thursby area there are approx 200 houses in the Blast Zone Estimate Total approximately 1000 structures (most of which are Private Homes) in the blast zone area
Also, the "CAK" Akron_Canton AIRPORT is only 2500 feet from the pipeline and is SouthEast DOWN WIND
- The Main Line Valve is Above Ground - Adds Risk to City of Green
Above Ground Valve creates additional bends which requires many circumferential welds
No Location in City of Green is a safe location for the Main Line Valve

As an Engineer in the business world for 39+ years, I know that safety and quality are essential. Based on the track record of leaks and explosions, I see the City of Green being at risk, as well as risk to both my family and those in surrounding neighborhoods. I also consulted with my brother-in-law who is an expert in ASME and AWS quality standards. The number of bends in this pipeline design and with the high pressure Main Line Valve also located in the City of Green is an unacceptable safety concern.

Has Nexus addressed the following regarding Weld Joints? Are quality systems in place to verify the following?

- * Are certified welding personnel qualified and certified to the American Welding Society (AWS) or American Society of Mechanical Engineers (ASME) standards?
- * Are approved welding procedures (Procedure Qualification Reports) and welding procedure specifications for the materials utilized and available to assure compliance? Are the procedures certified for either AWS or ASME?
- * Since high pressure lines exist, are x-rays on the weld joints performed? If x-ray is performed, what type of x-ray film acceptance criteria is being utilized, how much slag, porosity, non-fusion, lack of penetration, etc.?
- * Are final weld surfaces magnetic particle examined for hairline crack determination? The MT should be a requirement considering x-ray would miss a hairline surface crack.
- * Regarding piping base material, can you confirm base material integrity? Is 4 direction shear wave exam performed to 3% or 4% notch depth of the base material thickness for sensitivity?
- * Are independently certified and registered AWS professional inspectors (CWI) available for project oversight of weld quality and to review the accuracy of welder procedure qualification

- IND95-1 See section 4.9.7.3 for a discussion on Metroparks (Farnsworth Metropark and Towpath Trail). Both Metroparks would be crossed using the HDD method and recreational uses of the park and trail would not be affected by operations.
- IND95-2 Section 4.13 addresses safety impacts associated with the proposed project and concludes that the proposed route would represent a minor increase in risk to public safety. This section also states that NEXUS would implement appropriate safety measures based on population/pipeline Class locations.
- IND95-3 Section 4.13 addresses safety impacts associated with the proposed project and concludes that the proposed route would represent a minor increase in risk to public safety. This section also states that NEXUS would implement appropriate safety measures based on population/pipeline Class locations.
- IND95-4 NEXUS would comply with 49 CFR 192, which provides details on pipeline welds for natural gas transmission pipelines. Subpart E Welding of Steel in Pipelines describe welding procedures (section 192.225), welder qualifications (192.227), and weld testing and inspections (192.241). Section 192.7 incorporates American Petroleum Institute's API-1104 (Standard for Welding Pipelines and Related Facilities) by reference.

INDIVIDUALS/LANDOWNERS

IND95 – Paul Fledderjohann (cont'd)

IND95-4
(cont'd)

reports, welding procedure specifications and welding personnel certification records? Also, will the CWI perform a final signoff of the welding documents as an independent source?

- * Are CWI personnel available to perform weld joint fit-up inspections prior to welding?
- * Are CWI personnel available to confirm the initial stages of welding to confirm welding material consumables?

For any type of high tech welding AWS CWI final reviews are normally required per specific contract language. I consider a pipeline by my house high tech welding or it should be!

Paul Fledderjohann resident of City of Green (1038 Killinger Rd.)

INDIVIDUALS/LANDOWNERS

IND95 – Paul Fledderjohann (cont'd)

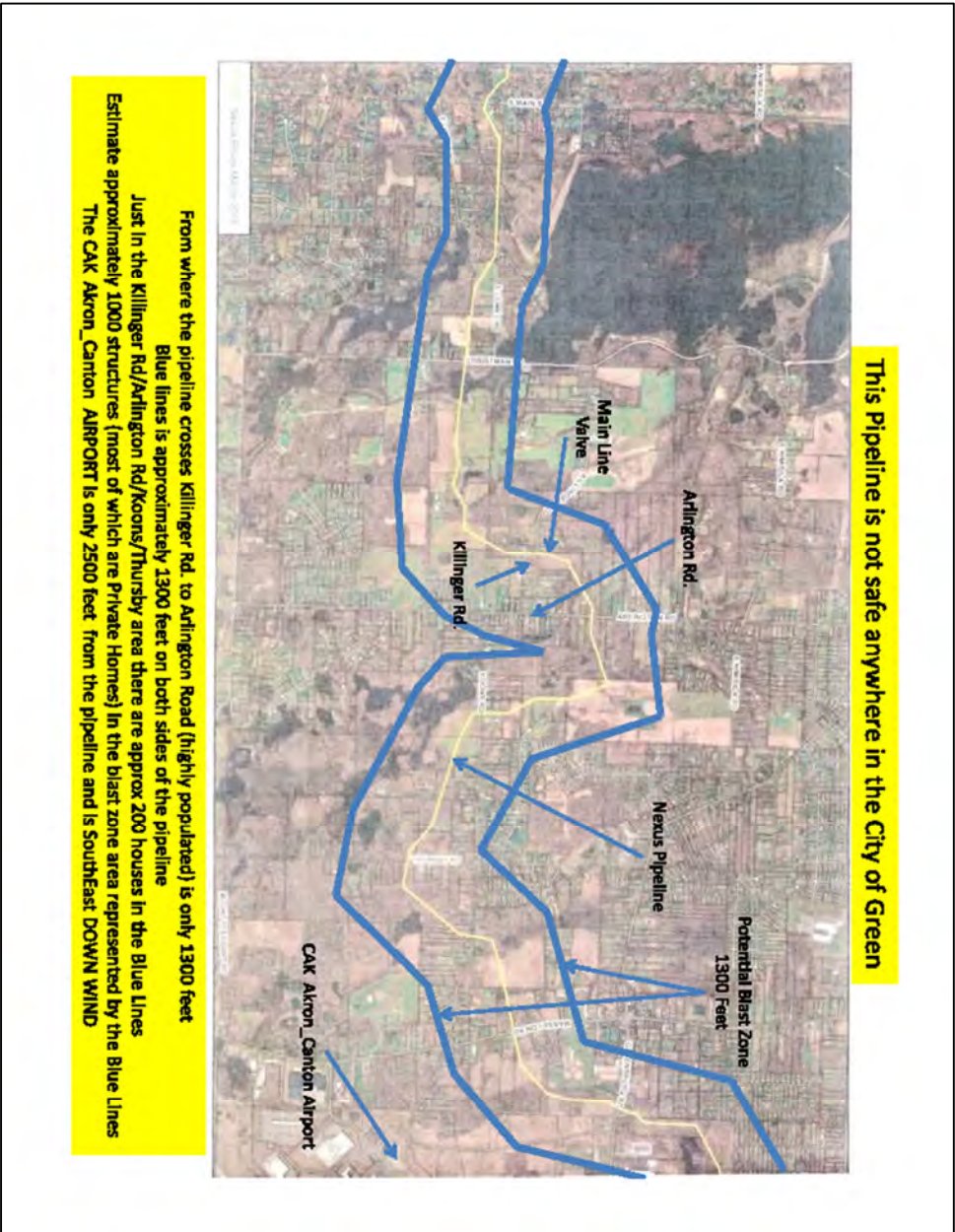
The Layout and Design of this pipeline is Not Safe – Too many Bends



For every bend "2 circumferential welds required" (doubles the number of welds which adds risk)
Any additional modifications to the uniformity of pipe causes a loss of structural integrity
High Pressure Main Line Valve located in the Middle of Green on Killinger Rd. In a heavy residential area

INDIVIDUALS/LANDOWNERS

IND95 – Paul Fledderjohann (cont'd)



INDIVIDUALS/LANDOWNERS

IND95 – Paul Fledderjohann (cont'd)

This Main Line Valve is Above Ground – Adds Risk to City of Green
Additional Bends requires many circumferential welds
No Location in City of Green is a safe location for the Main Line Valve



INDIVIDUALS/LANDOWNERS

IND105 – Terence J. Cooney

IND105-1

Terence J Cooney, Waterville, OH,
I presented some information during a "Public Hearing" on the Nexus Pipeline Compressor station. The FERC representative requested I upload several documents I cited during my testimony. Please let me know how I can upload these documents to be considered as part of my testimony.

Also - Just on comment, this was to be a PUBLIC HEARING when in fact it was private testimony and I was not able to hear others data and facts - pro or con for this project. I took off work 1 hour early to make sure I arrived by the start time of 5:00 PM - really misleading as to the style of meeting that was to take place.

IND105-2

For the record, I am against the citing of this station in Lucas County - near Waterville Ohio - there have been other cites proposed that are in far less populated areas, away from schools and nursing homes that would be a far beet location with less impact on the general population.

I look forward to hearing how to upload my documents.

Best Regards;
Terry Cooney

IND105-1 See response to comment CO12-01.

IND105-2 Comment noted. See section 3 if the EIS for a discussion of alternatives.

INDIVIDUALS/LANDOWNERS

IND113 – Michael A. Porter and Sharon Lycans Porter

R-687

20160815-0145 FERC PDF (Unofficial) 08/15/2016

ORIGINAL

7387 Zimmerman Rd.
Wooster, OH 44691
August 4, 2016

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 20426

Regarding: FERC City of Green Route Alternative Map (Nexus Project) – CP16-22-000

To Whom it May Concern:

We are writing this letter to express our concerns with the Nexus Project listed above. We have lived at our residence at 7387 Zimmerman Rd., Wooster, OH 44691 since April of 1996. We bought this property shortly before we were married and have worked hard to make it a long-term residence. It is the only property we have lived in, as a married couple. We have made many improvements to the property including a total kitchen remodel, new roofs on our home and barn, new siding on the barn, new furnace, all new fencing, a new patio, landscaping, all new flooring and planting numerous trees.

IND113-1 We also have an on-site septic tank which is close to the proposed route of the pipeline. We are concerned that the pipeline would adversely impact not only our septic system, but the quality/quantity of our water supply. There are several ponds on our road which attract wildlife (geese, duck, etc.) as well as providing water for our local fire dept. We are concerned that the pipeline could have a negative impact on those properties, belonging to our neighbors, too. We have also tiled sections of our property since we have lived here and feel that the pipeline would damage the drainage system that we currently have.

IND113-2

IND113-3

IND113-4 There is no doubt in our minds that the proposed pipeline would be damaging to our property and property value. While we have a relatively small amount of property, the work done in the surrounding areas could also have a negative impact on the property value of our home.

One of the reasons we bought this property was to be able to have a small amount of livestock. During the time that we lived here, we added fencing and have housed goats and horses. We were married on the property, on horseback, so naturally our property has a huge emotional value to us as well, that no amount of financial compensation can replace. Our small "mini farm" currently has a large workshop and barn, in addition to the home.

IND113-5 Most of our neighbors are farmers. While we certainly understand the need for pipelines, there is also a huge need for farms and farm land. We feel that the pipeline would be detrimental to the farm land in our area. Within one mile of our home, there is acreage farmed by at least 3 families where the land has been owned and/or farmed by the same family for at least 3 generations. This land has provided, not only a living for these families, but crops that are important and valuable to many people. The land also contains pastures where area farmers raise cattle and hogs. These animals are used to feed many people, not just the people in this area.

IND113-6 In addition to farms there are wooded areas in our neighborhood. These areas house a large variety of wildlife including deer, rabbits, birds, squirrels, coyotes, bats etc. In the creek bordering our property, I have seen herons and geese. There is also a natural spring across the road from our home. It is not

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SECRETARY OF THE
COMMISSION
2016 AUG 15 P 4:25
FEDERAL ENERGY
REGULATORY COMMISSION

- IND113-1 The types of impacts on septic systems, drain tiles, property values, farming, and wildlife would be similar on the City of Green Alternative as the proposed route. Sections 4.9.4, 4.9.5.4, 4.10.8, 4.9.2, and 4.6.2 describe the nature of these impacts. Based on our review in section 3.3.3, we did not find the City of Green Route Alternative provides a substantial environmental advantage when compared to the corresponding segment of the proposed route and did not recommend that it be incorporated as part of the Projects.
- IND113-2 Comment noted.
- IND113-3 See response to comment IND113-1
- IND113-4 See response to comment IND113-1
- Prior to construction, NEXUS shall file with the Secretary an *Agricultural Impact Mitigation Plan (AIMP)* detailing construction and restoration measures to be implemented on the NGT Project to address agricultural issues unique to Ohio and Michigan. For construction and restoration measures in Ohio, NEXUS shall consult with the Ohio Department of Agriculture (ODA) on construction procedures to be used in agricultural land in Ohio and shall file with the Secretary any measures that result from coordination with the ODA.
- IND113-5 See response to comment IND113-1
- Prior to construction, NEXUS shall file with the Secretary an *Agricultural Impact Mitigation Plan (AIMP)* detailing construction and restoration measures to be implemented on the NGT Project to address agricultural issues unique to Ohio and Michigan. For construction and restoration measures in Ohio, NEXUS shall consult with the Ohio Department of Agriculture (ODA) on construction procedures to be used in agricultural land in Ohio and shall file with the Secretary any measures that result from coordination with the ODA.
- IND113-6 See response to comment IND113-1

INDIVIDUALS/LANDOWNERS

IND113 – Michael A. Porter and Sharon Lycans Porter (cont'd)

20160815-0145 FERC PDF (Unofficial) 08/15/2016

IND113-6
(cont'd)

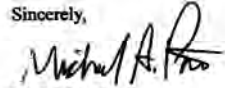
unusual to sit on our back patio and see deer and other wildlife in the farm fields adjoining our property. One of the things we enjoy, most, is the ability to observe the wildlife in our peaceful neighborhood. These areas are becoming fewer due to construction and farms being split up into housing developments, etc. We feel it is important to maintain and preserve areas where farmland and woodland exist.

IND113-7

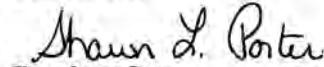
We are also concerned about the short amount of time that we were given to respond to the proposed route. Compared to people impacted by the alternative routes, we were not given much time to gather data and information to support our findings and concerns. We are afraid that this route will be chosen partly because we did not have time to prepare our concerns and questions.

We appreciate the opportunity to voice our opinions and concerns about the Nexus pipeline and hope that you will take into consideration the huge loss of farmland, woodland, residential value, etc. that could occur because of the pipeline if it proceeds in our area. In addition, many of the residents in his area have lived here for generations and their family farms are very important to them. Not only would this project impact their farms and livelihood, but their heritage. We worked hard to buy and pay-off our property and consider it an investment in our future and retirement. The prospect of losing part of that investment and having our property value decline, because of the pipeline, is very concerning to us. We hope that you will also take into consideration the devastating results that the pipeline could have on small property owners, like us, in addition to the larger property owners and farmers in our area.

Sincerely,



Michael A. Porter



Sharon Lycans Porter

IND113-7 Comment noted.

INDIVIDUALS/LANDOWNERS

IND115 – Terrence J. Cooney

20160816-5167 FERC PDF (Unofficial) 8/16/2016 1:12:12 PM
Low Frequency Noise and the Hazards of Living Near a Compressor Station! | Stop The ... Page 1 of 3

Stop The Minisink Compression Station

Minisink Matters

Low Frequency Noise and the Hazards of Living Near a Compressor Station!

Posted on January 30, 2013 by admin

Dear Ms. Fisher,

You are correct in having concerns about the Natural Gas Compressor Station. I raise registered Limousin Cattle. Yes, I have had a major problem with fertility of my prize bull being sterile. After 15 years of raising cattle here, this is the first bull to be sterile. He was raised on the same side of the hill as the compressor station. My other bulls were raised on the opposite side of the hill further away from the Low Frequency Noise (LFN). This bull was genetically tested and found to be homozygous polled and homozygous black, which means he would always throw a black and polled calf. After he reached breeding age, I had him tested for fertility. The vet said inconclusive as to fertility. Twice more, I had him tested by another vet, who said he was not able to breed. All my other bulls were very fertile. The sire of the bulls had sold for \$520,000. I got the sire's semen before he became popular. I was extremely disappointed to have this prize bull be sterile.

I am more concerned about the LFN effect on humans. Especially when my grand children come to stay with us, I have suffered brain damage, heart damage, ruptured ear drum twice and now have a permanent hole in my ear drum and suffer from restless leg syndrome. I have lived in my home 21 years in near perfect health before the compressor station came. It is 0.9 miles from our home. Our neighbors are suffering also including ruptured ear drums, vertigo, restless leg syndrome, incontinence in younger women. Men can become sterile also and suffer sexual dysfunction. All of these are symptoms of **Vibro-Acoustic Disease (VAD)** caused by **LFN from compressor stations**.

<http://www.stopmcs.org/?p=841>

3/7/2016

IND115-1 Section 4.12.2.2 addresses low frequency noise and vibrations.

R-689

Individuals/Landowners Comments

INDIVIDUALS/LANDOWNERS

IND115 – Terrence J Cooney (cont'd)

20160816-5167 PERC PDF (Unofficial) 8/16/2016 1:12:12 PM
Live on tape: the dangerous noise emitted by natural gas compressor stations in neighborh... Page 1 of 2



Amy Mall's Blog

Live on tape: the dangerous noise emitted by natural gas compressor stations in neighborhoods



Posted February 22, 2010 Jan 2016

Share | 0 | 0 | Like 161

As I mentioned in a previous post, it's the season for film awards, so I am posting my nominees for some of the most compelling oil and gas pollution videos. Words cannot do justice to the environmental harm that is evident in these images.

Today's category: noise from natural gas compressor stations. According to the World Health Organization, noise can cause permanent medical conditions, such as hypertension and heart disease, hearing impairment, communication problems, sleep disturbance, cognitive effects such as memory problems, reduced performance, behavioral symptoms, and more. Low-frequency noise (LFN), also created by compressor stations, can also cause vibroacoustic disease, leading to cardiovascular symptoms and decreased cognitive skills.

In other words, it is not just a nuisance. It is serious.

These issues are so important that there is actually a scientific Journal of Low Frequency Noise, Vibration and Active Control, and a Journal of Sound and Vibration.

These are not groundless worries. Individuals report health symptoms they have linked to natural gas compressor station noise, including ruptured ear drums.

Natural gas compressor stations are located all over the country, even where there are no wells, because they help move natural gas along the pipeline. They often run 24/7. Each state or locality has its own regulations. Some are not strong enough to protect their citizens.

With that, roll tape. You'll see how horrible this would be if it were in your own backyard. This video is thanks to Erin in Port Washington, Ohio, whose home is bordered by two compressor stations. As you can see, children live here.

Share | 0 | 0 | Like 161

Comments

Sharon Wilson — Feb 22 2010 04:20 PM

They have such a lovely place and lovely children. This is so wrong it's hard to find the words. I

Emily Cousins — Feb 23 2010 05:00 PM

Now imagine if one of these was right behind your church or temple. How prayerful could you be?

I live on the Navajo Nation and have traveled to one of the tribe's six sacred mountains with a medicine man only to hear a compressor station roaring throughout the man's prayers. So much for quiet contemplation.

John Liffie — Feb 23 2010 05:13 PM

Horrible. What a graphic example of heedless corporate behavior. And you just know it would take years and huge amounts of cash to — just maybe — enlist the law in forcing the company to make a change. Poor family is just completely screwed.

Amy Mall — Feb 23 2010 05:30 PM

Thanks for the comments. A quick web search illustrates that there are readily available approaches to mitigate harmful noise from natural gas compressor stations. Here is just one example: <http://www.acousticalcontrol-inc.com/midstream.html>

If mitigation is not required by the authorities, and it is not being adopted voluntarily, then regulations need to be updated to reflect our current knowledge about the harm of noise and the technologies available to protect human health.

http://switchboard.nrdc.org/blogs/amall/live_on_tape_the_dangerous_noi.html

3/7/2016

IND115-1
(cont'd)

R-690

INDIVIDUALS/LANDOWNERS

IND115 – Terrence J Cooney (cont'd)

20160816-5167 FERC PDF (Unofficial) 8/16/2016 1:12:12 PM

Low Frequency Noise and the Hazards of Living Near a Compressor Station! | Stop The ... Page 2 of 3

We have had several people die recently from brain aneurisms and heart attacks. All of them had LFN at their homes. To have a compressor station within 20 feet of a home is absolutely absurd. It will be uninhabitable. One home here within 500 feet of the compressor station near me and on the opposite side has sold four times and now is owned again by the compressor station owner. It is uninhabitable!

IND115-1
(cont'd)

LFN is noise between 25 and 500 cycles per second (cps) frequency and is below the normal human hearing range of 500 to 20,000 cps frequency. However, it affects 70 percent of people in its five to eight mile path in every direction. The LFN must be eliminated at the source as is done in Colorado. Noise testing must be done at the property line of the compressor station. Any noise within the human hearing range must not be greater than 55 dBC at their fence line according to the Federal Energy Regulatory Commission (FERC). The "C" scale is the environmental scale for noise and is weighted to include all sounds in the environment.

We now have 130 compressor stations in our county and more are being built. Texas, like Idaho, does not have a state noise law to protect us. See my generic petition attached for facts. Only six states have a state noise law: New York, Illinois, California, Massachusetts, Maine, and Colorado. The rest of us are just unprotected. I tried to get a state noise law passed for Texas to no avail. Oil and Gas lobbied and spent a lot of money to prevent passage. Thirty eight noise bills had been introduced, but none got out of committee during the 2009 legislative session. I ran for State Representative in my district during the last election, obtaining 30 percent of the vote. I may run again in 2012.

This is a very serious issue for families and agriculture. Fight this installation for all you're worth. Otherwise, your life will never be the same. I have been tortured for three and one half years. I have taken every action possible to no avail.

Folks from Connecticut to Colorado have requested help from me. I have worked with the cities of Ft. Worth and Dallas on their city ordinances for natural gas development. You might look up the movie GASLAND and obtain a copy on DVD. Go to www.gaslandthemovie.com I am in the movie for a brief time about the noise. I do not get any compensation from it. The main thrust of the movie is the effect of fracking of gas wells on ground water and water wells. It is worth the effort to see it. The movie was nominated for an Oscar earlier this year. It has drawn national attention to a very serious problem.

Regards,

Charles E. Morgan, P.E., Inactive
Executive Director,
Citizens for Environmental Clean-Up (CEC)

<http://www.stopmcs.org/?p=841>

3/7/2016

R-691

INDIVIDUALS/LANDOWNERS

IND115 – Terrence J Cooney (cont'd)

20160816-5167 FERC PDF {Unofficial} 8/16/2016 1:12:12 PM

Low Frequency Noise and the Hazards of Living Near a Compressor Station! | Stop The ... Page 3 of 3

P.O. Box 1534
Fairfield, Texas 75840

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[<http://www.stopmcs.org/?p=841>].

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<http://www.stopmcs.org/?p=841>

3/7/2016

R-692

Individuals/Landowners Comments

INDIVIDUALS/LANDOWNERS

IND115 – Terrence J Cooney (cont'd)

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Human Health Impacts - : Marcellus Outreach Butler

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.: Marcellus Outreach Butler (/)

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[CONTACT US \(/CONTACT-US.HTML\)](#)

Protecting the Health & Safety Children near Unconventional Gas Drilling

Here is a link (<https://onedrive.live.com/?cid=7567118C68450798&id=7567118C68450798%214052&v=3&authkey=%21AGSD0xmEAPMRY>) to the health and safety voice over presentation that was presented to Mars Home for Youth and the MASD Board by Marsha Haley M.D. and Patrice Tomcik.

Ever Wonder What Toxic Exposures to Gas Drilling Pollution Does to Children?

Dr. Jerome Paulson gave lecture in Pittsburgh on May 17, 2014. Click HERE (<https://www.youtube.com/watch?v=2WCTxB0V98g>) to see the video.

Jerome A. Paulson is a Professor in the Department of Environmental & Occupational Health at The George Washington University School of Public Health and Health Services, and a Professor in the Department of Pediatrics at The George Washington University School of Medicine and Health Sciences.



Human Health Impacts Associated with Chemicals & Pathways of Exposure from the Development of Shale Gas Plays

By: Wilma Subra, Subra Company/Earthworks Board Member, January 9, 2012

Pathways Of Exposure

- Inhalation and Dermal Absorption from Air Emissions
- Natural Gas Production- Methane and associated hydrocarbons and Condensates
- Condensate contains extremely toxic volatile organic chemicals
 - Benzene known human cancer causing agent
 - Xylene, Toluene, Ethyl Benzene
 - Other probable and possible cancer causing agents
 - Sulfur based compounds
- Chemicals are released into the air during production, separation processes, tank storage and pipeline transportation.
- Emissions into the air from produced water tanks on the production site release methane, toxic volatile organic chemicals and sulfur compounds into the air.
- Natural gas is frequently vented to the air when a well is completed.
- Compressors and motors on the drilling and production sites, injection well disposal sites and along pipelines release combustion products and volatile organic hydrocarbons into the air and degrade the air quality. These combustion products also combine with the volatile organic chemicals in the presence of heat and sunlight to produce ground level ozone.

<http://www.marcellusoutreachbutler.org/human-health-impacts.html>

8/10/2016

R-693

Individuals/Landowners Comments

INDIVIDUALS/LANDOWNERS

IND115 – Terrence J Cooney (cont'd)

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Human Health Impacts -.: Marcellus Outreach Butler

Page 2 of 3

IND115-2

Ingestion and Dermal Absorption Pathways of Exposure Ground water and surface water resources and soils and sediments are contaminated from:

- Spills and leaks from pits, tanks, rigs, chemical storage containers, drums, flow lines, pipelines, mixing vats, trucks, injection wells, etc.
- Road Spreading and Land Spreading of waste
- Untreated or improperly treated produced water and flowback water discharged from Waste Water Treatment Plants

Acute Health Impacts Experienced by Individuals Living in Close Proximity to Shale Gas Drilling, Fracturing and Production Wells Air Pathways

- Irritates Skin, Eyes, Nose, Throat and Lungs
- Headaches
- Dizziness, Light Headed
- Nausea, Vomiting
- Skin Rashes
- Fatigue
- Tense and Nervous
- Depression, Anxiety, Irritability
- Confusion
- Drowsiness
- Weakness
- Muscle Cramps
- Irregular Heartbeat (arrhythmia)
- Personality Changes

Chronic Health Impacts Experienced by Individuals Living in Close Proximity to Shale Gas Drilling, Fracturing and Production Wells - Air Pathways

- Damage to Liver and Kidneys
- Damage to Lungs
- Damage to Nervous System Causing Weakness
- Leukemia
- Aplastic Anemia
- Changes in Blood Cells
- Impacts to Blood Clotting Ability

Health Impacts Experienced by Individuals Living in Close Proximity to Shale Gas Drilling, Fracturing and Production Wells - Air and Drinking Water Pathways

Medical Condition and % of Individuals

- Respiratory Impacts- 81%
- Memory Loss- 56%
- Feeling Weak & Tired- 50%
- Throat Irritation- 50%
- Sinus Problems- 44%
- High Blood Pressure- 44%
- Muscle Aches or Pains- 44%
- Forgetfulness- 38%
- Recall Problems- 38%
- Breathing Difficulties- 38%
- Eyes Burning- 38%
- Joint Pain- 38%
- Decrease in Vision- 31%

Health Impacts Reported by Community Members Living 50 feet to 2 miles from Compressor Stations and Gas Metering Stations Along Gas Transmission Pipelines

*61% of Health Impacts Associated with Chemicals present in Excess of Short and Long Term Effects Screening Levels in the air

- Nasal Irritation*
- Throat Irritation*
- Eyes Burning*
- Frequent Nausea*
- Allergies
- Sinus Problems*
- Bronchitis*
- Persistent Cough
- Chronic Eye Irritation*
- Shortness of Breath
- Increased Fatigue*
- Muscle Aches & Pains*
- Weakness* & Tired*
- Ringing in Ears
- Sores & Ulcers in Mouth
- Urinary Infections
- Depression*
- Decreased Motor Skills*
- Falling, Slagging*
- Frequent Irritation*
- Brain Disorders*
- Severe Headaches*
- Frequent Nose Bleeds
- Sleep Disturbances
- Joint Pain
- Difficulty in Concentrating
- Nervous System Impacts
- Irregular/Rapid Heart Beat*
- Strokes
- Dizziness*
- Forgetfulness
- Easy Bruising
- Amnesia
- Severe Anxiety*
- Excessive Sweating
- Abnormal EEG*
- Lump in Breast
- Spleen
- Pre-Cancerous Lesions*
- Abnormal Mammogram
- Thyroid Problems
- Endometriosis

Most Prevalent Medical Conditions In Individuals Living in Close Proximity to Compressor Stations and Metering Stations

Medical Conditions and % of Individuals:

- Respiratory Impacts- 71%
- Sinus Problems- 58%
- Throat Irritation- 55%
- Allergies- 55%
- Weakness and Fatigue- 55%
- Eye Irritation- 52%
- Nasal Irritation- 48%
- Joint Pain- 45%

R-694

IND115-2 See the response to comment CO8-17.

INDIVIDUALS/LANDOWNERS

IND115 – Terrence J Cooney (cont'd)

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Human Health Impacts - Marcellus Outreach Butler

Page 3 of 3

IND115-2
(cont'd)

• Sleep Disorder- 31
23% of the individuals surveyed had the following symptoms:

- Nasal Irritation
- Arthritis
- Persistent Indigestion
- Increased Fatigue
- Frequent Urination
- Extreme Drowsiness
- Difficulty in Concentrating
- Inability to Recall Numbers
- Ringing the Ears
- Difficulty in Hearing
- Severe Headaches
- Tingling in Hands
- Reduced Muscle Strength
- Loss of Sexual Drive

- Muscle Aches & Pains- 42%
- Breathing Difficulties- 42%
- Vision Impairment- 42%
- Severe Headaches- 39%
- Sleep Disturbances- 39%
- Swollen & Painful Joints- 39%
- Frequent Irritation- 32%



Health Effects Experienced by Community Members Living Near a Natural Gas Storage and Processing Tank Farm

Acute Health Effects

- Irritates Skin, Eyes, Nose Mouth, Throat and Lungs
- Headache
- Dizziness
- Light Headed
- Nausea
- Vomiting

Chronic Health Effects

- Anemia
- Cancer
- Leukemia

The Southwest Pennsylvania Environmental Health Project (SWPA-EHP)

The Southwest Pennsylvania Environmental Health Project (<http://www.environmentalhealthproject.org/>) (SWPA-EHP) is a nonprofit environmental health organization created to assist and support residents who believe their health has been, or could be, impacted by natural gas drilling activities.

What Happens When the Doctor Doesn't Know?

A Pennsylvania Medical Association article. (<http://www.pamedsoc.org/MainMenuCategories/Resources/MediaResources/NewsReleases/Op-ed-tracking.html>)

Leading Public Official says Impact Fee Law Violates Medical Ethics

PA State Impact article. (<http://stateimpact.npr.org/pennsylvania/2012/02/16/leading-public-health-official-says-impact-fee-law-violates-medical-ethics/>)

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INDIVIDUALS/LANDOWNERS

IND115 – Terrence J Cooney (cont'd)

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IND115-3

Table 4 shows the day to day and morning to evening variability in emissions at one compressor station near Hickory, Pennsylvania. It comes from a Pennsylvania Department of Environmental Protection. We present this case to show documentation of fluctuations not captured by averages.² Note how much relevant emissions information is lost when relying on averages, even of just three days. When extending this logic across a year, there is little doubt that there will be times of high levels of contaminants released and these high levels can increase health risks to residents. It is also notable that the EPA inhalation reference concentration (RfC) for ethylbenzene is 1 mg/m³ (equivalent to 1,000 ug/m³).³ Some of the reported emissions exceed this standard of health safety.

1,000 ug/m³

R-696

IND115-3 See the response to comment CO8-17.

INDIVIDUALS/LANDOWNERS

IND115 – Terrence J Cooney (cont'd)

20160816-5167 FERC PDF (Unofficial) 8/16/2016 1:12:12 PM

IND115-3
(cont'd)

Table 1. Variation in ambient air measurements of five VOCs near a compressor station reported in ug/m³ *⁴

Chemical	May 18		May 19		May 20		3 day average
	morning	evening	morning	evening	morning	evening	
Ethyl-benzene	No detect	No detect	964	2,015	10,553	27,088	6,770
n-Butane	385	490	326	696	12,925	915	2,623
n-Hexane	No detect	536	832	11,502	33,607	No detect	7,746

*The PA DEP collected data on many more chemicals than those listed above; the authors of this paper have chosen these chemicals specifically to highlight variation in emissions.

Documented compressor emissions

It is important to know, with more specificity, what chemicals will be emitted by a compressor facility so that a targeted assessment can be made about its potential health impacts.

There is a small but growing body of literature on emissions from shale gas extraction, processing and transport activities. In its early stages of inquiry, the focus was predominantly on drill pad activity, but there are now some reports on natural gas compressor station emissions. Below are examples of chemicals that have been found at or near compressor stations during operations. These emissions reports – whether from public databases or from a private sector firm or organization – do not provide relevant background levels of the chemicals detected. Without a “control” location it is not possible to say with certainty that the chemicals found are the result of the compressor station, although these facilities are often the only industrial activity in the areas where they are found.

Emissions from two compressor stations (Stewart and Energy Corps), published by the Pennsylvania Department of Environmental Protection (DEP)⁵ are:

MTBE	2-methyl butane
CO	2 methyl pentane
iso-Butane	3 methyl pentane
methyl mercaptan	ethyl benzene
n-Butane	benzene
n-hexane	ethane
n-octane	propane
nitrogen dioxide	methanol
nitrous-	napthlelene
acidstyrene	

INDIVIDUALS/LANDOWNERS

IND142 – Richard M. Barron

IND142-1

IND142-2

Richard M. Barron, Ann Arbor, MI.

I respectfully urge FERC not to approve the proposed NEXIS gas pipeline. There are many reasons why this project should not go forward, including the lack of clear need. However the principal reason not to approve it is the imminent and threatening growth of climate change (global warming). We need as a nation and as planet to immediately transition from the use of fossil fuels such as methane to renewable and non- polluting sources of energy. Further, natural gas, particularly when obtained by hydraulic fracturing, is a significant source of atmospheric methane, a greenhouse gas much more damaging than carbon dioxide. FERC is obligated, in my judgment, to make its determination in light of the future, not just the next few years. The longer we wait to act against climate change the harder it will be to slow it and the more expensive it will be to do so.

Many thoughtful persons and groups have objected to this project. Please hear what they are saying.

Richard M. Barron

IND142-1 Comment noted.

IND142-2 See the response to comment FA2-34.

INDIVIDUALS/LANDOWNERS

IND182 – April L. Rolf

April L. Rolf, North Canton, OH.
Attn: Federal Energy Regulatory Commission
Kimberly D. Bose, Secretary

Re: Docket #CP16-22

IND182-1

We are residents in the City of Green. We want to express our opposition to the proposed pipeline route through the City of Green. We support the Coalition/City of Green suggested alternative southern route.

As I review the current proposed route, I am disturbed by how close it comes to our property and how it travel through parks and a preserve. There are numerous waterways, plants, animals and insects that have the potential to be negatively impacted.

We not only care about our property but the preserved nature areas in ours and surrounding communities that could be negatively impacted by this route. NEXUS has already proven by their attempts to survey on private property all over the city but also on properties that border areas such as the Singer Lake Bog that they are not concerned about these same issues.

IND182-2

If you have not already, I suggest you read the recent study by Cleveland State University to understand the economic impact it will have on our city, our schools and our businesses. Please reconsider the route. Please show everyone that you do care about the citizens of the City of Green, State of Ohio & The United States of America.

Sincerely,
John Raumberger
April Rolf
5055 S Arlington Rd.
N Canton (Green), OH 44720

IND182-1 Comment noted. Based on our review, we did not find the City of Green Route Alternative provides a substantial environmental advantage when compared to the corresponding segment of the proposed route and did not recommend that it be incorporated as part of the Projects.

IND182-2 As discussed in sections 3.3.3 and 4.10.9, we did not find the economic analysis by Cleveland State University to be compelling.

R-699

INDIVIDUALS/LANDOWNERS

IND183 – Paul Wohlfarth

Paul Wohlfarth, Ottawa Lake, MI.
Kimberly D. Bose,
Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426-0001

RE: Docket Number-CP 16-22-000- NEXUS Gas Pipeline Project

Dear Ms. Bose,

IND183-1 I'm writing you today to make you and the public aware that Docket Number CP 16-22-000 has been compromised with fraudulently mailed letters.

On August 10th I started receiving suspiciously mailed FERC Docket CP 16- 22-000 letters in my Emails. The almost 100 letters were not signed, were not dated and all were U.S. Post Office mailed. They all contained similar language and layouts, using the exact same font. CORN members were alerted and went to work tracking down the supposed letter writers.

Of those we were able to track down I found contact information for a Glenn England (401 Walnut St. Risingsun, OH, 43457) who supposedly wrote to FERC and posted a letter of support for the NEXUS pipeline. I called Glenn today at (419) 457-6782. I talked to his wife Mary. She told me Glenn could not have written FERC because her husband died in February of 1998 at the VA hospital in Ann Arbor Michigan. The letter he supposedly wrote (Accession number 20160815-0108) was in support of the NEXUS pipeline. All of the fraudulent letters have been in support of the NEXUS pipeline. All that I've been able to contact have been fraudulent.

I've contacted a Alan Powers (ACC# 20160815-0097), Debra Omler (ACC# 20160815-0098), Thomas Hart (ASS# 20160815-0101), Daniel Szych (ASS# 20160815-0106), Mary Blaser (ACC# 20160809-0014), Nancy Wiegand (ASS# 20160810-0082), Majel Dazley (ASS# 20160810-0026) all have told me they never wrote to FERC by mail. Some even asked what is FERC? Other CORN members have found the same results. Not one mailed, unsigned letter of support is legit!

Paul Gieroski of CORN contacted FERC this past week to alert them of the fraudulent letters. Seems FERC has no interest in uphold its integrity by investigating fraud in the process. We got politicians writing letters of support at the same time getting campaign contributions from the oil and gas industry, a sort of Quid Pro Quo, and now dead people writing letters to FERC. Makes one wonder if the whole process is riddled with fraud. So the unsigned, undated, form letters stand, giving the impression of widespread support for this export pipeline? Who is overseeing FERC?

Paul Wohlfarth

IND182-1 Comment noted.

R-700

INDIVIDUALS/LANDOWNERS

IND184 – Matthew Beebe

IND184-1

IND184-2

IND184-3

Matthew Beebe, Norwalk, OH
Greetings Federal Energy Regulatory Commission,
I strongly do not approve of the NEXUS project & the pipeline associated with it.. My friend lives on beautiful lands that this pipeline is set to cross.. So for pure aesthetic reasons & the water that almost certainly will be contaminated if is built.. I do not want this NEXUS pipeline installed. The money that this NEXUS pipeline will use could be invested into solar, wind, geothermal, hydroelectric, & the storage mediums these will entail.. I grew up as a 5 year old while my Dad built electric powered cars in the garage.. That was during the 1980s.. The technology is here, we must believe that it can work & change the existing infrastructure now before socio-economical climates change too drastically.. What NEXUS represents is a step backwards for our society.. Fossil fuels & the stone age.. I have solar power powering my computer right now.. We don't need to destroy the earth & it's treasures as fast as humanly possible to make a buck.. Money is a story which we all believe.. It's only real in our minds.. & as one of a species of homo sapiens who are classified as a flexible collective.. We work well with strangers whom we've never met before.. WORK WITH ME NOW.. Please.. I humbly ask of you who read this message.. Please stop working against a world where fresh oxygen & clean water are a reality.. As the children's story of the knight who fights the dragon goes.. The dragon seems insurmountable, but you must believe in either this unknown magic, OR the love of the princess.. This is why, as an underdog, I write to you now.. Let us take the earth back from these monsters who would like to see human beings suffer rather than lose a point number on a computer screen that's endlessly meaningless.. The human being who lives inside this atmosphere & on this earth is significant.. You are one too.
Kind Regards, Matt
Beebe

IND184-1 Section 4.9.10.1 discusses the impacts of the proposed pipeline in visual resources.

IND184-2 See discussion in sections 4.3.1.2 and 4.3.2.2 for mitigation procedures that will be used to protect groundwater and surface water resources, respectively.

IND184-3 Section 1.1 discusses the Project purpose and need.

INDIVIDUALS/LANDOWNERS

IND185 – Yvonne N. McKee, Sherry McKee Napier, Vicki McKee Mandley

August 17, 2016

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission 888 First
Street NE, Room 1A Washington, D.C. 20426

I am contacting you in reference to the Nexus Pipeline construction, Project Docket Number CP16-22000, which could possibly be moved to go through our property.

IND185-1 The McKee name has been associated with our farm for many generations, with the intent of future generations of our family to build their homes on the farm.

Rover Pipeline is already scheduled to begin construction through the complete width of our farm in early 2017, which is already going to reduce available land for future generation homes.

Nexus Pipeline would be another disadvantage to our farm as it would not only disrupt our farming, but it would leave very little if any land available to future generation homes.

We request and hope that you would please highly consider not going through our farm, but rather go through other farmland that is wide open land.

I have attached to this letter 2 documents? (1) A diagram of our farm, which the north portion is owned by me (Yvonne McKee), the south portion is owned by my one daughter (Sherry McKee Napier) and the east portion is owned by my other daughter (Vicki McKee Mandley). (2) A picture of the whole farm showing where the Rover Pipeline construction will be.

Once again, please take into consideration our request!!!

Sincerely,

Yvonne N. McKee - 5712 McKee Rd. Wooster, Ohio 44691
Sherry McKee Napier – 3925 Springville Rd. Wooster, Ohio 44691 Vicki McKee
Mandley – 3823 Springville Rd. Wooster, Ohio 44691

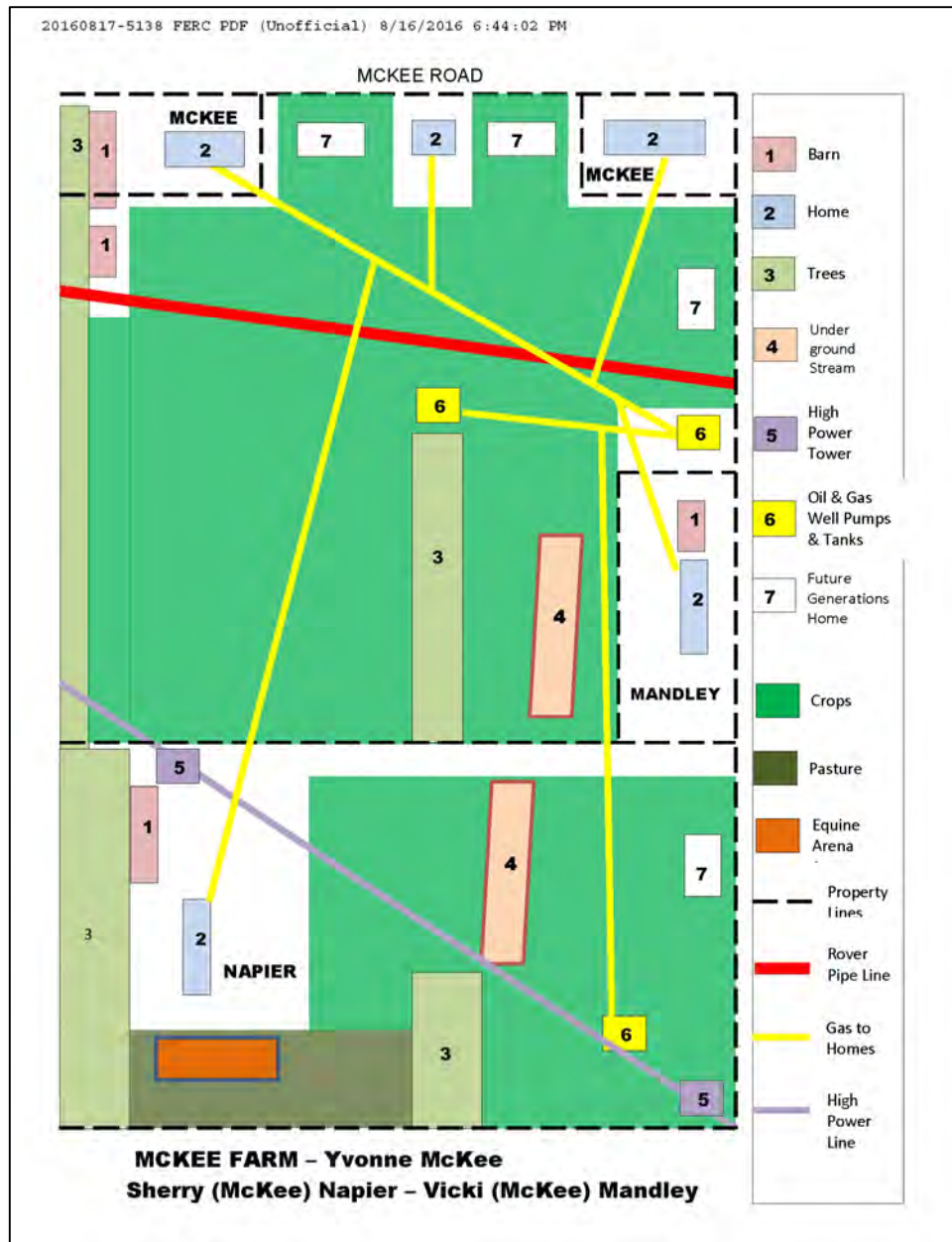
IND185-1 Comment noted. Based on our review, we did not find the City of Green Route Alternative provides a substantial environmental advantage when compared to the corresponding segment of the proposed route and did not recommend that it be incorporated as part of the Projects.

R-702

INDIVIDUALS/LANDOWNERS

IND185 – Yvonne N. McKee, Sherry McKee Napier, Vicki McKee Mandley (cont'd)

R-703



Individuals/Landowners Comments

INDIVIDUALS/LANDOWNERS

IND185 – Yvonne N. McKee, Sherry McKee Napier, Vicki McKee Mandley (cont'd)

20160817-5138 FERC PDF (Unofficial) 8/16/2016 6:44:02 PM



R-704

Individuals/Landowners Comments

INDIVIDUALS/LANDOWNERS

IND186 – Joe Hyclak

Joe Hyclak, Medina, OH.
Kimberly D Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426-0001

RE: Docket number CP16-22 Nexus Gas Pipeline

Dear Ms. Bose:

In addition to Paul Wohlfarth's posting #20160817-5008 relaying information regarding the fraudulent letters being posted to the above referenced docket, I too reached out to the spouse of a co-worker that purportedly filed the same form letter in support of the Nexus pipeline (Jennifer Syme #20160809-0027). Ms. Syme has stated that she DID NOT submit the letter, feels violated, and would like to have her supposed submission removed from the docket.

In this matter, has the FERC staff examined the post marks on the envelopes these comments were mailed in? I would venture to bet that they have all been mailed from one or two zip codes, and not a zip code corresponding to the alleged mailers home address....probably implicating Nexus as the perpetrator.

This is just another example of the dishonest, underhanded ways that Nexus is willing to use to convince FERC of the non-existent "overwhelming support for the project". This should be enough for the Board to deny the Nexus application in total.

Joe Hyclak Medina, OH 44256

IND186-1 Comment noted.

IND186-1

R-705

INDIVIDUALS/LANDOWNERS

IND 212– Jennifer Sporer

R-706

IND212-1

IND212-2

IND212-3

IND212-4

IND212-5

Jennifer Sporer, Ypsilanti, MI.

I am writing in opposition to Docket CP16-22-000, the Nexus Pipeline. The origin of natural gas through fracking is devastating to the environment— leading to poisoning our waters, our land, and air. The air release valves along the pipeline would have toxins, leading to medical problems like asthma. The potential for explosions and leaks contaminating the water would be devastating to the people of Michigan and other states along this pipeline. The soil will be disrupted, compromising valuable farm land. We already have pipelines in Ypsilanti Township, and no additional one are needed. I urge the US Government to invest in renewable resources-solar, wind, water, geothermal. Even nuclear energy is less risky than fracking. Watching documentaries like Gasland will make you realize that companies lie about safety and environmental impact. I do not trust it, and stand with the Ypsilanti Township residents and board who say we do not want this.

IND212-1 Section 4.14.3.1 discusses shale formation Natural Gas Production.

IND212-2 See the response to comment CO8-17.

IND212-3 Section 4.13 discusses leaks and pipeline incidents.

IND212-4 See section 4.2.2 for a discussion of mitigation measures on agricultural lands.

Prior to construction, NEXUS shall file with the Secretary an *Agricultural Impact Mitigation Plan (AIMP)* detailing construction and restoration measures to be implemented on the NGT Project to address agricultural issues unique to Ohio and Michigan. For construction and restoration measures in Ohio, NEXUS shall consult with the Ohio Department of Agriculture (ODA) on construction procedures to be used in agricultural land in Ohio and shall file with the Secretary any measures that result from coordination with the ODA.

Prior to construction, NEXUS shall file with the Secretary a 5-year post-construction monitoring program to evaluate crop productivity in areas impacted by the construction of the Project. NEXUS shall include in the program a commitment to file with the Secretary quarterly reports for a period of 5 years following construction documenting any crop-related problems and describing any corrective action taken to remedy those problems. The program shall stipulate that if any landowner agrees that revegetation and crop productivity are successful prior to the 5-year requirement, NEXUS shall provide documentation in its quarterly reports indicating which landowners have agreed that monitoring is no longer necessary.

IND212-5 See response to comment CO47-02.

INDIVIDUALS/LANDOWNERS

IND213 – Paul Wohlfarth

R-707

Paul Wohlfarth, Ottawa Lake, MI
July 8th DEIS NEXUS GAS Transmission Project CP-16-22-000 Accession Number
20160708-4002

Any person wishing to comment on the draft EIS may do so. To ensure consideration of your comments on the proposal in the final EIS, it is important that the Commission receive your comments on or before August 29, 2016. For your convenience, there are four methods you can use to submit your comments to the Commission. In all instances, please reference the Projects' docket numbers (CP16-22-000 for the NGT Project and CP16-23-000 for the TEAL Project) with your submission. The Commission encourages electronic filing of comments and has expert staff available to assist you at (202) 502-8258 or efiling@ferc.gov. 1) You can file your comments electronically using the eComment feature on the Commission's website (www.ferc.gov) under the link to Documents and Filings. This is an easy method for submitting brief, text-only comments on a project. 2) You can file your comments electronically by using the eFiling feature on the Commission's website (www.ferc.gov) under the link to Documents and Filings. With eFiling, you can provide comments in a variety of formats by attaching them as a file with your submission. New eFiling users must first create an account by clicking on "eRegister." If you are filing a comment on a particular project, please select "Comment on a Filing" as the filing type. 3) You can file a paper copy of your comments by mailing them to the following address: Nathaniel J. Davis, Sr., Deputy Secretary Federal Energy Regulatory Commission 888 First Street NE, Room 1A Washington, DC 20426 4) In lieu of sending written or electronic comments, the Commission invites you to attend one of the public comment meetings its staff will conduct in the Project areas to receive comments on the draft EIS. We encourage 1 "We," "us," and "our" refer to the environmental staff of the FERC's Office of Energy Projects.

- 4 - interested groups and individuals to attend and present oral comments on the draft EIS at any of the meeting locations provided on page 4. There will not be a formal start of the meeting nor a formal presentation by Commission staff, but FERC staff will be available to answer your questions about the environmental review process. You may arrive at any time after 5:00 PM and we will stop taking comments at 10:00 PM Eastern Time Zone. The primary goal is to have your verbal environmental comments on the draft EIS documented in the public record. http://elibrary.ferc.gov/idmws/file_list.asp?document_id=14476330

Wacholder said the one-on-one format wasn't intended to intimidate the public. Instead it was a way to make people more comfortable, she said, because many people, especially those from rural areas, aren't always comfortable speaking in front of a crowd.

Wacholder added that the one-on-one format is more streamlined because at some meetings in the past hundreds showed up but not everyone was able to speak due to time constraints.

"We just wanted to find a way to get more comments while making people more comfortable," Wacholder said. <http://www.chroniclet.com/Local-News/2016/08/17/Federal-regulators-meet-with-residents-one-on-one.html>

Joanne Wacholder, one of about a dozen FERC representatives, said the format from public sessions to private ones was changed at previous meetings to allow more people the chance to talk.

INDIVIDUALS/LANDOWNERS

IND213 – Paul Wohlfarth (cont'd)

R-708

"In a meeting in Pennsylvania recently we had more than 600 people attend," Wacholder said, "Only about 90 got to speak. Some people are nervous about speaking out in public. This method allows them to ask their questions in private."

FERC's official letter announcing the meeting said there would not be a formal presentation and that "FERC staff would be available to answer questions."

Wacholder said two meetings last week held in Swanton and Fremont were conducted in private sessions with residents and that two other meetings this week will be conducted the same way. She said in the recent past, the meetings were done en masse.

Her fears of a large number of people showing up in Elyria on Tuesday were unfounded. Fewer than 10 arrived in the first two hours.

http://www.cleveland.com/metro/index.ssf/2016/08/nexus_pipeline_discussions_in_elyria_on_tuesday_were_anything_but_public_photos.html

***FERC spokesperson Tamara Young-Allen said the one-on-one format for the event was announced July 8, and was mentioned in the DEIS. She said there was no deliberate attempt to deceive the public. In fact, FERC has used the format for about a year, and has received positive feedback, Young-Allen said. "Oftentimes, during the town hall meetings, people do not have the opportunity to speak...and they complained," she said. It's also a more convenient format, allowing people to have their say, then go home, she said. "Some people are too shy to stand up in front of a crowd to speak. This way, they have their say," she added. Young-Allen said FERC is required only to gather public comments, and the method is not dictated. The public events are held as a courtesy. She said comments can also be delivered at ferc.gov and by traditional mail. <http://swantonenterprise.com/news/3026/ferc-meeting-gets-thumbs-down>

IND213-1 | Finally, in previous FERC meetings/hearings they have offered both public and private one-on-one opportunities to make comments. This was done to speed up the process. Also all these comments end up on the FERC Docket CP16-22-000 for all to see. Anyone can make a comment anytime, in private, to this ferc.gov docket by computer until August 29th. So its my opinion the FERC staff are just not telling the truth of the real reason, to stop public outrage.

Paul Wohlfarth

IND213-1 See response to comment CO12-1.

INDIVIDUALS/LANDOWNERS

IND219 – Debby Christy

R-709

Debby Christy, Medina, OH August 17, 2016

Kimberly D Bose, Secretary
Federal Energy Regulatory
Commission
888 First Street NE
Washington, DC 20426-0001

RE: Docket number CP16-22 Nexus Gas Pipeline

Dear Ms. Bose:

In addition to Paul Wohlfarth's posting #20160817-5008 and Joe Hyclak's posting

Description: Comment of Joe Hyclak in
Docket(s)/Project(s) CP16-22-000
[http://elibrary.FERC.gov/idmws/file_list.asp?accessi
on_num=20160817-5160](http://elibrary.FERC.gov/idmws/file_list.asp?accession_num=20160817-5160)

exposing information regarding the hundreds of fraudulent letters being posted to the above referenced docket. I spoke with several people who purportedly filed the same form letter in support of the Nexus pipeline.

One example: http://elibrary.FERC.gov/idmws/file_list.asp?accession_num=20160815-0045

IND219-1 Mrs. Magons stated that her husband DID NOT submit the letter. She was concerned their name and address was used to file a federal document without their knowledge or authority. I sent the above document filing to Mrs. Magons.

I am in contact with others whose names and addresses have been fraudulently filed on federal documents.

In this matter, has the FERC staff examined the post marks on the envelopes these comments were mailed in? I would venture to bet that they have all been mailed from one or two zip codes, and not a zip code corresponding to the alleged mailers home address.

This is just another example of the dishonest, underhanded ways that Nexus is willing to use to convince FERC of the non-existent "overwhelming support for the project".

This should be enough for the Board to deny the Nexus application in total. So much for the elusive exemplary code of nexus conduct.

Debby Christy Medina, OH 44256

IND219-1 Comment noted.

INDIVIDUALS/LANDOWNERS

IND254 – Tammy Daly

R-710

Aug 17, 2016
CP 16-22-000

Nexus & FERC,

Do you hear the residents of the CITY OF GREEN, OH?
We have unanimously spoken, loud and clear. The City of Green has come together as a community to oppose this pipeline and to protect our residents, properties, and natural resources.

IND254-1 We have presented the conflicts and have offered a solution. The City Of Green's Alternative Route would mean the Nexus project would affect 40 percent fewer businesses, 50 percent fewer churches, 70 percent fewer residences, 100 percent fewer schools, and 58 % fewer acres of wetland.

IND254-2 **Opposition in Green has been filed by:**
- City Of Green
- Parks & Rec Board: 5 parks affected
- Green Local School Board: 3 schools, 1 stadium
- Portage Lakes Career Center Board Of Education
- Green Teacher's Union
- Green School's Foundation
- Green PTAs
- Green Soccer Association:
- Green Youth Football: 5 fields affected
- Green Youth Cheer: 5 fields affected
- Green Lacrosse Club: 5 fields affected
- Queen of Heaven Church
- Greenburg United Methodist Church
- Camp Y-Noah
- Green Meadows Home Owners Association

IND254-3 **Green's filings have included these additional concerns:**
* Nimisila Reservoir: Bald Eagle population
* Hartong Dairy Farm
* Wetlands
* Wildlife: Bats, Foxes, Turkey, Deer, Bald Eagles
* Well Water (w/in 150 ft of wells)
* Singer Bog
* Wise Road Disposal Site,
* Underground mine shafts near 77/Ariss Park
* Indian Artifacts on Ariss Park, Close proximity to powerlines,
* City Of Green's Economic Development
* Virgin Forest/ Ariss Park.
* Large gatherings of people on/near line pipelines at sports fields (Ariss Park)
* Close proximity to powerlines
* Population Statistics
* Trespassing Issues
* Close proximity to homes (No regard to a suggested 1500 ft safety setback)

IND254-4 In the Executive Summary pages ES-4 and ES-5 titled **Groundwater, Surface Water, Water Use and Wetlands** FERC states that "The Project could result in increased turbidity and alteration of flow in shallow aquifers...". The current route identifies 475 waterbodies (208 perennial, 156 intermittent, 90 ephemeral, 1 reservoir and 5 ponds) that will be crossed.
Even more troubling is the fact that 245 wells and 6 springs were identified within 150 feet of the Project. NEXUS will also cross 16 wellhead protection areas, 12 surface water protection areas and 5 water bodies that have public water intakes with three miles downstream. But the Draft Environmental Impact Statement ("DEIS") concludes that, "No long-term effects on surface waters would result from construction and operation of the Project."
How can you be so sure? Who developed the data to support this conclusion?
Please provide the facts and evidence that support this conclusion?

Tammy Daly, 1779 King Dr, Uniontown, OH, TammyLDaly@gmail.com

IND254-1 Comment noted. Based on our review, we did not find the City of Green Route Alternative provides a substantial environmental advantage when compared to the corresponding segment of the proposed route and did not recommend that it be incorporated as part of the Projects.

IND254-2 Comment noted.

IND254-3 A discussion of the proposed route in and near the City of Green is presented throughout section 4.0. The discussion provides detail regarding the Nimisila Reservoir, Singer Lake Bog, Ariss Park, wildlife (including bald Eagles), wetlands, water wells, farming, contaminated soils/groundwater, cultural resources, abandoned mines, future development, and proximity to populations.

IND254-4 See discussion in sections 4.3.1.2 and 4.3.2.2 for mitigation procedures that will be used to protect surface waters and groundwater, respectively. Historically, the installation and operation of pipelines adhering to proper mitigation procedures supports the conclusions.

INDIVIDUALS/LANDOWNERS

IND256 – Debbie Christy

August 17, 2016

Kimberly D Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426-0001

RE: Docket number CP16-22 Nexus Gas Pipeline

Dear Ms. Bose:

In the Executive Summary pages ES-4 and ES-5 titled **Groundwater, Surface Water, Water Use and Wetlands** FERC states that "The Project could result in increased turbidity and alteration of flow in shallow aquifers...".

You identify 475 waterbodies (208 perennial, 156 intermittent, 90 ephemeral, 1 reservoir and 5 ponds) that will be crossed.

Even more troubling is the fact that 245 wells and 6 springs were identified within 150 feet of the Project. NEXUS will also cross 16 wellhead protection areas, 12 surface water protection areas and 5 water bodies that have public water intakes with three miles downstream.

But you conclude that, "No long-term effects on surface waters would result from construction and operation of the Project."

How can you be so sure?

Who developed the data to support this conclusion?

Please provide the facts and evidence that support this conclusion?

What are the consequences if your conclusion is incorrect?

How will my property use and value be impacted if your conclusion is incorrect?

What are the risks to my health if your conclusion is incorrect?

Who will be held liable for damages to my property or health?

Debby Christy
Medina, OH 44256

IND256-1 See discussion in sections 4.3.1.2 and 4.3.2.2 for mitigation procedures that will be used to protect surface waters and groundwater, respectively. Historically, the installation and operation of pipelines adhering to proper mitigation procedures supports the conclusions.

IND256-1

R-711

INDIVIDUALS/LANDOWNERS

IND271 – Harry and Debbie Porter

IND271-1

Harry Porter, North Canton, OH,

the proposed pipeline will hurt the city of Green financially, and will put residents in Green as well as others along the current pipeline route in financial and physical danger, should an accident occur. since there are at least 2 other routes, affecting far fewer residents along the pipeline, it is imperative to avoid the current route!

to continue with the present routing will do a disservice to the City of Green, and many other residents along the route. it is time to consider the health and safety of those who will be hurt if this initial route choice is allowed to stand.

Harry & Debbie Porter

IND271-1 See section 4.13 for a discussion of pipeline reliability and safety. Based on our review, we did not find the City of Green Route Alternative or other major route alternatives provide a substantial environmental advantage when compared to the corresponding segment of the proposed route and did not recommend that they incorporated as part of the Projects.

INDIVIDUALS/LANDOWNERS

IND293 – Gary Schoen

IND293-1

Gary Schoen, Climax, MI.

I submit this in protest of the way the FERC public comment was conducted in Tecumseh, Michigan on August 11, 2016. On August 4, 2016 only a week before the meeting the format of meeting was changed, by FERC, from comments being given in front of the audience to comments being given in a small room with a FERC representative and a person operating a recording device. People come to these meetings to hear comments. Many people come never intending to give comment but attend in order to hear what opinions are given regarding the Nexus Pipeline. Some came that night having just learned about the Nexus and were there to get more information. I feel the way this meeting was conducted was just another attempt to silence and divide people all along the route.

In addition holding the one and only meeting in Michigan, in Tecumseh, prevented many people from attending. Tecumseh is approximately 6 miles west of the pipeline but far removed from dense population areas like Willow Run Subdivision which is in Ypsilanti, MI at the end of new construction. Again, I believe it is another attempt to silence and divide those opposed to the pipeline.

Gary Schoen

IND293-1 Comment noted. Meeting locations were selected to provide access to all affected landowners along the route with a reasonable travel distance. Also see responses to comments CO12-1 and CO12-2.

INDIVIDUALS/LANDOWNERS

IND294 – Paul Wohlfarth

IND294-1

Paul Wohlfarth, Ottawa Lake, MI.
Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE Washington, DC 20426-0001

RE: Docket number CP16-22 Nexus Gas Pipeline

Dear Ms. Bose:

Please make note that Docket CP16-22-000 has become a fraudulent docket filled with industry produced fraudulent letters. Ms. Bose, within the last few weeks, hundreds of stolen identities have been used to promote the NEXUS pipeline. Mail fraud has been committed and your agency allows the criminal activity to continue. Those of us who get FERC Esubscription have had their Email boxes filled with FERC fraudulent letters. If this massive fraud continues I and many others will either end our Esubscription or relegate your corrupted emails to the spam box. I suggest you create a new category, a sort of spam file for all of your unsigned, undated, mailed form letters that no one is reading.

IND294-2

A lot of time and money is being spent to perpetuate this fraud. Your staff has suggested we members of CORN, contact the hundreds of stolen identities used in these letters and have them mail FERC with yet another letter dis-evolving themselves of writing previous letters. This is not our responsibility to police your agency of fraud and will only create hundreds more of mail to the docket. It makes one wonder why you won't police your agency of criminal activity? Please contact the U.S. Postal Inspection Service: <https://postalinspectors.uspis.gov/contactus/filecomplaint.aspx> and file a formal complaint under identity theft.

Paul Wohlfarth

IND294-1 Comment noted.

IND294-2 Comment noted.

INDIVIDUALS/LANDOWNERS

IND313 – Paul Wohlfarth

Paul Wohlfarth, Ottawa Lake, MI.

Kimberly D Bose, Secretary
Federal Energy Regulatory Commission 888 First
Street NE
Washington, DC 20426-0001

RE: Docket number CP16-22 Nexus Gas Pipeline Dear Ms.

Bose:

IND313-1 On you docket today a mailed unsigned undated form letter, just posted, supposedly written from a Barbara Vaculik
http://elibrary.FERC.gov/idmws/file_list.asp?accession_num=20160817-0030
.

A simple search of Barbara Vaculik, 211 W Main St., Metamora, OH, 43540 turned up Mrs. Vaculik's phone number (419) 644-3271. I called and talked to Mike Vaculik son of Barbara. He explained his elderly mother was away at dialysis. I then explained the situation and asked if he knew if his 83 year old mother Barbara wrote a letter to FERC? Mike explained to me that it would not be possible because his mother suffers from dementia, a life robbing disease that robs people of their memory and the ability to function independently.

So my question to Ms. Bose: How would Barbara Vaculik clear her name of the fraudulent letter written in her name if she is unaware of her being? What kind of organization allows fraudulent letters to be written by the dead and the infirm? If the oil & gas industry is funding this, what other fraudulent postings are we not aware of? Are the so-called industry funded "studies" not riddled with graft and corruption engineered to deceive?

Paul Wohlfarth

IND313-1 Comment noted.

R-715

INDIVIDUALS/LANDOWNERS

IND314 – Jonathon Strong

August 18, 2016

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Hard copies of the CP16-22 DEIS reports are of inferior quality.

Dear Secretary Bose:

As part of the FERC process, we effected property owners working to take part in this process in defense of our communities and neighborhoods, were sent either CD's with the electronic files or hard copies of the DEIS report. I and many others have found In reading the hard copy reports as sent, after a short time, the pages have begun to fall out. Additionally, many recipients of the CD's received discs which were unreadable. I am requesting that your office perform a quality audit of the services you are receiving which are producing these materials, and work to improve the final products which are being sent to the public. This process is already frustrating and over burdensome for the public, and we don't need to exacerbate this by sending out faulty communication materials.

Sincerely,



Jonathan Strong

IND314-1 Comment noted.

INDIVIDUALS/LANDOWNERS

IND315 – Jonathon Strong

August 18, 2016

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

CP16-22 fraudulent filings spur needed comment submission reform.

Dear Secretary Bose:

IND315-1 As noted by several commenters recently, your database has been compromised with many fraudulent comments, submitted via writing. This has brought to light a significant flaw in your comment process.

The requirement to use either the eComment or eFiling option on the FERC website requires an individual make use of two-factored authentication. This forces the commenter to either create an account, or validate who they claim to be via email. While this is still able to be compromised, it at least leaves an accountability trail which would be easy to identify the source commenter, legitimate or false. However, please note that your process by which you receive written comments provides no such accountability.

The submittal of written correspondence should also afford a way to preserve an audit trail of origin. It is presumed the written comments are being sent because of the inability to access the FERC website electronically. I think we can assume everyone has the ability to make a phone call these days. One method to enable authentication could be to require any would-be written commenter to sign the comment, and also call into the FERC help line, and request a pin for written comment. This pin could be logged with the requestors name and contact information. The submitter would then be required to put the PIN on the letter which could be tied back to the log. While any system can be defeated, this rather simple process change would prevent the blatant abuse we are now seeing on this docket.

Sincerely,



Jonathon Strong

IND315-1 Comment noted.

R-717

INDIVIDUALS/LANDOWNERS

IND318 – No Name Provided

IND318-1

20160917-0051 PERC (09/17/2016) 09/17/2016
CP16-22
RECEIVED
SECRETARY OF THE
COMMISSION
2016 AUG 17 P 2:43
FEDERAL ENERGY
REGULATORY COMMISSION

Dear Nexus,

Greetings sent from here to your office. We are — responding to your info. regarding the the pipeline project. (Docket CP16-22-000)

We would like to kindly let you know we are very much opposed to the (City of Green Alternative) Route. We already have one, and maybe two pipelines going right beside our property. We strongly encourage you to stay with the (Nexus preferred route)

So we close this short letter with us hoping + praying you will stay with the (Nexus preferred route.

Thanks for reading our letter!

IND318-1 As discussed in sections 3.3.3 and 4.10.9, we did not find the economic analysis by Cleveland State University to be compelling.

INDIVIDUALS/LANDOWNERS

IND324 – Jennifer Sporer

IND324-1 Comment noted.

20160817-0049 FERC EDF (Unofficial) 08/17/2016

Aug 10, 2016

RE: CP16-22-000

Dear Deputy Secretary Davis, ORIGINAL

IND324-1

Please do not allow Nexus
to build the pipeline through
Michigan and Ohio. This
project, if permitted, will affect
water, trees, and farms.

I strongly oppose this project.

Sincerely,



Jennifer Sporer
573 Kansas Ave
Ypsilanti MI 48198

FILED
SECRETARY OF THE
COMMISSION
AUG 17 P 2:40
FEDERAL ENERGY
REGULATORY COMMISSION

R-719

INDIVIDUALS/LANDOWNERS

IND326 – Richard Baumgartner

R-720

IND326-1

Richard Baumgartner, Westlake, OH.
Improving the FERC Approval Process
8/18/2016

The present process has been influenced and evolved over many years. Some feel that the present process needs some major improvements. Unfortunately, the present process has deep roots, and minor improvements are much easier to make than major changes. How do we know the system is wrong and requires major changes?

1. When the system allows a "for profit" company to take away property rights of landowners against their will, for speculated business purposes, something is wrong.
 2. When a pipeline route is established by a developer without any initial input from local officials, something is wrong.
 3. When the majority of local governmental entities formally request that an alternate safer, less intrusive route be considered, but their requests are ignored, something is wrong.
 4. When the rules are manipulated to ignore "safe setback distances", something is wrong.
 5. When the lives of endangered species are more important than the safety of people, something is wrong.
 6. When there is employment co-mingling of the officials of pipeline developers and pipeline rule makers; and by this co-mingling, the process can be influenced to favor the rights of business over the rights of property owners, something is wrong.
- We need strong leadership to mitigate or eliminate many of these major issues, and other issues in a positive fashion.
Richard Baumgartner

IND326-1 Comment noted.

INDIVIDUALS/LANDOWNERS

IND327 – Paul Gierosky



August 18, 2016

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Re: Nexus Gas Transmission LLC ("NEXUS") Docket No. CP16-22 and the Federal Energy Regulatory Commission ("Commission")

Dear Secretary Bose:

IND327-1 | My email inbox is overflowing with fraudulent letters filed in support of the NEXUS project. This is obviously not the work of an independent rogue operator. This is clearly a well-planned and executed operation. The kind of operation a well-funded energy company working from a well-rehearsed playbook would undertake.

WHEN WILL THE FRAUD STOP and THE GREED END

IND327-2 | It will stop when the Commission uses its authority as the lead Agency for National Environmental Protection Act ("NEPA") review to immediately investigate this fraudulent activity, track down the perpetrator(s) and prosecute to the full extent of the law. Mail fraud is a serious offense. I don't believe you will have any difficulty convincing United States Postal Inspectors of that fact.

It will stop when the Commission sends a message to the industry that people matter, that facts matter, the process is not to be taken lightly or toyed with, and that truth shall prevail.

IND327-3 | It will stop when you approve and order that NEXUS adopt the City of Green Alternate Route. We can do better than the NEXUS proposed route. We know it and you will soon. You can make the call to enforce this route alternative. This will change the process dynamics and perhaps slowly the disrespect energy companies have shown for this entire process.

919 East Turkeyfoot Lake Road, Suite B, Akron, OH 44312; plgierosky@gmail.com; 216-469-5206

www.facebook.com/MedinaNoNexus

IND327-1 Comment noted.

IND327-2 Comment noted.

IND327-3 Comment noted.

R-721

INDIVIDUALS/LANDOWNERS

IND327 – Paul Gierosky (cont'd)

IND327-4

Secretary Bose, as you know, the Commission has the responsibility to provide strong leadership in the processing of energy project applications. The arrival of hundreds of fraudulent letters on the NEXUS Docket is a perfect opportunity to demonstrate real leadership to ensure fairness and determine consistency with the public interest using the authority vested in the Commission by Congress.

Yours truly,



Paul L. Gierosky
Cofounder of the Coalition to Reroute Nexus



The Mission of the **Coalition to Reroute Nexus** is to educate and persuade NEXUS to choose a route that avoids the higher density counties in northeastern Ohio already adequately served with natural gas and infrastructure and the ecologically unique and environmentally sensitive Oak Openings Region in western Ohio.

IND327-4 Comment noted.

R-722

INDIVIDUALS/LANDOWNERS

IND328 – David A. Mucklow

DAVID A. MUCKLOW

ATTORNEY AT LAW
919 E. TURKEYFOOT RD, SUITE B
AKRON, OH 44312
PHONE: (330) 896-8190
FAX (330) 896-8201
davidamucklow@yahoo.com

August 26, 2016

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE Room 1A
Washington, DC 20426
Docket # PF15-10-000

Re: Nexus pipeline, docket number Docket # CP16-22-000; Mines
near MILE MARKER 45; Summit Parcel #2400603 and Ariss Park in
the City of Green

Dear Secretary,

We are resubmitting documentation in support of opposition to the proposed Nexus route through the City of New Franklin. This particular parcel and issue is near the corner of Grove and Rheam Roads. The owner was incapable of relaying these comments. The owner of Summit County Parcel #2400603 which is on the Nexus proposed route wishes to report extensive coal mine damage in the area of the proposed route. She reports recent sink holes directly in the area of the route as deep as five feet. One hole recently opened up and she fell into it while riding her horse. Attached are mine maps relating to this area. The particular route of Nexus in Summit County has several areas of mine subsistence issues. One of the largest mine areas is under Ariss Park in the City of Green and under Interstate 77 next to Ariss Park. A number of records were submitted to FERC in the pre-filing and post-filing dockets on this issue. However in the Draft EIS, FERC wrote: "NGT Project No active underground coal mines are located within 0.25 mile of the NGT Project area. Ten (10) known abandoned underground coal mines were identified with 0.25 mile of the NGT Project are between MP 0.0 and MP 52.0 (see table 4.1.2-2), **but the NGT Project does not cross any of these known abandoned underground mines.**" This statement is incredulous since in the case of Ariss Park, the pipeline will cross directly over areas of known mine subsistence. The statement is not backed with any independent evidence and is based upon information submitted by Nexus. These areas may be dangerous to walk across or drive vehicles across. Because the mine maps are approximately one hundred years old or greater and no one has actually been in these mines for several decades, the exact locations are difficult to pin point. One shaft mine is filled with water and one sink hole is filled with water. Eye

IND328-1 The ODNR Mines of Ohio GIS dataset does not indicate the presence of a known, mapped, underground mine that is crossed by the NGT Project in the vicinity of Summit County Parcel #2400603 but does show a mine about 0.2 miles east (Mine Code ST-011). However, ODNR believes that only 50 percent of abandoned underground mines are mapped and georeferenced in their dataset. NGT has stated that they will perform geophysical surveys if undocumented abandoned underground coal mines are discovered during construction. We recommend that NGT review this property for the potential presence of an abandoned underground coal mine and provide a report to the FERC.

IND328-2 The ODNR Mines of Ohio GIS dataset does not indicate the presence of a known, mapped, underground mine that is crossed by the NGT Project in the vicinity of Ariss Park but does show the mapped extent of two mines about 0.2 miles north (Mine Codes ST-034 and ST-035). ST-034 is the mine beneath Interstate 77 where ODOT performed mitigation by filling voids with concrete and ST-035 is the mine located beneath Ariss Park. We have reviewed publically available ODOT presentations and maps relating to the mitigation and confirmed this area is located to the north of where the pipeline would cross I-77. NGT has stated that they will perform geophysical surveys if undocumented abandoned underground coal mines are discovered during construction.

R-723

IND328-1

IND328-2

INDIVIDUALS/LANDOWNERS

IND328 – David A. Mucklow (cont'd)

witness testimony has observed several locations on Ariss Park and I-77 in the immediate area of the pipeline location where large sink holes have opened up engulfing large pieces of equipment and vehicles. The issue was so problematic from the high tension wire, where Nexus intends to cross the highway, North to the Wise Road Bridge, ODOT expended millions of dollars to repair I-77 and poured thousands of tons of concrete beneath the highway. Evidence of this project with pictures can be Googled. This is the primary reason that Ariss Park is a park and not housing and why I-77 was built in the location it is sited dating back to the early 1960s. Should Nexus not be able to bore through the concrete under I-77 it will be forced to use an open cut method to cross I-77. Ariss Park is probably one of the worst possible locations to site the pipeline for this and many other reasons. Better alternatives South of Summit County, exist which avoid the old mine areas completely and are mapped in the City of Green alternate route as revised.

Very truly yours,

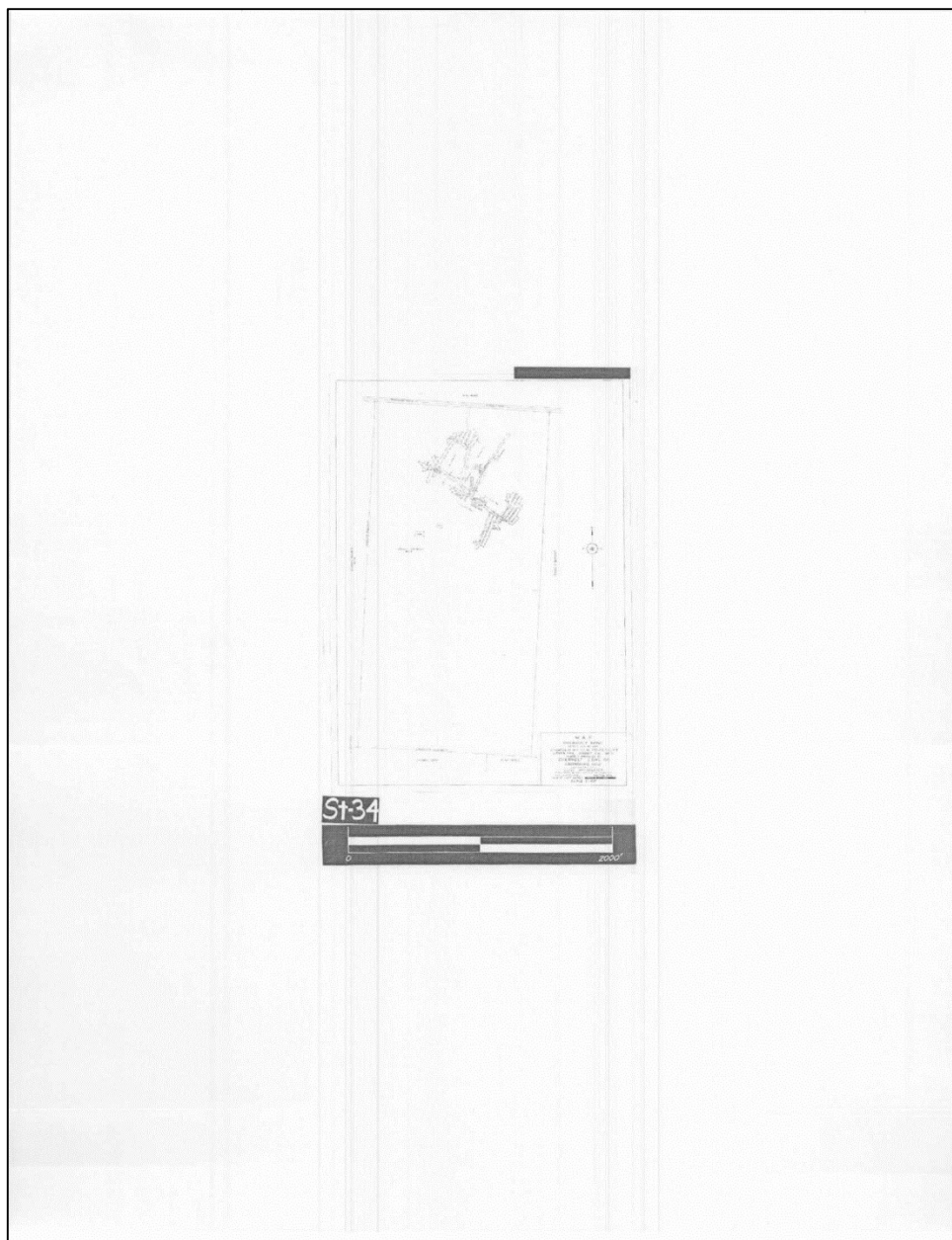
/s/David A. Mucklow
David A. Mucklow

R-724

INDIVIDUALS/LANDOWNERS

IND328 – David A. Mucklow (cont'd)

R-725

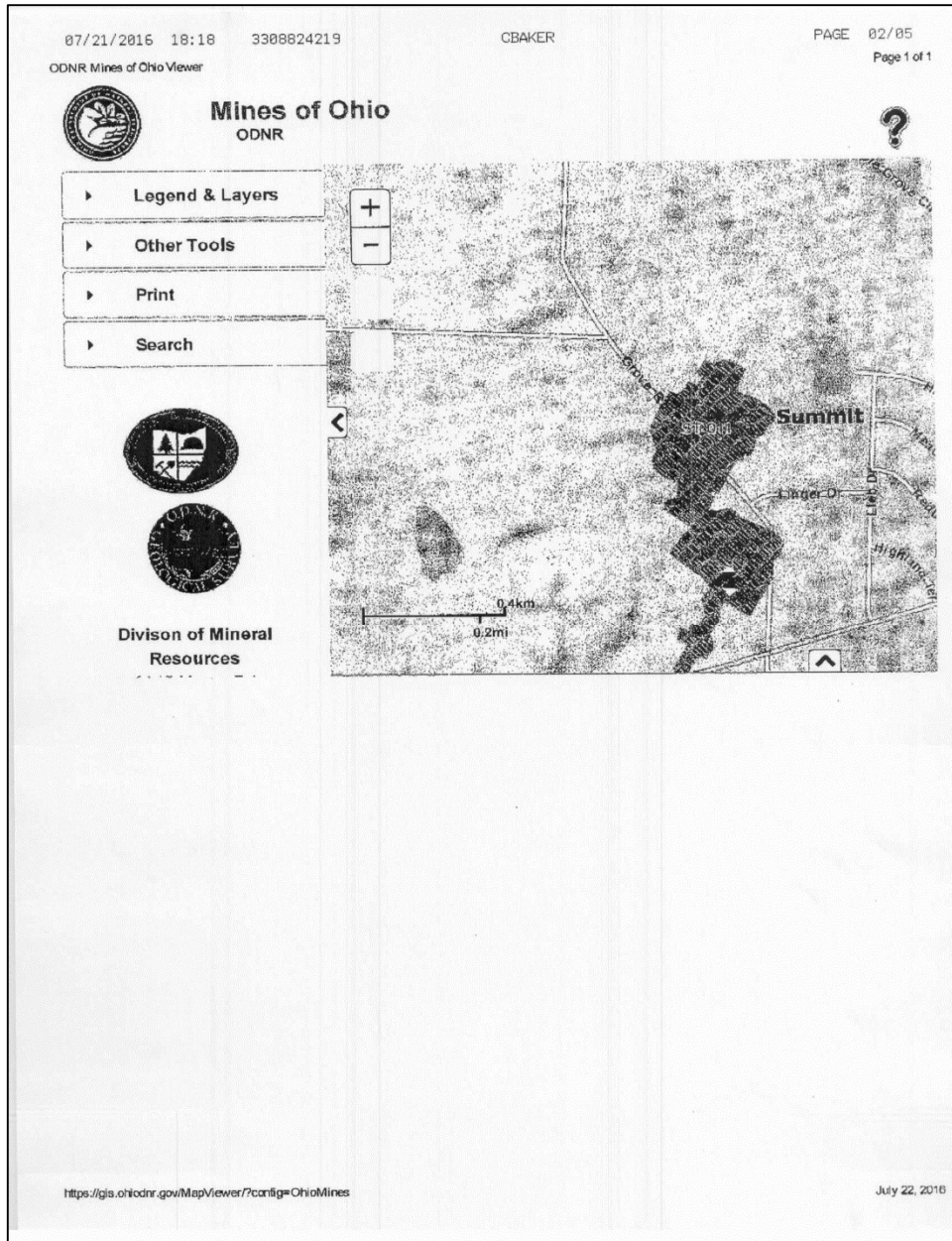


Individuals/Landowners Comments

INDIVIDUALS/LANDOWNERS

IND328 – David A. Mucklow (cont'd)

R-726




Individuals/Landowners Comments

INDIVIDUALS/LANDOWNERS

IND328 – David A. Mucklow (cont'd)

R-727

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ODNR Mines of Ohio Viewer Page 1 of 1



Mines of Ohio
ODNR

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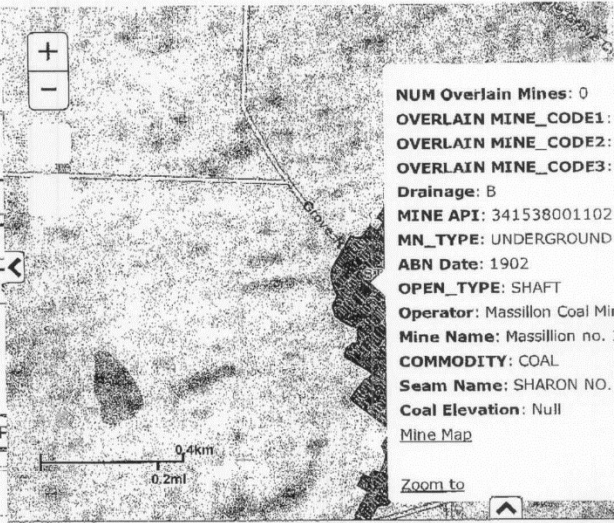
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NUM Overlain Mines: 0

OVERLAIN MINE_CODE1:

OVERLAIN MINE_CODE2:

OVERLAIN MINE_CODE3:

Drainage: B

MINE API: 341538001102

MN_TYPE: UNDERGROUND

ABN Date: 1902

OPEN_TYPE: SHAFT

Operator: Massillon Coal Mir

Mine Name: Massillon no. 1

COMMODITY: COAL

Seam Name: SHARON NO.

Coal Elevation: Null

Mine Map

Zoom to

https://gis.ohiodnr.gov/MapViewer/?config=OhioMines

July 22, 2016

Individuals/Landowners Comments

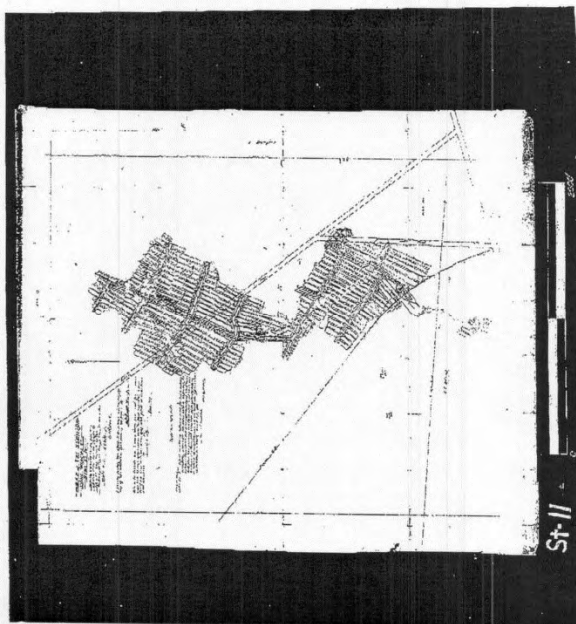
INDIVIDUALS/LANDOWNERS

IND328 – David A. Mucklow (cont'd)

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PAGE 04/05



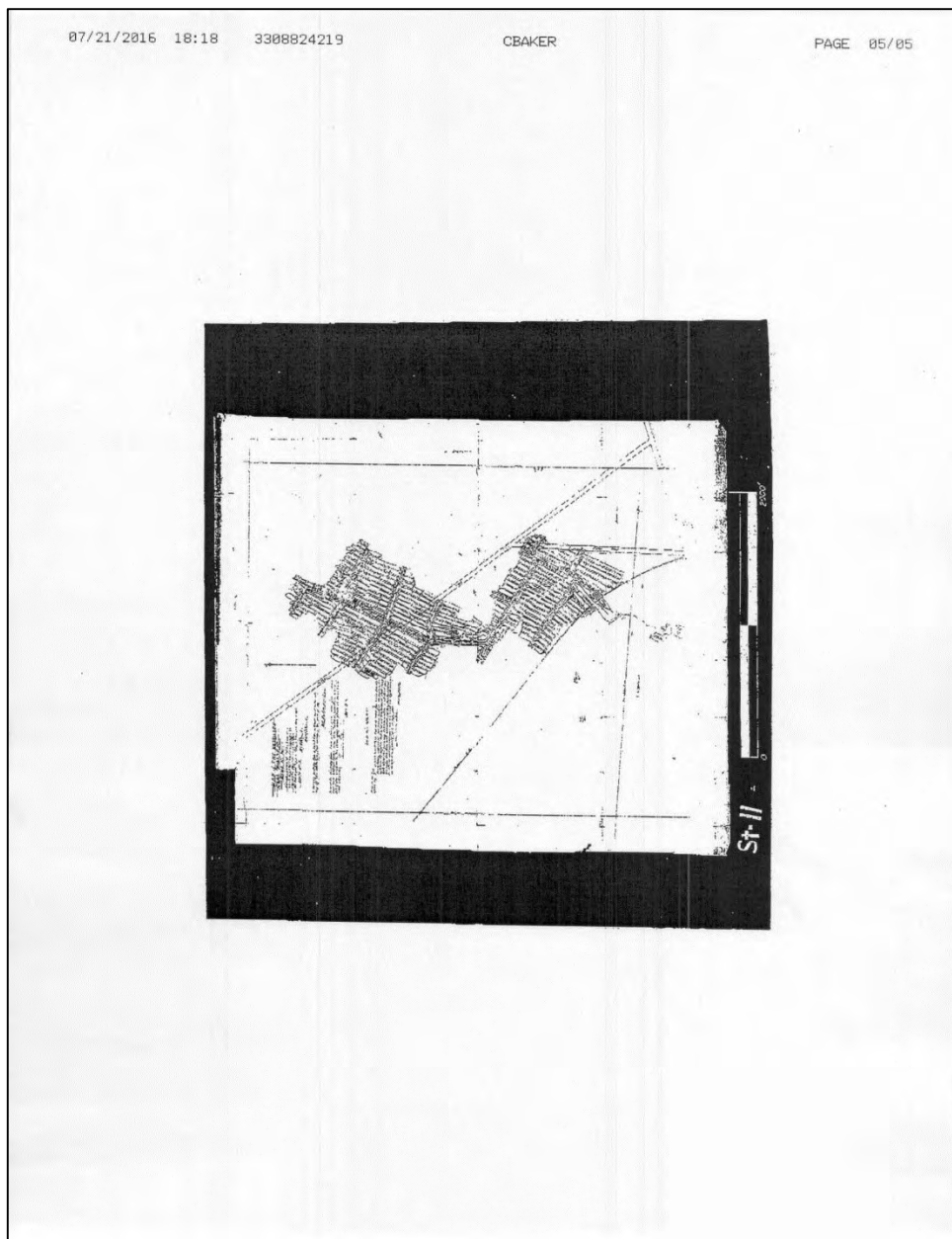
R-728

Individuals/Landowners Comments

INDIVIDUALS/LANDOWNERS

IND328 – David A. Mucklow (cont'd)

R-729



Individuals/Landowners Comments

INDIVIDUALS/LANDOWNERS

IND329 – Jack Lewis

IND329-1

IND329-2

jack lewis, akron, OH.
There is no possible rationale that would justify the routing of the NEXUS pipeline IAW with the original NEXUS proposal, other than it being the most cost effective/profitable solution for the companies involved. FERC is spinning it with justification that does not represent the involved citizen's interests – not even close. This is a Federal agency! What happened to "government of the people, by the people, for the people?" There are way too many Green & New Franklin properties & citizens; personal, business & community, being adversely impacted by this, to justify the original routing, over the proposed rerouting. To do so, just smacks of corrupt politics.

IND329-1 Comment noted.

IND329-2 Comment noted.

INDIVIDUALS/LANDOWNERS

IND330 – David Houk Sr.

	DAVID HOUK SR., SEVILLE, OH Dear Sirs,
IND330-1	My wife and I live within 2 miles of the proposed compressor station to be constructed on Guilford Rd. in Seville, OH We both have asthma and are very concerned about the pollutants that will be released when it is in operation. Since we are both in our mid 80s this could be very harmful to us.
IND330-2	I am also concerned that Nexus feels they have you in their pocket since they have already given out contracts for the construction of the pipeline. Also I feel that the information they are giving out about the amount of taxes they will be returning to the area is not true.
IND330-4	They cannot say just where this type of return has already been paid to areas where they have a pipeline.
IND330-4	We don't want to stop the construction, we just would like to have it moved further South away from heavy residential areas. I hope you will take into consideration all of the comments that have come to you before you make your decision about where the pipeline will be constructed. Thank you for your time

- IND330-1 See the response to comment CO8-17.
- IND330-2 Comment noted.
- IND330-3 Comment noted.
- IND330-4 Comment noted. Alternatives are discussed in section 3.0.

INDIVIDUALS/LANDOWNERS

IND331 – Jane Walther

Jane Walther, Whitehouse, OH
IND331-1 I am writing to plead with you to do what is right for the people in my community. Please reconsider the alternate routes for the Nexus Gas Pipeline and Compressor Station. It seems to make sense for the route to be away from such a populated area. Accidents happen! That's why they call them accidents! Why put us all at risk if there is an alternative route that keeps more risk away from the public and our precious metroparks?
IND331-2 Compressor Stations emit toxic gases. Measuring this on an annual average is not a fair measurement to those of us who live here EVERYDAY.

IND331-1 See the response to comment CO8-17.

IND331-2 Comment noted. Alternatives are discussed in Section 3.0. Section 4.12.1.3 demonstrates that all compressor stations associated with the proposed projects would comply with the NAAQS, which were established to protect human health, including sensitive populations such as children, the elderly, and those with chronic respiratory problems.

INDIVIDUALS/LANDOWNERS

IND332 – Verne G. Waldow, Jr.

20160819-5115 FERC PDF (Unofficial) 8/19/2016 10:55:14 AM

IND332-1

I live at 8782 Yoder Road, Wadsworth, in Medina County, Ohio 44281. My wife and three children, ages 16, 14 and 13, live with me at our home. My primary concern with the NEXUS project is the compressor station in Guilford Township, Medina County, Ohio (hereafter referred to as the Wadsworth compressor station). My home is approximately .87 miles from the Wadsworth compressor station, which if built, will be due west from my home. As is common knowledge, the weather pattern is west to east. Therefore, all pollutants emitted from the Wadsworth compressor station will inevitably travel by wind to my home. If it is raining, the pollutants will travel through precipitation into the ground water around my home. Almost all homes in Guilford Township have residential water wells. As the Ohio EPA's brochure on compressor stations states, "Air pollutants typically emitted from compressor stations can include volatile organic compounds; particulate matter; nitrogen oxides; carbon monoxide; sulfur dioxide; greenhouse gases (carbon dioxide, methane and nitrous oxide); and small amounts of hazardous air pollutants (e.g., benzene, acetaldehyde, formaldehyde, toluene, ethyl benzene and xylenes)." I'm not a scientist, but those are very dangerous pollutants.

IND332-2

NEXUS says these pollutants will be at or below Ohio EPA standards, but I am very concerned that repeated exposure to "safe" levels of pollutants will have an adverse effect on the health of my family – through the air we breathe, and the water we drink. There is no debate that pollutants will be emitted, especially during blowdowns when millions of cubic feet of untreated natural gas is released into the air. It is my understanding that more than 200 blowdowns per year could occur at the Wadsworth compressor station. If a blow down is anything like what is shown in this video: <https://www.youtube.com/watch?v=yXLD3e7Eol8>, it defies logic to assert that pollutants will not be an issue for people living in close proximity to the Wadsworth compressor station.

IND332-3

Wilma Subra, an Environmental Health Scientist, MacArthur Fellow, and President of the Subra Company stated, "The pathways of human exposure of air emissions from the compressor stations consist of inhalation, ingestion and dermal absorption. The air emissions from the various units associated with the compressor stations associated with the Nexus pipeline and the Wadsworth Compressor station in particular, as well as the venting of gases from the periodic maintenances, routine operations, equipment leaks, startup and shut down activities, and pigging operations, will have the potential to negatively impact the health of individuals living, working and recreating within 2 to 5 miles of the compressor stations." Additionally, Subra noted that the most prevalent medical conditions of those living in close proximity to compressor stations consists of: respiratory impacts (71%), throat irritation (55%), weakness and fatigue (55%), breathing difficulties (42%), and severe headaches (39%). I can only assume that living .87 miles downwind from the Wadsworth compressor station means these negative impacts will be even greater for my family. (full article attached)

Another person studying the Wadsworth compressor station, Joanne Belovich, Professor at Cleveland State University, College of Engineering (Ph.D. in Chemical Engineering from the University of Michigan), states, "The data show that the potential exists for serious negative

IND332-1

Volatile organic compound emissions from the compressor stations would be limited since they will meet state and federal air quality standards, and any emissions would rapidly disperse and be diluted. Moreover, given their volatility, the level at which these compounds would partition into meteoric water would be negligible, and therefore would not impact the quality of receiving surface waters or groundwater.

IND332-2

Section 4.12.1 addresses compressor station blowdowns. Methane is the primary pollutant emitted during blowdowns, with minor levels of volatile organic compounds. As demonstrated in section 4.12.1.3, compressor stations associated with the proposed projects would not exceed the NAAQS.

IND332-3

See the response to comment CO8-17.

INDIVIDUALS/LANDOWNERS

IND332 – Verne G. Waldow, Jr. (cont'd)

20160819-5115 FERC PDF (Unofficial) 8/19/2016 10:55:14 AM

- IND332-4 health effects due to the compressor station emissions at distances up to one mile from the [Wadsworth] compressor station." (full article attached)
- It is hard for me to understand how any rational person wouldn't think over 200 compressor station events, or blowdowns, wouldn't affect the health of a family living .87 miles downwind from the Wadsworth compressor station.
- IND332-5 I am not against pipelines or compressor stations. It is in the country's interest to develop the domestic gas market. However, I am adamantly against pipelines and compressor stations being built in residential areas. The City of Green has proposed an alternate route which would take the pipeline out of most populated areas and re-route it through more rural areas. The FERC should mandate that NEXUS build the pipeline using a route which will have the least impact on the fewest number of people. Populated areas should be avoided at all costs. NEXUS has basically rejected the City of Green alternate route and made vague promises to "study" alternate routes. Study, but not change. NEXUS will not alter the route because it will cost money. Money should never take precedence over people. I hope the FERC will put the health of people above the profits of a private corporation. In the end, NEXUS will make money regardless of the route chosen. Why not use the route which impacts the least amount of people? It seems like common sense to me.
- IND332-6 In summary, I am very concerned about the health of my family if the Wadsworth compressor station is built. I am requesting that the FERC deny NEXUS the permit to build the Wadsworth compressor station and order NEXUS re-route the pipeline using the City of Green's alternate route. Less people will be affected, and NEXUS will still get its pipeline to Canada.
- Documents Attached:
 Wilma Subra, Comments on Wadsworth Compressor Station
 Joanne Belovich, Health Effects of Compressor Stations
 Southwest Pennsylvania Environmental Health Project, Summary on Compressor Stations and Health Impacts.

- IND332-4 See the response to comment CO8-17.
- IND332-5 Comment noted.
- IND332-6 See the response to comment CO8-17.

INDIVIDUALS/LANDOWNERS

IND332 – Verne G. Waldow, Jr. (cont'd)

20160919-5115 FERC PDF (Unofficial) 8/19/2016 10:55:44 AM

Subra Company

P. O. Box 9813

New Iberia, LA 70562

To: Ohio Environmental Protection Agency
Akron Regional Air Quality
1867 West Market Street
Akron, OH 44313

From: Wilma Subra

Date: February 10, 2016

Re: Wadsworth Compressor Station Air Permit Application

Madina County, Ohio

The following comments are submitted in opposition to the granting of an air permit for the Wadsworth Compressor Station.

The Wadsworth Compressor Station will service the new NEXUS Gas Transmission natural gas pipeline to deliver natural gas from Appalachia supplies to markets in Ohio, Michigan, Chicago and Ontario.

The Wadsworth compressor is designed to maintain line pressure and ensure natural gas continues to move at sufficient volumes for reliable service at delivery points. The compressor station will consist of a 29,517 horse power natural gas fired Solar Turbine, Titan-250-30002S4.

The air emissions from the units associated with the compressor station will have a negative impact on the health of those living, working or spending time in the area of the compressor station.

R-735

INDIVIDUALS/LANDOWNERS

IND332 – Verne G. Waldow, Jr. (cont'd)

20160819-5115 FERC PDF (Unofficial) 8/19/2016 10:55:44 AM

Air Emissions

Compressor Turbine (P001)

As designed, the Wadsworth compressor station will result in the release of air emissions from the compressor turbine as well as a number of other units associated with the operations of the compressor station.

The compressor turbine (Natural gas-fired Solar Titan 250-30002S4) will have the highest quantity of air emissions for:

-Nitrogen Oxide (NOX)	30.99 tons per year
-Carbon Monoxide (CO)	7.79 tons per year
-Sulfur Dioxide (SO2)	3.21 tons per year
-Particulate Matter (PM, PM10 and PM 2.5)	6.23 tons per year
-Green House gases (CO2 equivalents)	111,925 tons per year

Gas Releases (P003)

The gas releases from periodic maintenances, routine operations and pigging activities will evacuate the turbine and piping components directly into the atmosphere. These gas releases will result in the highest air emissions of very toxic chemicals:

-Volatile Organic Compounds	19.8 tons per year
-Total Hazardous Air Pollutants	1.64 tons per year

Second highest concentrations of air emissions:

-CO2 Equivalent	15,401 tons per year
-Hexane	0.58 tons per year

INDIVIDUALS/LANDOWNERS

IND332 – Verne G. Waldow, Jr. (cont'd)

20160919-5115 FERC PDF (Unofficial) 8/19/2016 10:55:44 AM

Equipment Leaks (P801)

Equipment leaks from equipment components such as valves, flanges and connectors throughout the compressor station will release the third highest concentrations of:

-Volatile Organic Compounds	6.28 tons per year
-Green House gases (CO2 equivalent)	997 tons per year

Second highest concentrations of air emissions:

-Hexane	0.11 tons per year
-Total Hazardous Air Pollutants	0.76 tons per year

Separator Vessels 1-5 and Storage Tank 1 (P004 – P008, and T001)

The separator vessels consist of fixed roof tanks handling condensate liquids collected from the pipelines.

-VOCs	1.28 tons per year
-CO2 Equivalents	56 tons per

Separator Vessels:

#1 and #2 – 530 gallons each

#3 – 400 gallons

#4 – 317 gallons

#5 - 43 gallons

R-737

INDIVIDUALS/LANDOWNERS

IND332 – Verne G. Waldow, Jr. (cont'd)

20160919-5115 FERC PDF (Unofficial) 8/19/2016 10:55:14 AM

Storage Tank #1 is a fixed roof tanks with a 2,000 gallons capacity which will store condensate liquids collected from the pipeline and station equipment.

Emergency Generator (P002) - permit by rule

-VOCs	0.87 tons per year
-CO@ Equivalent	432 tons per year
-Total HAP	0.53 tons per year

Ozone

In addition to the air emissions listed above, the Nitrogen Oxide released by the combustion turbine (30.00 tons per year) and emergency generator (0.97 tons per year) will combine with the VOCs released by the combustion turbine, emergency generator, gas release, equipment leaks and the separator vessels and storage tank in the presence of heat and sunlight to produce ozone. The ozone will result in respiratory impacts to those living in the area of the compressor station.

Startup, Shutdowns and Pigging Events

There will be up to 260 startup events and 260 shutdown events per year in association with the compressor turbine. These start up or shut down events will occur 71% of the days in each year.

There will be 5 pigging events per year.

The air emissions from these events will result in degrade of the quality of the air and result in negative health impacts as a result of inhalation of the toxic chemicals released into the air.

INDIVIDUALS/LANDOWNERS

IND332 – Verne G. Waldow, Jr. (cont'd)

20160919-5115 FERC PDF (Unofficial) 8/19/2016 10:55:44 AM

NEXUS Gas Transmission Compressor Stations

Wadsworth Compressor Station

Guilford Road, Wadsworth (Medina County)

Combustion Turbine 29,517 Horse Power natural gas fired Solar Turbine,
Titan-250-30002S4

Process Heater 1.125 MMBtu/hr

Emergency Generator 880 Horse Power natural gas fired

Waterville Compressor Station

Mossman Dr., Waterville (Lucas County)

Combustion Turbine 29,517 Horse Power natural gas fired Solar Turbine,
Titan-250-30002S4

Process Heater 1.125 MMBtu/hr

Emergency Generator 880 Horse Power natural gas fired

Salineville Compressor Station

Yellow Creek road, Salineville (Columbiana County)

2 Combustion Turbines 10,802 Horse Power natural gas fired Solar
Turbine, Taurus-070-10802S3

Emergency Generator 880 Horse Power natural gas fired

R-739

INDIVIDUALS/LANDOWNERS

IND332 – Verne G. Waldow, Jr. (cont'd)

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Hanoverton Compressor Station

State Route 644, Hanoverton (Columbiana County)

2 Combustion Turbine 29,517 Horse Power natural gas fired Solar Turbine, Titan-250-30002S4

Process Heater 1.125 MMBtu/hr

Emergency Generator 1,175 Horse Power natural gas fired

Clyde Compressor Station

Pickle Street, Clyde (Sandusky County)

Combustion Turbine 29,517 Horse Power natural gas fired Solar Turbine, Titan-250-30002S4

Process Heater 1.125 MMBtu/hr

Emergency Generator 880 Horse Power natural gas fired

The Hanoverton Compressor Station will have the largest compressor horsepower, 59,034 horse power, followed by the Salineville Compressor Station, 21,604 horse power. The other three compressor stations, Wadsworth, Waterville and Clyde will each have 29,517 horse power compressor capacity.

The Compressor Turbines, Process Heaters and Emergency Generators will release Nitrogen Oxide, Carbon Monoxide, Sulfur Dioxide, Particulate Matter, Volatile Organic Compounds, Hazardous Air Pollutants and Green House Gases into the air.

The Compressor Turbines will release the highest concentrations of Nitrogen Oxide, Carbon Monoxide, Sulfur Dioxide, Particulate Matter 10/2.5 and Green House Gases into the air. They will release the third highest concentration of Volatile Organic Compounds into the air.

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Separator Vessels and Storage Tanks (gallons)

Vessel	Wadsworth	Waterville	Salineville	Hanoverton	Clyde
Separator #1	530	1,590	750	530	530
Separator #2	530	1,590	750	530	530
Separator #3	400	1,200	168	400	400
Separator #4	317	950	168	317	317
Separator #5	43	130	587	43	43
Separator #6			587		
Storage #1	2,000	2,000	2,000	2,000	2,000
Storage #2	570	570	570	570	570
Storage #3	3,000	3,000	3,000	3,000	3,000

Storage #1 Condensate liquid

Storage #2 Lube oil

Storage #3 Oily water

The separator vessels consist of vertical fixed roof tanks for handling condensate from the pipeline. The Waterville Compressor Station will have the largest condensate storage capacity, 5,460 gallons. The Salineville Compressor Station will have the second largest condensate storage capacity, 3,010 gallons. Compressor Stations Wadsworth, Hanoverton and Clyde will each have 1,820 gallon condensate storage capacity.

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Storage tanks 1, 2 and 3 will be vertical fixed roof tanks used to store condensate liquids collected from the pipeline and station equipment, lubricating oils from the turbine(s) and oily water. The liquids in the storage tanks will be transferred to tanker trucks for shipment off site.

The Separator Vessels and Storage Tanks will release Volatile Organic Compounds, Hazardous Air Pollutants, Hexane and Green House Gases into the air.

Air Emissions Sources at the Compressor Stations in Addition to the Compressor Turbines, Process Heaters, Emergency Generators, Separator Vessels and Storage Tanks

Sources	Wadsworth	Waterville	Salineville	Hanoverton	Clyde
Parts Washer	*	*	*	*	*
Loading	*	*	*	*	*
Gas Releases	*	*	*	*	*
Pipeline Pigging	*	*	*		*
Equipment Leaks	*	*	*	*	*
Roadways	*	*	*	*	*

Loading Operation – transfer condensate liquids, used lubricating oil and oily water to tanker trucks for offsite shipment

Gas Releases will be caused by periodic maintenance, routine operations, start up and shut down events and pigging activities and will result in evacuation of gases from turbine equipment and piping components directly to the atmosphere.

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Start up and Shut down events – 260 Start Up and 260 Shut Down events each year. 71% of days each year will have a Start Up event and 71% of the days each year will have a Shut down event.

Pigging Events 5 per year

Equipment Leaks – valves, flanges, connectors, pump seals and open ended lines through out the compressor facility

Roadways – vehicle traffic on facility roadways, fugitive emissions of particulate matter

The Loading Operations, Gas Releases and Equipment Leaks will release Volatile Organic Compounds, Hazardous Air Pollutants, Hexane and Green House Gases into the air.

The Gas Releases will release the largest quantity of Volatile Organic Compounds, Hazardous Air Pollutants and Hexane into the air of all of the units and activities at the compressor facility.

The Equipment Leaks will release the second highest quantity of Volatile Organic Compounds into the air.

The Parts Washer will also release Volatile Organic Compounds into the air.

Overall Compressor Station Air Emissions (tons per year)

Pollutant	Wadsworth	Waterville	Salineville	Hanoverton	Clyde
CO	7.81	7.81	28.61	19.07	7.81
NOx	31.2	31.08	42.4	65.0	31.2
PM10	6.24	6.24	5.06	12.6	6.24
SO2	3.24	3.24	2.6	6.45	3.24
VOC	29.3	30.8	41.56	44.52	24.1

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The air emissions from the Hanoverton Compressor Station will be the highest for Nitrogen Oxide (NOx), Particulate Matter 10 (PM10), Sulfur Dioxide (SO2), and Volatile Organic Compounds (VOCs). The air emissions for Carbon Monoxide will be the highest at the Salineville Compressor Station.

The Hanoverton Compressor Station will have the largest compressor capacity (57,034horse power) and largest quantity of air emissions for Nitrogen Oxide, Particle Matter 10, Sulfur Dioxide and Volatile Organic Compounds. The Salineville Compressor Station will have the second highest horse power capacity (21,604horse power) and the highest air emissions for Carbon Monoxide.

Ambient Air Quality in Areas of Proposed Compressor Stations

The proposed location of the Wadsworth Compressor Station has air quality in marginal non-attainment for ozone.

The proposed locations of the Waterville and Clyde compressor stations have air quality in attainment for ozone.

The proposed location of the Salineville and Hanoverton compressor stations have air quality in attainment for all criteria pollutants.

Regulatory Agency Recommendations for Air Pollution Permit to Install and Operate (PTIO) for the Five Compressor Stations

The draft Air Pollution Permit to Install and Operate for the Wadsworth, Waterville, Salineville, Hanoverton and Clyde compressor stations were issued by the Ohio Environmental Protection Agency on January 12, 2016.

The agency divisions listed as having authority over and to receive comments concerning the draft air pollution PTIO are as follows:

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Wadsworth Compressor Station

Ohio EPA, Division of Air Pollution Control

Akron Regional Air Quality Management District

Waterville Compressor Station

Ohio EPA, Division of Air Pollution Control

Toledo Department of Environmental Services

Salineville Compressor Station

Ohio EPA, Division of Air Pollution Control

Ohio EPA, DAPC Northeast District Office

Hanoverton Compressor Station

Ohio EPA, Division of Air Pollution Control

Ohio EPA, DAPC Northeast District

Clyde Compressor Station

Ohio EPA, Division of Air Pollution Control

Ohio EPA, DAPC Northwest District Office

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Toxic Chemicals Released by Compressor Stations and the Associated Health Impacts

The pathways of human exposure of air emissions from the compressor stations consist of inhalation, ingestion and dermal absorption. The air emissions from the various units associated with the compressor stations associated with the Nexus pipeline and the Wadsworth Compressor station in particular as well as the venting of gases from the periodic maintenances, routine operations, equipment leaks, startup and shut down activities and pigging operations will have the potential to negatively impact the health of individuals living, working and recreating within 2 to 5 miles of the compressor stations.

The chemicals detected in the ambient air associated with releases from compressor operations consist of:

- Benzene
- 1,3-Butadiene
- 2-Butanone
- n-Butyl Alcohol
- Carbon Disulfide
- Carbon Monoxide
- Carbonyl Sulfide
- Chlorobenzene
- Chloromethane
- Cis-1,2-dichloroethane
- Cyclohexane
- Cumene
- Dichlorodifluoromethane
- 1,2-Dichloroethane
- Diethyl Benzene
- Ethane
- Ethyl Benzene
- Ethylene
- Ethylene Oxide
- Formaldehyde

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n-Heptane
n-Hexane
Methane
Methylethyl Disulfide
Nitrogen Oxide
Propane
Propylene
Sulfur Dioxide
Tetrachloroethane
1,1,2-Trichloroethane
Trichloroethylene
Trifluoroethane
1,2,4-Trimethyl Benzene
Toluene
m,p-Xylene
o-Xylene

The health impacts reported by community members living with in the area of impact of compressor stations consist of:

Nasal Irritation
Throat Irritation
Eyes Burning
Frequent Nausea
Allergies
Sinus Problems
Bronchitis
Persistent Cough
Chronic Eye Irritation
Shortness of Breathe
Severe Headaches
Frequent Nose Bleeds
Sleep Disturbances
Joint Pain

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Difficulty in Concentrating
Nervous System Impacts
Irregular/Rapid Heart Beat
Strokes
Spleen Damage
Pre-Cancerous Lesions
Abnormal Mammogram
Increased Fatigue
Dizziness
Forgetfulness
Easy Bruising
Muscle Aches and Pains
Weakness
Tired
Ringing in Ears
Sores and Ulcers in Mouth
Urinary Infections
Depression
Decreased Motor Skills
Falling
Staggering
Frequent Irritation
Amnesia
Severe Anxiety
Excessive sweating
Abnormal EEG
Lump in Breast
Thyroid Problems
Endometriosis
Brain Disorders

Note: 61% of the health impacts were associated with chemicals present in the ambient air in excess or short and long term effects screening levels.

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The most prevalent medical conditions in individuals living in close proximity to compressor stations consist of:

Respiratory Impacts	71% of individuals
Sinus Problems	58%
Throat Irritation	55%
Allergies	55%
Weakness and Fatigue	55%
Eye Irritation	52%
Nasal Irritation	48%
Joint Pain	45%
Muscle Aches and Pains	42 %
Breathing Difficulties	42%
Vision Impairment	42%
Severe Headaches	39%
Sleep Disturbances	39%
Swollen and Painful Joints	39%
Frequent Irritation	32%

Note: 90% of individuals surveyed reported experiencing odor events from the compressor stations.

The above listed chemicals and associate health impacts have the potential to negatively impact the health of citizens living within 5 miles of the proposed Wadsworth Compressor Station. The area of impact includes over half the city of Wadsworth as well as a number of additional communities. The prevailing wind direction in the area of the proposed Wadsworth Compressor Station indicates that the city of Wadsworth is downwind of the proposed compressor station.

Siting a compressor station in an area that will negatively impact the health of a number of communities as well as more than half of the city of Wadsworth is inappropriate and should be used as a reason to deny the air permit being proposed for the Wadsworth Compressor Station.

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SWPA-EHP

SOUTHWEST PENNSYLVANIA ENVIRONMENTAL HEALTH PROJECT
www.environmentalhealthproject.org

Summary on Compressor Stations and Health Impacts February 24, 2015

Compressor station emissions

Compressor station emissions fall into two categories: construction emissions and operational emissions. Within operational emissions there are three types that warrant individual attention – blowdowns, fugitives and accidents. This document provides perspective on the aptness of the method of estimation (in tons per year) and need for further detail about the VOC and PM estimated emissions to better consider health risk.

Compressor construction and operational phases are generally projected to produce emissions below the NAAQS standards. They are presented in *tons per year*. This measure of emissions is used for NAAQS purposes which determines the air quality designation over a region and over long periods of time. The problem posed by estimating tons of contaminants emitted per year is that over the course of a year emissions will vary, often greatly. As phases of construction and operation change so will emissions content and concentrations. For a resident living near a compressor station, the concern is not simply PM_{2.5} emissions over the course of a year, but is PM_{2.5} emissions during the peak construction time when it's at its most intense.

Even during normal operations compressor stations have been shown not to emit uniformly ("blowdown" and accident events will be discussed separately).¹ The measurement *tons per year*, while common in the industry and common in the environmental field where regional air quality is at issue, is not an appropriate measure to determine individuals' health risks which increase during episodes of high exposures.

Table 4 shows the day to day and morning to evening variability in emissions at one compressor station near Hickory, Pennsylvania. It comes from a Pennsylvania Department of Environmental Protection. We present this case to show documentation of fluctuations not captured by averages.² Note how much relevant emissions information is lost when relying on averages, even of just three days. When extending this logic across a year, there is little doubt that there will be times of high levels of contaminants released and these high levels can increase health risks to residents. It is also notable that the EPA inhalation reference concentration (RfC) for ethylbenzene is 1 mg/m³ (equivalent to 1,000 ug/m³).³ Some of the reported emissions exceed this standard of health safety.

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Table 1. Variation in ambient air measurements of five VOCs near a compressor station reported in $\mu\text{g}/\text{m}^3$ **4

Chemical	May 18		May 19		May 20		3 day average
	morning	evening	morning	evening	morning	evening	
Ethyl-benzene	No detect	No detect	964	2,015	10,553	27,088	6,770
n-Butane	385	490	326	696	12,925	915	2,623
n-Hexane	No detect	536	832	11,502	33,607	No detect	7,746

*The PA DEP collected data on many more chemicals than those listed above; the authors of this paper have chosen these chemicals specifically to highlight variation in emissions.

Documented compressor emissions

It is important to know, with more specificity, what chemicals will be emitted by a compressor facility so that a targeted assessment can be made about its potential health impacts.

There is a small but growing body of literature on emissions from shale gas extraction, processing and transport activities. In its early stages of inquiry, the focus was predominantly on drill pad activity, but there are now some reports on natural gas compressor station emissions. Below are examples of chemicals that have been found at or near compressor stations during operations. These emissions reports – whether from public databases or from a private sector firm or organization – do not provide relevant background levels of the chemicals detected. Without a “control” location it is not possible to say with certainty that the chemicals found are the result of the compressor station, although these facilities are often the only industrial activity in the areas where they are found.

Emissions from two compressor stations (Stewart and Energy Corps), published by the Pennsylvania Department of Environmental Protection (DEP)⁵ are:

MTBE	2-methyl butane
CO	2 methyl pentane
iso-Butane	3 methyl pentane
methyl mercaptan	ethyl benzene
n-Butane	benzene
n-hexane	ethane
n-octane	propane
nitrogen dioxide	methanol
nitrous-	naphthalene
acidstyrene	

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The Texas Commission on Environmental Quality (TCEQ), as part of its Barnett Shale Formation Area Monitoring Projects found the following chemicals downwind from two monitored compressor stations⁶:

- Downwind of Devon Energy Company LP's Justin compressor station the TCEQ reports propane, isobutene, n-butane, ethane, cyclohexane, benzene, n-octane, toluene, m+p-xylene, n-hexane.
- Downwind of Targa North Texas LP's Bryan Compressor Station the TCEQ reports: ethane, propane, isobutene, n-butane, cyclohexane, n-octane, toluene, isopentane, n-pentane + isoprene, benzene.⁷

Officials in DISH, TX commissioned a study of compressor station emissions in its vicinity. Wolf Eagle Consultants performed whole air emissions sampling for VOCs, HAPs as well as Tentatively Identified Compounds (TICs). Chemicals identified as *exceeding* Texas's ESLs include:⁸

benzene	tetramethyl benzene
dimethyl disulfide	naphthalene 1,2,4-trimethyl benzene
methyl ethyl disulphide	m&p xylenes
ethyl-methylethyl disulfide	carbonyl sulfide
trimethyl benzene	carbon disulfide
diethyl benzene	methyl pyridine
methyl-methylethyl benzene	dimethyl pyridine

In 2011 and 2013, Earthworks, a non-profit organization, collected air samples within 0.33 miles of two compressor stations: Springhill compressor in Fayette County and the Cumberland/Henderson compressor station in Greene County, Pennsylvania.⁹ Results from samples collected include:

1,1,2-Trichloro-1,2,2-trifluoroethane,
1,2-dichlorobenzene
2-butanone
benzene
carbon tetrachloride
chloromethane
dichlorodifluoromethane
ethylbenzene
methane
methylene chloride
tetrachloroethylene
toluene
trichloroethylene
trichlorofluoromethane

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Anecdotally, we know that people living near compressor stations report episodic strong odors as well as visible plumes during venting or blowdowns. Residents often report symptoms that they associate with odors such as burning eyes and throat, skin irritation, and headaches. These are simply anecdotes but they are fairly consistently reported. It should be noted that residents in southwest Pennsylvania where these anecdotes were collected, often live near drill pads and in some instances processing plants along with compressor stations.¹⁰

Emissions pathways

In addition to the emissions produced during the normal operations of a compressor station there are several other ways that emissions might be dispersed from the site. These include fugitive releases, blowdowns, and accidents. Trucks play a significant role in the emissions profile during construction but are not common once the facility is complete and on line.

Fugitive emissions

Fugitive emissions are uncontrolled or under-controlled releases. They occur from equipment leaks and evaporative sources. It has been suggested that fugitive emissions will increase over time as machinery begins to wear.¹¹

There does not appear to be a central publicly available source of information of these emissions. There are, however, many opportunities for fugitive emissions to be released from a compressor station. We were able to locate only one study on natural gas compressor station fugitive emissions. In that study, conducted in the Fort Worth, TX area, researchers evaluated compressor station emissions from eight sites, focusing in part on fugitive emissions. A total of 2,126 fugitive emission points were identified in the four month field study of 8 compressor stations: 192 of the emission points were valves; 644 were connectors (including flanges, threaded unions, tees, plugs, caps and open-ended lines where the plug or cap was missing); and 1,290 were classified as Other Equipment. The Other category consists of all remaining components such as tank thief hatches, pneumatic valve controllers, instrumentation, regulators, gauges, and vents. 1,330 emission points were detected with an IR camera (i.e. high level emissions) and 796 emission points were detected by Method 21 screening (i.e. low level emissions). Pneumatic Valve Controllers were the most frequent emission sources encountered at well pads and compressor stations.¹²

Blowdowns

The largest single emission at a compressor station is the compressor blowdown.¹³ They can be scheduled or accidental. As the natural gas rushes through the blowdown valve, a gas plume extends upward of 30 to 60 meters. The most forceful rush of air occurs at the very beginning, then the flow gradually slows down. The first 30 to 60 minutes of the blowdown are the most intense, but the entire blowdown may last up to three hours.¹⁴ One blowdown vents 15 MCF gas to atmosphere on average. Isolation valves leak about 1.4 Mcf/hr on average through open blowdown vents.¹⁵

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It is not possible to know what exactly would be emitted in a given natural gas compressor station blowdown as there is no data available. We know that it will include whatever is in the pipeline when the blowdown occurs. This would undoubtedly include the constituents of natural gas: methane, ethane, etc., and various additional constituents would be present during different episodes. We are especially concerned about the presence of radioactive material during a blowdown. Anecdotal, there are reports of odors and burning eyes, headaches and coughing associated with the events.¹⁶

An exposure to blowdown concentrations of contaminants would have different health implications than a long-term lower level exposure (i.e. yearly average) to the same contaminants when the compressor is on line.

Accidents

In addition to planned emissions, fugitive emissions and blowdowns there is also the possibility of accidents at the compressor station. There are no central national or state inventories of compressor station accidents that we were able to locate. In their absence we turned to local news accounts of individual accidents (which are generally in the form of fires). Without knowing what precisely is in the pipeline nor what else (if anything) may be housed on the site, it is not possible to estimate emissions from a fire at the compressor station. The possibility, however, is very real. A gas compressor station exploded near Godley, TX. That fire destroyed the compressor station where it started and also the one next to it. The fire burned for several hours.¹⁷ In a compressor station fire in Madison County, TX volunteer firefighters from four towns were dispatched to the site. First responders blocked roads near the site and evacuated three homes.¹⁸ In Corpus Christi, TX a fire broke out at a compressor station which then spread to nearby brush before being extinguished.¹⁹

The possibility of fire or other accidents raises the concern over whether the localities surrounding a compressor station have the resources available to contain a fire or explosion adequately and whether first responders and hospitals are able to care for injured workers or others nearby or whether an evacuation plan could be implemented. In Wheeler County, TX four contractors were performing maintenance activities near a compressor station when a flash fire occurred. The workers were brought to a nearby hospital. Two were treated and released; the other two were transferred to a burn unit in Lubbock.²⁰ In Carbon County, UT an explosion and fire damaged a natural gas compressor station and other buildings on the site injuring two workers and engulfing the facility in flame. Firefighters from every city in the county responded to the emergency. Injured workers had to be evacuated by medical helicopters.²¹

Overall, there is little information on the division of responsibility between the company operating the facility and the locality. This should be clarified.

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The question of radioactivity

A 2008 publication of the International Association of Oil & Gas Producers has laid out the discussion on radioactive material in the natural gas extraction and production process.

During the production process, naturally occurring radioactive material (NORM) flows with the oil, gas and water mixture and accumulates in scale, sludge and scrapings. It can also form a thin film on the interior surfaces of gas processing equipment and vessels. The level of NORM accumulation can vary substantially from one facility to another depending on geological formation, operational and other factors.

[R]adionuclides such as Lead-210 and Polonium-210 can ... be found in pipelines scrapings as well as sludge accumulating in tank bottoms, gas/oil separators, dehydration vessels, liquid natural gas (LNG) storage tanks and in waste pits as well as in crude oil pipeline scrapings.²²

The gas which flows through the pipeline likely carries gaseous radon with it, and as radon decays within the pipeline, the solid daughter elements, polonium and lead, accumulate along the interior of the pipes. There is a concern that the gas transiting, and being compressed and regulated, will have radioactivity levels which will put at risk not only the workers at these stations and along the pipeline, but potentially also to the residents.²³ Radon, a gas, has a short half-life (3.8 days) but its progeny are lead and polonium, and these are toxic and have relatively long half-lives of 22.6 years and 138 days respectively.²⁴ There is no data that we can turn to in order to assess the risk of radioactive exposures in our community.

Health risks from relevant air contaminants

Averages, peaks and health events

As stated previously, one of our primary concerns is the poor fit of a *tons per year* measurement to the assessment of risk to the public's health near a compressor station. Furthermore, the National Ambient Air Quality Standards (NAAQS) used as a benchmark for air quality were not created to assess the air quality and safety in a small geographic area with fluctuating emissions. NAAQS effectively address regional air quality concerns. But these standards do not adequately assess risk to human health for residents living in close proximity to polluting sources such as unconventional natural gas development (UNGD) sites, where emissions can be highly variable.

Generally, it has been shown that:

1. Current protocols used for assessing compliance with ambient air standards do not adequately determine the intensity, frequency or durations of the actual

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human exposures to the mixtures of toxic materials released regularly at UNGD sites, including compressor stations.

2. The typically used periodic 24-hour average measures can underestimate actual exposures by an order of magnitude.
3. Reference standards are set in a form that inaccurately determines health risk because they do not fully consider the potential synergistic combinations of toxic air emissions.²⁵

Thus estimates of yearly totals of contaminants released by a compressor station do not allow for an assessment of the physiological impact of those emissions on individuals.

NAAQS reflects what, over a region, over time, is deemed safe population-wide. This is very different than what is safe within for instance 1200 feet of this compressor station. As already stated, averaging over a year can wash out important higher spikes in emissions (thus exposures) that may occur at various points throughout the year. These high spikes can put residents at risk for illnesses caused by air toxics.

Toxicity and characterization of exposures

Toxicity of a chemical to the human body is determined by the concentration of the agent at the receptor where it acts. This concentration is determined by the intensity and duration of the exposure. All other physiological sequelae follow from the interaction between agent and receptor. Once a receptor is activated, a health event might be produced immediately or in as little as one to two hours.^{26 27} In some instances, where there is a high concentration of an agent, a single significant exposure can cause injury or illness. This is the case in the instance of an air contaminant induced asthma event. On the other hand, after an initial exposure, future exposures might compound the impact of the first one, in time, producing a health effect. Repeated exposures will increase, for instance, the risk for ischemic heart disease.²⁸

Peak exposures

Researchers have demonstrated the wisdom of looking at peak exposures as compared to averages over longer periods of time. Darrow et al (2011) write that sometimes peak exposures better capture relevant biological processes. This is the case for health effects that are triggered by, short-term, high doses. They write, "Temporal metrics that reflect peak pollution levels (e.g., 1-hour maximum) may be the most biologically relevant if the health effect is triggered by a high, short-term dose rather than a steady dose throughout the day. Peak concentrations ... are frequently associated with episodic, local emission events, resulting in spatially heterogeneous concentrations..."²⁹

Delfino et al (2002) posited that maxima of hourly data, not 24-hour averages, better captured the risks to asthmatic children, stating, "It is expected that biologic responses may intensify with high peak excursions that overwhelm lung defense mechanisms."

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Additionally, they suggest that “[o]ne-hour peaks may be more influenced by local point sources near the monitoring station that are not representative of regional exposures....”³⁰

Because episodic high exposures are not typically documented and analyzed by researchers and public agencies, natural gas compressor stations emissions are rarely correlated with health effects in nearby residents. However, examination of published air emission measurements shows the very real potential for harm from industry emissions.³¹ Reports of acute onset of respiratory, neurologic, dermal, vascular, abdominal, and gastrointestinal sequelae near natural gas facilities contrast with research that suggests there is limited risk posed by unconventional natural gas development.

Health Effects from exposures to VOCs

VOCs, present at compressor station construction and operation, are a varied group of compounds which can range from having no known health effects to being highly toxic. Short-term exposure can cause eye and respiratory tract irritation, headaches, dizziness, visual disorders, fatigue, loss of coordination, allergic skin reaction, nausea, and memory impairment. Long-term effects include loss of coordination and damage to the liver, kidney, and central nervous system. Some VOCs, such as benzene, formaldehyde, and styrene, are known or suspected carcinogens.³² The case for elevated risk of cancer from UNGD VOC exposure has been made by McKenzie et al (2012) and others.³³

The inhalation of the VOC, benzene, produces a number of risks including

[acute (short-term)] drowsiness, dizziness, headaches, as well as eye, skin, and respiratory tract irritation, and, at high levels, unconsciousness. Chronic (long-term) inhalation exposure has caused various disorders in the blood, including reduced numbers of red blood cells and aplastic anemia, in occupational settings. Reproductive effects have been reported for women exposed by inhalation to high levels, and adverse effects on the developing fetus have been observed in animal tests. Increased incidence of leukemia (cancer of the tissues that form white blood cells) have been observed in humans occupationally exposed to benzene. EPA has classified benzene as known human carcinogen for all routes of exposure.³⁴

Benzene, which is documented at compressor stations by the States of Pennsylvania and Texas, carries its own risk, including risk for cancer.^{35 36} There is growing evidence that benzene is associated with childhood leukemia. Benzene affects the blood-forming system at low levels of occupational exposures, and there is no evidence of a threshold. It has been argued in the literature that “[t]here is probably no safe level of exposure to benzene, and all exposures constitute some risk in a linear, if not supralinear, and additive fashion.”³⁷

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Another substance that is detected near compressor stations is methylene chloride.

According to the EPA:

The acute (short-term) effects of methylene chloride inhalation in humans consist mainly of nervous system effects including decreased visual, auditory, and motor functions, but these effects are reversible once exposure ceases. The effects of chronic (long-term) exposure to methylene chloride suggest that the central nervous system (CNS) is a potential target in humans and animals. Human data are inconclusive regarding methylene chloride and cancer. Animal studies have shown increases in liver and lung cancer and benign mammary gland tumors following the inhalation of methylene chloride.³⁸

The VOC formaldehyde is also considered a Hazardous Air Pollutant (HAP) by the US EPA (EPA).³⁹ It is one of the emissions chemicals that the natural gas development industry is required to report, for instance to the PA DEP. According to these reports, compressor stations are the highest UNGD source for formaldehyde.⁴⁰ For the year 2012, emissions of formaldehyde from compressor stations in Pennsylvania ranged from 0.0 TPY to 22.5 TPY.⁴¹

A recent study of air emissions in the Barnett shale region of Texas found concentrations of formaldehyde at sites with large compressor stations.⁴² Some of these concentrations were greater than the Texas Commission on Environmental Quality's health protective levels (page 62). Formaldehyde was one of 101 chemicals found in association with methane in this study. The research showed that aromatics in particular were associated with compressor stations.

Air exposures to formaldehyde target the lungs and mucous membranes and in the short-term can cause asthma-like symptoms, coughing, wheezing, and shortness of breath. The EPA classifies it as a probable human carcinogen.⁴³ The World Health Organization classifies it as carcinogenic to humans.⁴⁴ It has also been associated with childhood asthma.⁴⁵ The California Office of Environmental Health Hazard assessment (OEHHA) has "identified formaldehyde as a Toxic Air Contaminant and gives it an inhalation Reference Exposure Level (REL) of 55 ug/m³ for acute exposures and 9 ug/m³ for both 8-hour and chronic exposures.⁴⁶ The acute REL is 74 ppb based on irritation of asthmatics.⁴⁷ It has also been linked with adverse pregnancy outcomes and reproductive and developmental toxicity.⁴⁸

More recent investigations on formaldehyde near compressor stations are focused on the chemical reaction between methane and sunlight.⁴⁹ While it is well known that stationary compressor station engines emit formaldehyde, it is less well known that formaldehyde may also be formed at these sites through this chemical reaction. While the research is ongoing, it suggests that health hazards associated with formaldehyde

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may be greater than previously thought. Because reported health symptoms near compressor stations, such as respiratory impacts and shortness of breath, can be caused by exposure to formaldehyde, targeted monitoring of this chemical at these sites would be recommended.

Effects from exposure to particulate matter

In addition to the VOC exposure presented above, PM2.5 also poses a significant health concern and interacts with the airborne VOCs increasing their impact. In fact, at a compressor station PM2.5 may pose the greatest threat to the health of nearby residents. Fine particles are expected to reach a total of 1.136 tons for 2015 and 2016.

The size of particles determines the depth of inhalation into the lung; the smaller the particles are, the more readily they reach the deep lung. Particulate matter (PM10, PM2.5 and ultrafine PM), in conjunction with other emissions, are at the core of concern over potential effects of UNGD.

High particulate concentrations are of grave concern because they absorb airborne chemicals in their midst. The more water soluble the chemical, the more likely it is to be absorbed onto a particle. Larger sized particles are trapped in the nose and moist upper respiratory tract thereby blocking or minimizing their absorption into the blood stream. The smaller PM2.5 however, is more readily brought into the deep lung with airborne chemicals and from there into the blood stream. As the particulates reach the deep lung alveoli the chemicals on their surface are released at higher concentrations than they would in the absence of particles. The combination of particles and chemicals serves, in effect, to increase in the dose of the chemical. The consequences are much greater than additivity would indicate; and the physiological response is intensified. Once in the body, the actions between particles and chemicals are synergistic, enhancing or altering the effects of chemicals in sometimes known and often unknown ways.⁵⁰

Reported clinical actions resulting from PM2.5 inhalation affect both the respiratory and cardiovascular systems. Inhalation of PM2.5 can cause decreased lung function, aggravate asthma symptoms, cause nonfatal heart attacks and high blood pressure.⁵¹ Research reviewing health effects from highway traffic, which, like UNGD, has especially high particulates, concludes, "[s]hort-term exposure to fine particulate pollution exacerbates existing pulmonary and cardiovascular disease and long-term repeated exposures increases the risk of cardiovascular disease and death."⁵² PM2.5, it has been suggested, "appears to be a risk factor for cardiovascular disease via mechanisms that likely include pulmonary and systemic inflammation, accelerated atherosclerosis and altered cardiac autonomic function. Uptake of particles or particle constituents in the blood can affect the autonomic control of the heart and circulatory system."⁵³

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Ultrafine particles (<0.1) get less attention in the literature than PM2.5 but is found to have high toxic potency.⁵⁴ These particles readily deposit in the airways and centriacinar region of the lung.⁵⁵ Research suggests increases in ultrafine particles pose additional risk to asthmatic patients.⁵⁶ Ultrafine particles are generally produced by combustion processes. They, along with the larger PM2.5, are found in diesel exhaust.

Diesel is prevalent during the construction phase of compressor station site. High levels of diesel exhaust from construction machinery as well as trucks increase the level of respirable particles. Health consequences of diesel exposure have been widely studied and include immediate and long term health effects. Diesel emissions can irritate the eyes, nose, throat and lungs, and can cause coughs, headaches, lightheadedness and nausea. Short-term exposure to diesel exhaust also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks. Long-term exposure can cause increased risk of lung cancer.⁵⁷

PM2.5 acute effects

There is an abundance of research on the health effects of short term PM2.5 exposure. Mills et al demonstrate that one to two hours of a diesel exhaust exposure, which occurs during the construction phase of development, includes reduced brachial artery diameter and exacerbation of exercise-induced ST-segment depression in people with pre-existing coronary artery disease; ischemic and thrombotic effects in men with coronary heart disease;⁵⁸ and is associated with acute endothelial response and vasoconstriction of a conductance artery.⁵⁹ Fan He et al. suggest that health effects can occur within 6 hours of elevated PM2.5 exposures, the strongest effects occurring between 3 and 6 hours. Such an acute effect of PM2.5 may contribute to acute increase in the risk of cardiac disease, or trigger the onset of acute cardiac events, such as arrhythmia and sudden cardiac death.⁶⁰

Numerous epidemiological studies have demonstrated a consistent link between particulate matter and increased cardiopulmonary morbidity and mortality (Brook et al. 2004; Mann et al. 2002; Pope et al. 2002; Samet et al. 2009; Schwartz 1999).⁶¹ Previous studies have suggested that PM2.5 exposure is significantly associated with increased heart rate and decreased heart rate variability (HRV; Gold et al., 2000; He et al. 2010; Liao et al. 1999; Luttmann-Gibson et al. 2006; Magari et al. 2001; Park et al. 2005).

In addition to short term exposures and associated effects, there is evidence of health impacts from long-term exposures.⁶² An HIA reviewing data from a number of European cities found that nearly 17,000 premature deaths from all causes, including cardiopulmonary deaths and lung-cancer deaths, could be prevented annually if long-term exposure to PM2.5 levels were reduced. Equivalently, this reduction would increase life expectancy at age 30 by a range between one month and more than two years in the study cities. A Canadian national cohort study found positive and

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statistically significant associations between non-accidental mortality and estimates of PM2.5, the strongest association being with ischemic heart disease. Associations in this study were with concentrations of PM2.5 as low as only a few micrograms per cubic meter.⁶³ Research has also shown that there is an association between PM2.5 and hospitalization for COPD in elderly people.⁶⁴

There is also a considerable literature on the health effects specifically from diesel emission that include PM2.5 along with chemical components. Mills et al conclude that even dilute diesel emissions can induce risk and point to ischemic and thrombotic mechanisms for the adverse cardiovascular events associated with diesel exposure.⁶⁵

After an extensive review the EPA concluded that

long-term inhalation exposure is likely to pose a lung cancer risk to humans. Estimation of cancer potency from available epidemiology studies was not attempted.... A noncancer chronic human health hazard is inferred from rodent studies showing dose-dependent inflammation and histopathology in rats. Short-term exposures were noted to cause irritation and inflammatory symptoms of a transient nature these being highly variable across an exposed population. The assessment also indicates that there is emerging evidence from the exacerbation of existing allergies and asthma symptoms.⁶⁶

Children, pregnant women and air contaminants

Children and pregnant women are especially sensitive to pollution. Many studies confirm a range of adverse effects of air pollution on children's lung function and respiratory symptoms, especially for asthmatics. Recent studies have found statistically significant associations between the prevalence of childhood asthma or wheezing and living very close to high volume vehicle roadways.⁶⁷ Other research aimed specifically at children's PM2.5 exposure has found that PM2.5 and several of its components have important effects on hospital admissions for respiratory disease, especially pneumonia. The authors count among the sources for this exposure diesel exhaust, motor vehicle emissions, and fuel combustion processes.⁶⁸

Health effects have been found in pregnant women from high particulate highway pollution. Such particle pollution "may provoke oxidative stress and inflammation, cause endocrine disruption, and impair oxygen transport across the placenta, all of which can potentially lead to or may be implicated in some low birth weight... and preterm births." The consequences do not stop with low birth weight and preterm births because these conditions can negatively affect health throughout childhood and into adulthood.⁶⁹

Mixtures and sequential exposures

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Mixtures of pollutants are a critically important topic in addressing the public health implications of UNGD broadly and compressor stations in this case. While this report has focused primarily on three pollutants (VOCs, formaldehyde as one example, and PM_{2.5}), in fact, a very large number of chemicals are released together. Medical reference values are not able to take the complex nature of the shale environment, its multiple emissions and interactions into full consideration.⁷⁰ Although the shale gas industry is not unique in emitting multiple pollutants simultaneously, this industry is unique in doing so as close as 500 feet from residences.

Chemicals that reach the body interfere with metabolism and the uptake and release of other chemicals, be they vitally important biochemical produced and needed by the body or other environmental chemicals with potentially toxic effects. Some chemicals attack the same or similar target sites creating an additive effect. This is the case with chemicals of similar structure such as many in the class of VOCs. Some mixtures like PM and VOC act synergistically to increase the toxicity of the chemicals. Other chemicals released environmentally are rapidly absorbed and slowly excreted. These slowly excreted chemicals will interfere with subsequent actions of chemicals because the body has not yet cleared the effects from the earlier exposure.

Noise

Excessive noise has been associated with an array of psychological and physical effects. A review article on noise exposure and health risk published in *Noise and Health* claims that the evidence for a causal relationship between community or transportation noise and cardiovascular risk has risen in recent years. In sum, the author finds limited evidence for a causal relationship between noise and biochemical effects; limited or sufficient evidence for hypertension; and sufficient evidence for ischemic heart disease.⁷¹

According to a World Health Organization assessment of research, excessive noise can also increase risk of cognitive impairment in children, sleep disturbance, tinnitus, and high levels of annoyance.⁷² Researchers have found associations between elevated sound levels – including community sounds levels – and hearing loss, reduced performance and aggressive behavior.⁷³ Additionally some attention is being paid to the health effects of vibration exposure which is connected with but distinct from noise itself.⁷⁴

Noise exposures are associated with construction activities and during blowdown episodes. As with air exposures, the periods of extreme exposures (in this case noise exposures) can cause different and sometimes more serious effects than low-level exposures.

Summary

In sum, we know that a number of different chemicals as well as PM_{2.5} are present during the construction phase of compressor stations and they are present in close

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proximity to compressor stations that are on line. Some, although not all, have documented health effects on vulnerable populations and on the population at large. What we do not know is the precise mix and concentration of chemicals that will be released into the air. Without that information it is not possible to assess the compressor station's full impact on area residents.

Reported health effects specific to compressor stations

There is a growing body of research on emissions and health impacts from UNGD generally, though few studies specifically address health impacts from compressor stations. This is partly due to the fact that many compressors are sited in proximity to other UNGD sites such as well pads, impoundments, condensate tanks and processing stations. As the infrastructure for transporting natural gas continues to expand, more pipelines, metering stations and compressor stations will be sited away from other UNGD facilities.

Recent research that has been conducted near compressor stations in different parts of the country shows consistencies in the types of symptoms experienced by those living near these sites. These symptoms are associated with health impacts on respiratory, neurological and cardiovascular body systems. It should be noted that in each of the studies cited here health survey forms were filled out by residents and, as such, the findings are self-reported. To date there have been no epidemiological studies performed to identify health impacts from compressor stations.

A peer-reviewed article, *Investigating Links Between Shale Gas Development And Health Impacts Through A Community Survey Project In Pennsylvania* (2014) is one of the few publications that explicitly addresses health impacts from compressors.⁷⁵ The report states:

In the Pennsylvania study, distance to industrial sites correlated with the prevalence of health symptoms. For example, when a gas well, compressor station, and/or impoundment pit were 1500-4000 feet away, 27 percent of participants reported throat irritation; this increased to 63 percent at 501-1500 feet and to 74 percent at less than 500 feet. At the farther distance, 37 percent reported sinus problems; this increased to 53 percent at the middle distance and 70 percent at the shortest distance. Severe headaches were reported by 30 percent of respondents at the farther distance, but by about 60 percent at the middle and short distances.⁷⁶ P.62

Age groups also responded differently in terms of health symptoms:

Among the youngest respondents (1.5-16 years of age), for example, those within 1500 feet experienced higher rates of throat irritation (57% vs. 69%) and severe headaches (52% vs. 69%). It is also notable that the youngest group had the highest occurrence of frequent nosebleeds (perhaps reflective of the more

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sensitive mucosal membranes in the young), as well as experiencing conditions not typically associated with children, such as severe headaches, joint and lumbar pain, and forgetfulness.

Among 20- to 40-year-olds, those living within 1500 feet of a facility reported higher rates of nearly all symptoms; for example, 44 percent complained of frequent nosebleeds, compared to 29 percent of the entire age group. The same pattern existed among 41- to 55-year-olds with regard to several symptoms (e.g., throat and nasal irritation and increased fatigue), although with smaller differences and greater variability than in the other age groups.

The subset of participants in the oldest group (56- to 79-year-olds) living within 1500 feet of facilities had much higher rates of several symptoms, including throat irritation (67% vs. 47%), sinus problems (72% vs. 56%), eye burning (83% vs. 56%), shortness of breath (78% vs. 64%), and skin rashes (50% vs. 33%).

In sum, while these data do not prove that living closer to oil and gas facilities causes health problems, they do suggest a strong association since symptoms are more prevalent in those living closer to facilities than those living further away. Symptoms such as headaches, nausea, and pounding of the heart are known to be the first indications of excessive exposure to air pollutants such as VOCs [36], while the higher level of nosebleeds in the youngest age group is also consistent with patterns identified in health survey projects in other states [9, 10].” P.64

Earthworks, a non-profit organization, conducted the Pennsylvania study referred to above, (Gas Patch Roulette 2012) in which they surveyed residents about health symptoms and conducted air and water tests near residences in Pennsylvania and New York⁷⁷. In their report, specific mention is given of a residence 800 feet from a compressor station. Health symptoms experienced by the residents (parents and children) were extreme tiredness, severe headaches, runny noses, sore throats and muscle aches, as well as dizziness and vomiting by one individual.

Earthworks also conducted a health survey in Dish, Texas in 2009.⁷⁸ The health symptoms reported to be associated with compressors were: burning eyes, nausea, headaches, running nose, sore throat, asthma, sinus problems and bronchitis. Odors experienced by residents near compressor stations were described as: sulfur smell, odorized natural gas, burnt wire, strong chemical-like smell and ether.

Wilma Subra⁷⁹, an environmental chemist and consultant who is on the Earthworks Board of Directors, has compiled information on health symptoms experienced near compressor stations based on her research with communities concerned about health impacts from UNGD⁸⁰. Subra has served as Vice-Chair of the Environmental Protection Agency National Advisory Council for Environmental Policy and Technology (NACEPT),

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and recently completed a five year term on the National Advisory Committee of the U.S. Representative to the Commission for Environmental Cooperation and a six year term on the EPA National Environmental Justice Advisory Council (NEJAC) where she served as a member of the Cumulative Risk and Impacts Working Group of the NEJAC Council. While her research on health impacts associated with compressor stations is reported back to communities, most of the data shown here have not been published in peer-reviewed journals (she is an author on the above-mentioned peer-reviewed article on Pennsylvania data).

Subra has reported the following health impacts in association with compressor stations:

Table 2. Most Prevalent Medical Conditions In Individuals Living in Close Proximity to Compressor Stations and Metering Stations

Medical Conditions:	% of Individuals (71)
Respiratory Impacts	58
Throat Irritation	55
Weakness and Fatigue	55
Nasal Irritation	55
Muscle Aches & Pains	52
Vision Impairment	48
Sleep Disturbances	45
Sinus Problems	42
Allergies	42
Eye Irritation	42
Joint Pain	39
Breathing Difficulties	39
Severe Headaches	39
Swollen & Painful Joints	32
Frequent irritation	32

The full list of health impacts "Reported by Community Members Living 50 feet to 2 miles from Compressor Stations and Gas Metering Stations Along Gas Transmission Pipelines" is available at the Luzerne County Citizens for Clean Air website⁸¹. It is notable that Subra reports that 61% of health impacts are associated with the chemicals present in the air that were in excess of short and long term effects screening levels.

Subra further reports that the following units at compressor stations and gas metering stations release emissions into the air:

Compressor Engines

Compressor Blowdowns

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Condensate Tanks	Amine Units
Storage Tanks	Separators
Truck Loading Racks	Fugitive Emission Sources
Glycol Dehydration Units	

She reports that 90% of individuals surveyed reported experiencing odor events from these facilities. Based on her analysis, the following health symptoms are associated with the chemicals detected in the air at compressor stations:

Allergies	Difficulty in Concentrating
Persistent Cough	Nervous System Impacts
Shortness of Breath	Forgetfulness
Frequent Nose Bleeds	Sores and Ulcers in Mouth
Sleep Disturbances	Thyroid Problems
Joint Pain	

Subra reports that both the construction and production phases of compressor stations can cause acute and chronic impacts. In the construction phase impacts come from diesel truck emissions and from dust particles. In the production phase impacts are derived from constant emissions, venting, blowdowns, accidents/malfunctions and from the effects of noise, light and stress. She considers respiratory health impacts of particular concern, and vulnerable groups such as pregnant women, children, the elderly and sensitive individuals to be at greatest risk. Acute and chronic health impacts that Subra has documented are listed below.

Acute Health Impacts Experienced by Individuals Living and Working near Compressor Stations

Tense and nervous	Irritates skin, eyes, nose, throat and lungs
Joint and muscle aches and pains	Respiratory impacts
Vision Impairment	Sinus problems
Personality changes	Allergic reactions
Depression, Anxiety	Headaches
Irritability	Dizziness, Light headedness
Confusion	Nausea, Vomiting
Drowsiness	Skin rashes
Weakness	Fatigue
Irregular Heartbeat	Weakness

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Chronic Health Impacts Experienced by Individuals Living and Working near Compressor Stations

Damage to Liver and Kidneys	Damage to Nervous System
Damage to Lungs	Brain Impacts
Damage to Cardiovascular System	Leukemia
Damage to Developing Fetus	Aplastic Anemia
Reproductive Damage	Changes in Blood Cells
Mutagenic Impacts	Impacts to Blood Clotting Ability
Developmental Malformations	

Radioactive elements: a long-term health threat

The possibility of exposure to radiation from natural gas pipelines and compressor stations is also a concern, especially for long-term health effects. The New York public health group, Concerned Health Professionals of New York, describes the problem in their report, Compendium Of Scientific, Medical, And Media Findings Demonstrating Risks And Harms Of Fracking (Unconventional Gas And Oil Extraction) (July 10, 2014): "Unsafe levels of radon and its decay products in natural gas produced from the Marcellus Shale, known to have particularly high radon content, may also contaminate pipelines and compressor stations, as well as pose risks to end-users when allowed to travel into homes." (P.5). Health impacts from exposure to radioactive materials in compressor station emissions have not been documented, but the risk of exposure to these carcinogens are a serious public health concern.

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¹ Southwestern Pennsylvania Marcellus Shale Short-Term Ambient Air Sampling Report. Pennsylvania Department of Environmental Protection. November 2010.

² Southwestern Pennsylvania Marcellus Shale Short-Term Ambient Air Sampling Report. Pennsylvania Department of Environmental Protection. November 2010.

³ <http://www.atsdr.cdc.gov/ToxProfiles/tp110.pdf>. Page 216.

⁴ Ibid., Appendix A, p. 31.

⁵ "Emission Inventory." Pennsylvania Department of Environmental Protection. http://www.dep.state.pa.us/dep/deputate/airwaste/aq/emission/emission_inventory.htm 2010.

⁶ Texas Commission on Environmental Quality Barnett Shale Formation Area Monitoring Projects. Doc number BS0912-FR http://www.tceq.state.tx.us/assets/public/implementation/barnett_shale/2010.01.27-BarnettShaleMonitoringReport.pdf.

⁷ Ibid.

⁸ Wolf Eagle Environmental. Town of DISH, Texas Ambient Air Monitoring Analysis Final Report. September 15, 2009.

⁹ Steinzor N, Subra W, Sumi L. Investigating Links between Shale Gas Development and Health Impacts through a Community Survey Project in Pennsylvania New Solutions 2013; 23(1): 55-84.

¹⁰ Southwest Pennsylvania Environmental Health Project internal review of intake materials, August 2014.

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¹² Ibid.

¹³ Natural Gas Industry Methane Emission Factor Improvement Study Final Report Cooperative Agreement No. XA-83376101. Prepared by: Matthew R. Harrison Katherine E. Galloway Al Hendler Theresa M. Shires

¹⁴ http://www.transcanada.com/docs/Our_Responsibility/Blowdown_Notification_Factsheet.pdf

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¹⁷ <http://www.cleburnetimesreview.com/godley/x489007782/Compressor-station-blows-up>.

¹⁸ http://www.madisonvillemeteor.com/news/article_bb02293e-656e-11e2-b466-0019bb2963f4.html

¹⁹ <http://www.caller.com/news/natural-gas-explosion-in-jim-wells-county-shoots>

²⁰ <http://www.newschannel10.com/story/24605246/four-people-injured-in-workplace-accident>

²¹ http://www.sunad.com/index.php?tier=1&article_id=26535

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³⁶ http://www.epa.gov/teach/chem_summ/BENZ_summary.pdf

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³⁸ <http://www.epa.gov/ttn/atw/hlthef/methylen.html>

³⁹ <http://www.epa.gov/ttn/atw/orig189.html>

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IND332 – Verne G. Waldow, Jr. (cont'd)

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IND332 – Verne G. Waldow, Jr. (cont'd)

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A Review of Health Effects of Compressor Stations

Joanne M. Belovich, Ph.D.

2/2/16

Overview

Numerous hazardous substances are released into the atmosphere during the normal operation of natural gas pipeline compressor stations. While EPA regulations tend to limit the annual output per year of each class of chemical to the environment, the potential human health impacts are more directly a function of chemical concentrations in the local atmosphere of nearby residents. This report will summarize the emissions projected by Nexus for the Wadsworth compressor station (CS) and the data available on concentrations of selected hazardous compounds associated with shale gas from similar CSs around the country, and compare these to EPA limits. The data show that the potential exists for serious negative health effects due to the CS emissions at distances up to one mile from the CS. Before permits are granted for new CSs, it is recommended that more detailed studies be conducted at existing CSs, including monitoring of average and peak concentrations of hazardous substances, and investigation of adverse health effects in residents in proximity to CSs.

Results

Annual emissions estimates (by Nexus) for each of the four compressor stations exceed EPA limits. According to the Nexus permit application, the following are the estimated annual emissions in tons per year (tpy), compared to the EPA limits². While it is unclear as to whether the EPA limit applies to a single CS, or to the entire pipeline, the table indicates that the predicted emissions from the single Wadsworth compressor will equal or exceed the EPA limit for NO_x, CO, particulates, SO₂, and VOCs.

Emissions, in tons per year→	NO _x	CO	PM	SO ₂	VOC	HAP
Wadsworth	33	10	6	3	32	4
Total of 4 stations	164	49	31	15	141	17
EPA limit ¹	31.2	7.8	6.2	3.2	29.3	n/a

Formaldehyde concentrations in the atmosphere of nearby residents (1/4 mi) may cause nasal irritation, increased risk of asthma and allergies, and slight risk of cancer (1/100,000). The Chronic Minimal Risk to Human Level (MRL) has been set to 20 ppb by the Center for Disease Control (CDC)³, while the California Office of Environmental Health Hazard Assessment has set the chronic Reference Exposure Levels (RELs) to 7 ppb⁶. Indoor air levels of formaldehyde range from 20-4,000 ppb (formaldehyde is released by carpets and furniture and

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building material), while outdoor, rural area levels are 0.2-6 ppb². According to the CDC, "Nasal and eye irritation, neurological effects, and increased risk of asthma and/or allergy have been observed in humans breathing 100 to 500 ppb."² The U.S. Department of Housing and Urban Development has set maximum concentrations in manufactured housing of 400 ppb⁴. Formaldehyde is considered "probably human carcinogen" by the EPA, with a lifetime human cancer unit risk estimate of 3.3×10^{-7} per ppb formaldehyde⁴. Formaldehyde concentrations in air were measured at various distances from a CS in Susquehanna County, PA, yielding: 45 ppb at 1/8 mile (n=1); 6-44 ppb at 1/4 mile (n=4); and 24 ppb at 1/7 mile (n=1)⁵. Similar results were reported for Arkansas⁵. Average formaldehyde concentrations around a CS have been calculated from weather models, estimated to be up to (depending on weather conditions) 26 ppb at 1/4 mile, 53 ppb at 1/5 mile, and 300 ppb at 100 yards from the CS.⁷ Thus, residents at 1/4 mile from the CS may experience nasal and eye irritations, and increased risk of asthma and allergy, with the risk decreasing with distance. Given the EPA's risk assessment and a predicted level of 50 ppb, residents at 1/4 mile have a cancer risk level of 1/100,000 from lifetime exposure to this expected formaldehyde level.

Benzene concentrations in the atmosphere of nearby residents may be carcinogenic.

Benzene is considered "known human carcinogen" by the EPA⁸, with a lifetime human cancer unit risk estimate of 2.7×10^{-5} per ppb benzene⁹. The EPA estimates that exposure to 0.4 ppb in air over a lifetime has a cancer risk of 1/100,000 (i.e. one additional cancer case for every 100,000 exposed persons)⁹. Benzene is released from gasoline filling stations and many industrial processes. Levels of benzene in outside air range from 0.02 – 34 ppb⁸.

Benzene concentrations in air were measured at various distances from equipment in CSs in Fremont County, WY and Park County, WY yielding benzene concentrations ranging from 7 – 640 ppb, at distances of 5 to 55 meters distance from a discharge canal or equipment such as a separator.⁵ Benzene concentrations near equipment in Parker County, TX ranged from 9-93 ppb¹⁰. Concentrations downwind of CSs in Denton County, TX were 1.6 ppb benzene.¹⁰

At the lower end of the above concentrations (1.6 ppb), the lifetime cancer risk is 4/100,000, while at the higher end (640 ppb), the lifetime cancer risk is very high (2/100), if this concentration is sustained at this high of a level over a lifetime. Benzene concentrations near the condensate tank of a CS (likely for liquid propane, not natural gas) in Wise County, TX was measured at 1,100 ppb¹⁰.

The data provided above are for locations in the very near vicinity of the CS. Concentrations near residents (1/4 mile away), are unknown, but are likely to be much less than these values. Weather models predicting benzene concentrations at this distance from a CS could not be found. Additional measurements and weather models on average benzene concentrations at the residences in proximity to CSs are needed to properly evaluate the carcinogenic risk.

Fine particulate matter may cause increases in asthma and cardiopulmonary symptoms.

Fine particulates (PM_{2.5}) are particles that are 2.5 um in diameter or smaller. These particulates can be inhaled deep into the lungs. Scientific studies have linked the inhalation of fine

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particulates to heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, increased respiratory symptoms, and premature death in people with heart or lung disease.¹² The EPA has set particulate concentration limits at 12 ug/m³ for average annual exposure, and 35 ug/m³ for 24 h limit¹¹.

In a permit application for a 7700 hp CS by Spectra Energy, their models for PM_{2.5} predict a 4.6 ug/m³ particulate concentration, in addition to a background concentration of 16.4 ug/m³ for a total of 21 ug/m³. Given that the background concentration was already in excess of the EPA limit, the 25% increase due to the CS further increases the health risks. Note that the Wadsworth combustion turbine is rated at 26,000 hp (Nexus permit application), so it is likely that particulate concentrations will greatly exceed those shown above.

Average PM_{2.5} concentrations around a CS have been calculated from weather models, estimated to be up to (depending on weather conditions) 56 ug/m³ at 1.2 mile, 100 ug/m³ at ½ mile, 225 ug/m³ at 1/5 mile, and 1400 ug/m³ at 100 yards from the CS.⁷ These high levels far exceed the EPA limit and are likely to cause serious health problems.

Some of the hazardous air pollutants may adsorb to the surface of the particulates, increasing their concentration in the lungs of the residents who inhale the particulates and thus increasing the potential for toxicity of the chemicals.

Epidemiological surveys show increase of illnesses in proportion to proximity to shale gas infrastructure. A peer-reviewed published paper correlated self-reporting of residents of various illnesses (throat irritation, sinus problems, severe headaches, nosebleeds) with distance from shale gas facilities. Frequency of symptoms increased significantly as distance from the facility (gas well, CS, and/or impoundment pit) decreased, from 4000 ft to 500 ft.¹³ While this type of study is not conclusive, these symptoms are consistent with exposure to air pollutants such as VOCs.

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Notes:

"Estimates of exposure levels posing minimal risk to humans (MRLs) are also presented in the figure. An MRL is an estimate of the daily human exposure that is likely to be safe over a certain period of exposure. MRLs are not intended to define clean-up or action levels, but are intended only to serve as a screening tool to help public health professionals decide where to look more closely. Therefore, MRLs are set at levels well below where effects have been observed."

<http://www.atsdr.cdc.gov/PHS/PHS.asp?id=218&tid=39>

INDIVIDUALS/LANDOWNERS

IND333 – Todd Tubbert

Todd Tubbert, Wadsworth, OH.

I recently purchased a home in Guilford Farms Township, Wadsworth, Ohio on a dream come true beautiful two acre lot with plenty of room for my two children to grow up in. Our decision to purchase was made after leasing our last house which was overwhelmed by harsh smells that would come from the factory's nearby that was not known to us before we moved in. My children could not play outdoors much of the time, nor could we open windows for fresh air. We were so blessed to find our current house and have loved every minute of it. We are so excited to be able to raise our own organic vegetables in our garden and breathe the fresh country air. Our new home is truly a dream come true!

It has come to my attention a few weeks ago from a neighbor about the plans for Nexus to build a gas pipeline compressor station just over 1/4 mile from my home! This is extremely upsetting to myself and my family. We purchased this home for a long-term stay and looked forward a future of growing old in this house. Unfortunately, the health, noise, and safety concerns associated with the compressor station would not allow us to remain in this area. I cannot knowingly allow my wife and children to breathe air that I know will harm them.

Considering my house is approximately 1800 feet from the proposed compressor station, we will never feel at ease knowing that in other cases of compressor station explosions, an area of over a mile were evacuated. The property value of my house will decrease dramatically which will cause financial distress along with emotional distress due to the fact that we LOVE our home and DO NOT want to leave.

I never would have imagined that by moving out to the country to let me family enjoy the quiet and serene environment that we would ever be faced with the scenario of having a toxic monster built in our backyard. This is truly a nightmare.

Please do not consider building the Medina County compressor station, not just for me and my family, but for the sake of our great community and environment.

IND333-1 See the response to comment CO8-17.

IND333-2 See section 4.10.8 for a discussion of potential impacts to property values.

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INDIVIDUALS/LANDOWNERS

IND334 – Richard Baumgartner

Richard Baumgartner, Westlake, OH.
Pipeline Safety 2016

Recent NEXUS literature touts "important investments in 'Public Safety'".

One recent internet website describes some of the recent history of gas transmission lines.
See reference: <http://triblive.com/news/westmoreland/10391146-74/819-fire-gas>
April 29, 2016 article:
"Man burned in Salem Twp. gas line explosion; homes, businesses evacuated"

Transmission line blasts kill

Gas companies reported 35 explosions and 32 ignitions at their transmission pipelines since 2010, according to federal records. During that same time period, 17 people died and 86 were injured in incidents involving the pipelines, including a September 2010 explosion in San Bruno, Calif., that killed eight and injured 51.

Transmission lines ferry gas across the country, feeding the utility companies that then send gas to homes and businesses through smaller pipes known as distribution lines. Transmission lines are often far larger — and operate at far greater pressure — than the distribution lines that lead to homes and businesses.

In all, gas companies estimate incidents involving transmission pipelines have caused nearly \$1 billion in damage since 2010. The damage caused by the San Bruno blast alone amounted to more than \$558 million, according to figures the gas companies are required to report to federal regulators."

IND334-1 Section 4.13 addresses safety impacts associated with the proposed Project and concludes that the proposed route would represent a minor increase in risk to public safety.

IND334-1 If NEXUS is truly interested in public safety they should actually consider the lower risk pipeline route proposed by the City Of Green. If FERC is the guardian of safety, than they should insist on the safer route be the default route.

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INDIVIDUALS/LANDOWNERS

IND335 – Richard Baumgartner

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Richard Baumgartner, Westlake, OH. Focus on the alternate route

This writing does not discuss different advantages of alternate energy versus fracking. This writing does not advocate that the NEXUS pipeline should be abandoned, (although other writings might). This writing only asks for a focus on the specific route selected for the NEXUS pipeline project.

IND335-1 Without the input of local government officials, NEXUS generated a pipeline route on a Texas computer. One initial attempt was to ask NEXUS and FERC to consider placing several proposed pipelines and future pipelines in a "safe engineered corridor". A brief study indicated that there was not enough political support for this method.

IND335-2 Soon after the NEXUS route was proposed, The City of Green (COG) studied the proposed NEXUS route and realized there was a better alternative. The COG route documentation was able to show a significant improvement in safety and was less intrusive than the NEXUS route. Downside features of the COG route, as initially cited by NEXUS, were found to be minimal or non-existent.

IND335-3 NEXUS has continually attempted to shift the focus of their campaign. All their latest efforts focus on how they hope to increase jobs, tax revenue and be the foundation for economic growth. How much of this is truth or how much is fabricated, who knows? It was noticed that many of the latest FERC comments seem to be manufactured or coaxed. One example is as documented in the FERC Library, Cp18-22-000, Files(20160816-0073, 20160816-0074, 20160816-0075, 20160816-0076, 20160816-0077, 201608-0078, 20160816-0079, etc). These eight files had identical wordings, except as modified for county details. There are other similar examples of duplicate entries. All these entries talk about the same hoped for jobs and economics.

IND335-4 Most important: The point of this writing is not to discuss if there should or should not be a pipeline. The purpose of this writing is to discuss why the NEXUS people should select a route that puts more people in a blast zone, puts more people at risk, and is more intrusive to city infrastructure.

This choice of two different routes is gambling with more than money. The probability is that there is higher risk of injury or death as more people are within a "safe setback" distance of the pipeline. If NEXUS will not take the initiative to put a higher value on safety, then I am asking FERC to require the safer route be chosen.

IND335-1 FERC does not direct development of the gas industry's infrastructure, neither on a broad regional basis through the establishment of energy corridors, nor on a more local scale in the design of specific projects.

IND335-2 See section 3.3.3 for an updated discussion of the City of Green Route Alternative. Based on our review, we did not find the City of Green Route Alternative provides a substantial environmental advantage when compared to the corresponding segment of the proposed route and did not recommend that it be incorporated as part of the Projects.

IND335-3 Comment noted. Issues surrounding mail fraud are outside of the scope of the NEPA review.

IND335-4 Section 4.13.1 of the EIS explains that Commission sites natural gas pipelines in cooperation with the DOT, which establishes and maintains pipeline safety regulations and does not require a setback for natural gas pipelines. The FERC has no authority to require a minimum setback.

INDIVIDUALS/LANDOWNERS

IND336 – Erik Kost

IND336-1	Erik Kost, Maumee, OH. I am writing to strongly OPPOSE the planned transmission station planned in Whitehouse, Ohio. The Whitehouse area is a beautiful rural area with a nature preserve and local school property within a short distance of the proposed transmission station/pipeline. I have already contacted the Ohio-EPA and my local representatives to object to this planned station due to the harmful toxins that will be released by this station. There is so much land in this area of Ohio, there is NO REASON for Nexus to disregard local property owners & stakeholders and put this station right in our backyard. Move this somewhere else in Ohio where NO ONE WILL BE IMPACTED! It is unbelievable that this project could even get this far with the potential impact it will have on our Anthony Wayne Schools campus. Our large school campus - middle school, junior high and high school - are all directly downwind from this planned station. The School Superintendent has already objected numerous times with the support of all the local residents. As property owners, WE HAVE RIGHTS and we deserve to be heard. I understand that the pipeline is likely inevitable at this point, but a reasonable compromise is to re-route it further south so that it has NO impact on our children and nature. These risks are unacceptable and I'm tired of hearing the same tired corporate BS from Nexus that it is "within acceptable limits" for toxic emissions.
IND336-2	These are TOXIC EMISSIONS, there are no acceptable limits! It is acceptable to them because they don't live here and they don't care about our community. No one in this region supports this pipeline or the compressor station. I strongly urge/demand that FERC utilize their authority and stop this project immediately.
IND336-3	
IND336-4	

- IND336-1 See the response to comment CO8-17.
- IND336-2 See the response to comment CO8-17.
- IND336-3 Comment noted.
- IND336-4 See the response to comment CO8-17.

INDIVIDUALS/LANDOWNERS

IND337 – Rae Buckley

Rae Buckey, Grafton, OH:

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street N.E. Washington, D.C. 20426

RE: NEXUS Gas Transmission LLC Docket No, CP16-22

Dear Secretary Bose:

Below is a copy of a letter I sent to Ohio Senator Sherrod Brown regarding the above docket.

August 21, 2016 Senator Brown:

I would like to make you aware of an unsettling situation involving a federal agency's docket.

IND337-1 | It appears the Federal Energy Regulatory Commission, Docket CP16-22, Nexus Gas Transmission LLC has been compromised. This docket has recently been inundated by hundreds of unsigned, undated, "with similar language and layouts, using the exact same font" (Docket No.20160817- 5008), fraudulent letters sent via the United States Postal Service, all in support of the Nexus pipeline. This appears to be a well orchestrated attempt to show unsubstantiated support for the Nexus pipeline.

IND337-2 | FERC has been made aware of the situation and responded by telling those calling attention to these filings, to contact the "authors" of these letters and have them submit another filing disavowing they wrote the original posting. As you can see from Docket No. 20160817-5008 and Docket No. 20160818-5152, some of the so called "authors" suffer from physical ailments, mental impairments or because the author died in 1998 and are therefore unable to respond.

FERC's cavalier attitude towards these fraudulent postings is not appreciated, and leaves one to question, if the system is perhaps broken.

Irrespective of personal position regarding the Nexus pipeline or any pipelines, this apparent attempt to fraudulently influence a federal agency's docket and the agency's lack of appropriate response to get to the truth of this mess is extremely disturbing.

I would appreciate you investigating this matter and I look forward to hearing from you.

Thank you.

Sincerely,
Rae Buckey

cc: Secretary Kimberly D. Bose, Secretary Federal
Energy Regulatory Commission

IND337-1 | Comment noted. Issues surrounding mail fraud are outside of the scope of the NEPA review.

IND337-2 | Comment noted. Issues surrounding mail fraud are outside of the scope of the NEPA review.

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INDIVIDUALS/LANDOWNERS

IND338 – Tammy Daly

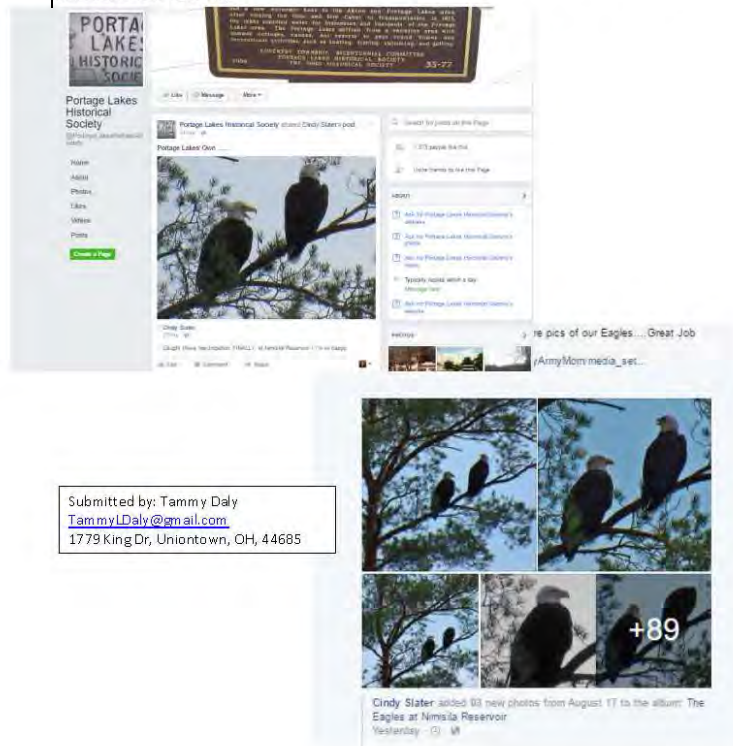
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Aug 17, 2016
CP 16-22-000

Photos of the bald eagles at Nimisila Reservoir, OH.
Posted on Facebook: Portage Lakes Historical Society

IND338-1

The proposed path of the Nexus pipeline threatens the Bald Eagles, wildlife, and plant life on and near Nimisila Reservoir in Green, Ohio. The pipeline should be re-routed away from Nimisila Reservoir and out of City Of Green to an area with less conflicts. Nimisila Reservoir is home to Bald Eagles. The Bald Eagles nest next to Nimisila reservoir's waters and they hunt on Nimisila Reservoir. The pipeline's construction will disturb the Bald Eagle's nests, habitat, and hunting habits as well as all the other precious wildlife and plant life. The Bald Eagles hunt the entire reservoir. The pipeline's construction would scare the Bald Eagles away.



Submitted by: Tammy Daly
TammyLDaly@gmail.com
1779 King Dr, Uniontown, OH, 44685

IND338-1 Project activities will not take place within 660 ft. of eagle nests (the disturbance buffer defined by the FWS). See section 4.6.6 and the *Migratory Bird Conservation Plan* for a discussion of impacts to eagles.

R-782

INDIVIDUALS/LANDOWNERS

IND340 – Teresa Reno

R-783

Teresa Reno, North Canton, OH.

Teresa Reno
3081 Wise Road
North Canton, OH 44720

Federal Regulatory Commission
888 First Street NE
Washington, D.C. 20426

Dear Commissioners:

RE:CP16-22

IND340-1 After studying the Nexus pipeline proposal for our City of Green, I have decided to support our city officials in their request for a suggested alternative southern route for the pipeline. I believe that the environment and safety interests will have a major impact on our area. This community has a wide variety of wildlife, from the larger mammals such as white tail deer, to smaller species of many songbird and amphibians. Various streams and ponds cross our community and many are already polluted with waste of housing and industry.

IND340-2 In addition, this pipeline will not deliver gas to our area and will not benefit the needs of area customers. Actually, in my section of Wise Road, there is not gas line at all – my fuel needs are met with home fuel oil from Campbell Oil, Co. Other neighbors use electric heating or propane. It is my understanding that all gasoline production will go to Canada.

IND340-3 Data that I have researched shows 11 significant gas line incidents between 2000-2009. In 2011 there was an explosion in Hanoverton, OH, that involved a 36-inch, buried transmission line that carries natural gas through the region. Mechanisms in the section that "failed" automatically shut off the segment and the residual gas burned off.

On July 22, 2013 there was a Dominion Gas rupture in New Franklin near West Nimisila and Dailey Roads, in an 8-inch steel line built in 1957 that carried 1,400 pounds per square inch and was a storage line for gas found in the natural sandstone of the area.

In October 2015 one of the biggest natural gas leaks recorded was in Aliso Canyon, CA. The amount of methane leaked had the same 20-year climate impact as burning nearly a billion gallons of gasoline. It took four months to plug the leak.

In 2011 Carl Weimer, executive director of the Pipeline Safety Trust commented, "... every nine or 10 days on average someone ends up dead or in the hospital from these pipelines. More needs to be done for safety."

IND340-4 I agree with our City of Green officials that this pipeline should not proceed in this area when there are could be an alternative southern route less populated that would be more feasible.

Please review their recommendations. Thank you for your consideration in this matter.

Sincerely,
Teresa Reno

IND340-1 Comment noted.

IND340-2 Section 1.1 discusses the Project purpose and need.

IND340-3 Section 4.13 addresses safety impacts associated with the proposed Project.

IND340-4 Section 3.0 discusses project alternatives, including several alternatives that would avoid the area by routing the pipeline farther to the south. Based on our review, we did not find that any of these alternatives provided a substantial environmental advantage when compared to the proposed route and did not recommend that they be incorporated into the Projects. In general, DOT safety standards are intended to ensure adequate protection of the public regardless of proximity to people. Therefore, we find that pipelines are safe regardless of population density. Instead, an important consideration in routing a pipeline is the impact on land use, which is discussed, as appropriate, in sections 3.0 and 4.9.

INDIVIDUALS/LANDOWNERS

IND341 – Ken Hoyt

R-784

Ken Hoyt, Clinton, OH.

I am a resident at Comet Lake Club, Inc.. Comet Lake Club is a not-for-profit organization in southern Summit County, Ohio chartered in to "... carry on programs for the conservation and propagation of fish, water- fowl and other wildlife; for the conservation of the soil and the prevention of soil erosion and the forestation of lands in the vicinity of Comet Lake in Summit County, Ohio."

- IND341-1 | While the proposed Nexus Pipeline project does not cross Comet Lake Club land, the project does propose utilizing Comet Lake waters for hydrostatic pressure testing of the pipeline. As a resident on Comet Lake and a member of Comet Lake Club, Inc. this project concerns me because of the 3,182,790 gallons of water uptake and the Balance of discharge volume taken from Lake P'na in West Township, OH.
- IND341-2 | My concerns with the 3,182,790 gallons of water uptake are for the impact on the fish in our lake. As our charter indicates one of our goals is the propagation of fish. No amount of precautions can completely eliminate fish kill/removal when pumping this quantity of water. Fish will be killed or pumped out of the lake along with the water and it will take years and financial resources to restore the lake to its current population.
- IND341-3 | My concerns about the Balance of Discharge Volume Taken from Lake P'na are greater. I know the water quality will be tainted by the pipeline materials. While there are federal standards in place to minimize this impact the standards include tolerance levels for impurities. While these are meant to keep us safe and reduce environmental impact, a far better solution would be to not put that water into our lake at all. I'm also concerned about the transfer of any biological elements from Lake P'na's ecosystem into that of Comet Lake including bacteria and vegetation that are not already native to Comet Lake. This type of material could damage the environment of our lake that we have been carefully maintaining through the years.
- | I'd prefer to have this water discharged down stream of our lake and allow Comet Lake to refill naturally through rainfall and natural springs that already maintain Comet Lake.
- IND341-4 | Ultimately it doesn't make sense to have the Nexus Pipeline go through the City of Green. Please re-route this pipeline to the alternate route South of Green, OH

- IND341-1 | As stated in section 4.3.2.3, the withdrawal and discharge of water used for hydrostatic testing would be regulated by the state to protect the resource. Discharge of the water would be further regulated under the federal National Pollution Discharge Elimination System as administered by the state.
- IND341-2 | See section 4.7.2.1 for a discussion of the mitigation measures to be used during hydrostatic testing water withdrawals in order to protect aquatic species.
- IND341-3 | See discussion in section 4.3.2.3 regarding the withdrawal and discharge of water used for hydrostatic testing. Discharge of the water would be regulated under the federal National Pollution Discharge Elimination System as administered by the state and would be done in accordance to the mitigation procedures presented in section 4.3.2.3 to protect the receiving waters.
- IND341-4 | Section 3.0 discusses project alternatives, including routes that would avoid the City of Green. Based on our review, we did not find that any of these alternatives provide a substantial environmental advantage when compared to the corresponding segment of the proposed route and did not recommend that they be incorporated as part of the Projects.

INDIVIDUALS/LANDOWNERS

IND343 – Gary Schoen

Gary Schoen, Climax, MI. FERC,

I have submitted three paragraphs from Keith Matheny's (Detroit Free Press) article dated June 13, 2016 entitled – "DTE gas supply line may cost customers. No profit expected for decades, so some doubt it's a good deal". As it exceeded the 6000 word limit I could not submit entire article.

IND343-1 | To which I add my comment that the Nexus Pipeline is not a good deal for Michigan or Ohio. It is not a good deal for communities and individuals all along the pipelines route who will bear the burden of this unnecessary pipeline.

The following 3 paragraphs come from Matheny's article. I ask you to take these comments into consideration when deciding the fate of the Nexus Pipeline. I also encourage you and others reading this comment to google and read the entire Keith Matheny article.

IND343-2 | The article says - That the Michigan Public Service Commission's Code of Conduct states: "An electric utility's or alternative energy supplier's services shall not subsidize in any manner, directly or indirectly, the unregulated business of its affiliates or other separate entities."

The article opens by saying - "However, DTE is seeking a guarantee from state regulators that its gas and electric ratepayers would be responsible for the utility's gas supply costs from the Nexus pipeline if it proves to be unprofitable. And critics, including state Attorney General Bill Schuette's office, say the proposal is a big loser for DTE customers because it's not projected to be profitable for decades - and even those projections are questioned."

The article goes on to say - "Assistant General John Janiszewski, in a June 6 brief to the Public Service Commission, recommended the regulator reject DTE's purchase of Nexus pipeline capacity".

IND343-1 | Comment noted. Section 1.1 provides a discussion of the purpose and need for the Projects.

IND342-2 | Comment noted.

INDIVIDUALS/LANDOWNERS

IND344 – Marcia Burton

R-786

Marcia Burton, Ypsilanti, MI
DOCKET # CP16-22-000 NO NEXUS PIPELINE
NEXUS Pipeline Project - NEXUS Gas Transmission, LLC has proposed construction of a natural gas pipeline to deliver gas from the Marcellus and Utica shale fields to markets in the Upper U.S. and Ontario, Canada. New construction for this pipeline would begin in Kensington, OH and end near Willow Run Airport in Ypsilanti, MI where it would tap into existing pipeline. The current scope for this project includes approximately 250 miles of up to 36 inch diameter greenfield pipeline with 4 new compressor stations and 4 new meter and regulation stations. It is designed to deliver 1.2 billion cubic feet per day of natural gas beginning in November of 2017. This information has been taken from correspondence from NEXUS and the Federal Energy Regulatory Commission.

- IND344-1 | The impact on Property Values – for home owners, business owners and farmers. In many areas of Ohio and Michigan property values are just starting to recover following the recession. This pipeline would cause property values to decline in impacted areas. Proposed pipeline route in Augusta township (Washtenaw County) show pipeline crossing Willis Rd. just east of Whittaker Rd. It could be within 1000 feet of three Lincoln Consolidated elementary schools and within a mile of entire Lincoln Consolidated School campus !!!!!!!!!!!!!
- IND344-2 | Impact on prime farmland. Huge sections of this pipeline would cut through farmland much of which is tiled for drainage. The soil would take years to settle and soil structure and crop yields would never be the same.
- IND344-3 | This pipeline would impact the environment. It would cut through woodlands and wetlands. It would cross streams and rivers. Wildlife would be affected.
- IND344-4 | We also should consider how natural gas is often obtained. Natural gas is found deep below the earth's surface. Much of it is contained in shale rock. Hydraulic Fracturing (fracking) injects sand mixed with large volumes of water and chemicals (some which are known to be carcinogenic) under high pressure into shale deposits. The shale deposits fracture thereby releasing the natural gas. The gas is captured, refined and then distributed. Hydraulic Fracturing for natural gas has polluted groundwater. It also has created a need for landfilling or deep well injection of the hazardous fracturing fluid byproducts it produces. In addition many scientists are now studying the link between Hydraulic Fracturing and the increase of earthquakes. Hydraulic Fracturing for natural gas does have serious environmental consequences. Is this something we want to encourage by building more pipelines? Especially pipelines designed to ship natural gas outside of the United States!
- IND344-5 |

NO....it is not !!!! Please say NO !!!!! Thank you, Marcia Burton

- IND344-1 | See section 4.10.8 for a discussion of potential impacts to property values.
- IND344-2 | As discussed in section 4.13, DOT safety standards are intended to ensure adequate protection of the public regardless of proximity to people, including schools, churches, daycares, etc.
- IND344-3 | See section 4.2.2 for a discussion of mitigation measures on agricultural lands. Impacts on drain tile systems are addressed in section 4.9.5.4 and in NEXUS' *Drain Tile Mitigation Plan* (appendix E-3).

Prior to construction, NEXUS shall file with the Secretary an *Agricultural Impact Mitigation Plan (AIMP)* detailing construction and restoration measures to be implemented on the NGT Project to address agricultural issues unique to Ohio and Michigan. For construction and restoration measures in Ohio, NEXUS shall consult with the Ohio Department of Agriculture (ODA) on construction procedures to be used in agricultural land in Ohio and shall file with the Secretary any measures that result from coordination with the ODA.

Prior to construction, NEXUS shall file with the Secretary a 5-year post-construction monitoring program to evaluate crop productivity in areas impacted by the construction of the Project. NEXUS shall include in the program a commitment to file with the Secretary quarterly reports for a period of 5 years following construction documenting any crop-related problems and describing any corrective action taken to remedy those problems. The program shall stipulate that if any landowner agrees that revegetation and crop productivity are successful prior to the 5-year requirement, NEXUS shall provide documentation in its quarterly reports indicating which landowners have agreed that monitoring is no longer necessary.

- IND344-4 | See section 4.6 for a discussion of potential impacts to wildlife.
- IND344-5 | Impacts related to natural gas production are discussed in section 4.14.3.

INDIVIDUALS/LANDOWNERS

IND345 – Rae Buckley

Rae Buckley, Grafton, OH.
Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street N.E. Washington, D.C. 20426

RE: NEXUS Gas Transmission LLC Docket No. CP16-22 Dear

Secretary Bose:

IND345-1

Another Nexus "GET THE FACTS" oversized propaganda postcard, was received, with the facts "Serving Ohio Markets, As of March 2016 NEXUS, had signed 13 connection agreements with various Ohio markets along the proposed route. These connections include local distribution companies, industrial parks and power plants in your community." Below the text on the postcard was a map of the "connections" and the names of facilities owners. Of note, is NRG Power, shown prominently on the map as a connection. At the time when NRG filed for its own pipeline, there was no mention of Nexus. "NRG Energy Inc. won't convert the former GenOn power plant to natural gas because it found other ways to comply with Environmental Protection Agency mercury and air toxic, or MATS, standards." (The Chronicle-Telegram) Sound minds are left to conclude that the NRG listing on the postcard is a fabrication, especially when Nexus implies the connections are firm contracts, but in reality they are merely 13 tee-taps sites.

IND345-2

In the July 2016 FERC draft for Nexus EIS "We consider the 6 definitive receipt and delivery points on the NGT Project to be essential to the Project's objective, whereas we do not consider the 13 tee-tap sites to be essential. Tee-taps typically are underground fittings installed on a pipeline to facilitate potential future connections." (not a contract connection)
Draft Environmental Impact Statement- FERC "Nexus Pipeline get the 'CORRECT' facts."

Sincerely, Rae Buckley

IND345-1 Section 1.1 provides a discussion of the purpose and need for the Projects.

IND345-2 Section 1.1 provides a discussion of the purpose and need for the Projects. This section discusses the differences between receipt and delivery points and the 13 tee-taps.

R-787

INDIVIDUALS/LANDOWNERS

IND346 – Ivars Magons

20160822-0016 FERC PDF (Unofficial) 08/22/2016

August 18, 2016

ORIGINAL

Kimberly D Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington DC 20426-001

FILED
SECRETARY OF THE
COMMISSION

2016 AUG 22 P 3 01

FEDERAL ENERGY
REGULATORY COMMISSION

RE: DOCKET NUMBER - CP 16-22-000 - NEXUS Gas Pipeline Project

Dear Ms. Bose,

The attached copy of a letter falsely claimed to be filed by me on Aug 15, 2016 was labeled in this way:

20160815-0045 FERC PDF (UNOFFICIAL) 08/15/2016
14330555.tif..... 1-1

I did not send the above referenced letter and I did not file that same letter with FERC or any other entity.

This letter was received by you without my signature, and without my knowledge or permission.

You may regard the referenced letter as unauthorized by me and a false claim.

I want you to tell me who this letter was received from and how you received it.

Please acknowledge this message. I am anxious to receive your reply.

Thank you.



Ivars Magons
9580 River Styx Road
Wadsworth OH 44281-8436
(330) 336-3579

IM:jm

Enclosure: Aug 15, 2016 Letter Received by FERC

IND346-1 Comment noted. Issues surrounding mail fraud are outside of the scope of the NEPA review.

R-788

INDIVIDUALS/LANDOWNERS

IND346 – Ivars Magons (cont'd)

R-789

20160922-0018 FERC PDF (Unofficial) 09/22/2016

20160915-0045 FERC PDF (Unofficial) 08/15/2016

ORIGINAL

Ivars Magons
9580 River Styx Rd
Wadsworth, OH 44281

FILED
SECRETARY OF THE
COMMISSION

25 AUG 15 P 3 53

FEDERAL ENERGY
REGULATORY COMMISSION

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426-0001

RE: Docket Number – CP 16-22-000 – NEXUS Gas Pipeline Project

Dear Ms. Bose,

Please join me in supporting the approval of the NEXUS pipeline which will help bring jobs and energy security to our county.

Many groups such as the Ohio Chamber of Commerce as well as local elected officials have voiced their support for this important infrastructure project. I agree with these groups that NEXUS will provide substantial economic benefits to counties like ours in addition to maintaining reliable, affordable natural gas service.

The economic impact of this project is significant, and one of the largest investments in Medina County – bringing in more than \$94 million in economic benefits and supporting over 700 jobs. In addition, our schools will benefit from increased revenue to provide more opportunities to our children.

In addition to the economic benefits, this pipeline will also ensure a reliable supply of U.S. produced natural gas at affordable prices, providing energy security for Medina County. While doing so, this pipeline will be continuously monitored with the latest safety controls such as remote control shutoff valves to make sure our environment is protected.

Approving this pipeline is commonsense, and I urge you to do so, knowing the importance of this project.

Sincerely,

Ivars Magons