

BEFORE THE OHIO ENVIRONMENTAL PROTECTION AGENCY

In the Matter Of)	Docket No.
Wadsworth Compressor Station)	Facility ID: 1652100116
NEXUS Gas Transmission, LLC,)	Permit Number: P0119280
Applicant.)	February 15, 2016
)	
)	

SUSTAINABLE MEDINA COUNTY’S
OBJECTIONS TO PROPOSED ISSUANCE
OF PERMIT-TO-INSTALL AND
REQUEST FOR ADJUDICATION HEARING

Now comes Sustainable Medina County (hereinafter “Objector SMC”), and the individuals Gary Freed, Michael Smith, Brian D. Heller and Jennifer M. Heller (hereinafter “Objectors Freed, Smith and Heller”), acting by and through the undersigned counsel, who respectfully object to the “Draft Air Pollution Permit-to-Install and Operate” issued to “Reagan Mayces/Wadsworth Compressor Station.” The Wadsworth Compressor Station, upon information and belief, will actually be owned and operated by NEXUS Gas Transmission, LLC as part of the NEXUS Gas Transmission Project. Objectors hereby request an adjudication hearing. Objectors Freed, Smith and Heller are designated as members of SMC for purposes of establishing organizational standing for SMC to proceed on their behalves. If for any reason SMC is not recognized as a proper organizational entity with standing, then alternatively, Freed, Smith and the Hellers submit their objections as individual complainants and request that their bases for standing be considered on their individual merits.

I. CONTACT INFORMATION FOR COMMUNICATIONS AND SERVICE

All communications, pleadings, and orders with respect to this proceeding should be sent to the following counsel of record for SMC and the individuals Freed, Smith and the Hellers:

Terry J. Lodge, Esq.
316 N. Michigan St., Ste. 520
Toledo, OH 43604-5627
(419) 255-7552
Fax (440) 965-0708
tjlodge50@yahoo.com

II. BACKGROUND

Reagan Mayces/Wadsworth Compressor Station, possibly on behalf of NEXUS Gas Transmission, LLC, seek an Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install and Operate (PTIO) for the Wadsworth Compressor Station, to be located in Guilford Township, Medina County, Ohio.

The NEXUS Gas Transmission Project is a proposed commercial pipeline which will utilize greenfield pipeline construction and the capacity of third-party pipelines to provide for the transportation of 1.5 million dekatherms per day (“th/d”) of Appalachian Basin shale gas, including Utica and Marcellus shale gas production, to the Dawn Hub in Ontario, Canada. Through interconnections with existing pipelines, the sponsor of the pipeline maintains that supply from the NEXUS Project will also be able to reach the Chicago Hub in Illinois and other Midwestern markets.

The United States portion of the NEXUS Project includes new greenfield pipeline in Ohio and Michigan and capacity leased from others in Pennsylvania, West Virginia, Ohio and Michigan, terminating at the United States/Canada international boundary between Michigan and Ontario. The Canadian portion of the Project will extend from the U.S./Canada international

boundary to the Dawn Hub.

The Wadsworth Compressor Station is proposed to be constructed approximately six (6) miles west of Wadsworth, Ohio and approximately seven (7) miles south of Medina, Ohio. There are residences located 1,800 feet west of the compressor station site center, residences located 1,840 feet west-northwest of the station site center; and residences located 2,490 feet northeast of the station site center.

There will be air emissions from a number of sources, including an emergency generator with a natural gas-fired fuel gas heater; fugitive releases from piping components, such as valves and fittings; gas releases, working, breathing, and flashing losses from storage vessels; vapor losses from liquid loading operations; non-routine activities, such as maintenance activities, will require ventings/blowdowns of sections of pipe between valves located along the pipeline.

Besides emitting a toxic stew of volatile organic chemicals (VOCs) and polynuclear aromatic hydrocarbons (PAHs) which are endemic to the process of hydraulic fracturing for oil and gas, the NEXUS Project also will routinely, intentionally and unintentionally, leak fine particulate and radon gas. Radon is a naturally-occurring odorless and tasteless radioactive gas which is produced by the radioactive decay of Radium-226 and is found in uranium ores and shales. Radon is the second-largest cause of lung cancer in the United States, behind smoking. NEXUS Gas Transmission, LLC predicts an average concentration of radon of 37 picocuries per liter (pCi/L) at normal atmospheric pressure, which is more than nine (9) times levels of radon deemed relatively harmless by the U.S. Environmental Protection Agency.

NEXUS Gas Transmission, LLC plans to install the following emissions sources at the Wadsworth Compressor Station:

- > a natural gas-fired catalytic heater;
- > a remote reservoir parts washer;
- > roadways from which trucks will emit fugitive particulate emissions;
- > loading facilities on which there will be periodic transfer of condensate liquids, used lubricating oil, and oily water to tanker trucks for shipment off-site;
- > a 29,517 HP (196.51 MMBtu/hr) natural gas-fired Solar Turbine;
- > an 880 hp natural gas-fired emergency electrical generator;
- > gas releases due to periodic maintenance, compressor blowdowns, routine operations (startup and shutdown and reduced pressure demand events) and other miscellaneous releases;
- > five (5) separator vessels;
- > pipeline pigging Gas releases associated with periodic pipeline pigging (maintenance) activities;
- > compressor equipment components from which fugitive emissions will be leaked;
- > three (3) vertical fixed roof storage tanks used to store condensate liquids collected from the pipeline and from station equipment, lubricating oils for the turbine, and to store oily water.

III. IDENTITIES AND INTERESTS OF OBJECTORS

A. Sustainable Medina County

Sustainable Medina County (hereinafter “SMC”) is an unincorporated association of persons who are residents of Medina County, Ohio who advocate for local, direct democratic control over energy policy and projects taking place within Medina County. SMC’s address is P. O. Box 1033, Wadsworth, OH 44282, www.sustainablemedinacounty.org. SMC. SMC’s

members oppose NEXUS project as being opposed to the public interest.

B. SMC Member Gary Freed

SMC member Gary E. Freed lives at 3491 Rohrer Road, Wadsworth, Medina County, OH 44281. His residence is located approximately less than one-half mile from the proposed site of the Wadsworth Compressor Station, Medina County, Ohio. If the proposed compressor station is granted an OEPA permit, Mr. Freed would be residing within a recognized “blast zone” radius from the compressor, and in the course of normal day-to-day operations of the compressor station would be constantly exposed to land and air contamination from station operations. The station’s emissions will consist of volatile organic chemicals (VOCs), polyaromatic hydrocarbons (PAHs), and radon gas at levels above the threshold set by the U.S. Environmental Protection Agency for individual health. Mr. Freed opposes the permit for the compressor station because its operation and emissions will be antithetical to his personal health, and to the physical environment within the vicinity of his residence.

C. SMC Member Michael Smith

SMC member Michael B. Smith lives at 8640 Guilford Road, Seville, OH 44273 on an eight-acre tract. His residence is located within one-half mile from the proposed site of the Wadsworth Compressor Station, Medina County, Ohio. On his land, Mr. Smith grows organic fruits and vegetables which are a mainstay of his family’s diet. Mr. Smith’s organically-grown food is a necessity to counter the symptoms of long-term illness of his spouse. If the proposed compressor station is granted an OEPA permit, Mr. Smith and his spouse will be residing within a recognized “blast zone” radius from the compressor, and in the course of normal day-to-day operations of the compressor station will be constantly exposed to land and air contamination

from station operations, which consist of volatile organic chemicals (VOCs), polyaromatic hydrocarbons (PAHs) and radon gas at levels above the threshold set by the U.S. Environmental Protection Agency for individual health. Mr. Smith opposes the permit for the compressor station because its operation and emissions will be inimical to his personal health, that of his spouse, and will pollute the agricultural environment in which they produce their own food.

D. SMC Members Brian D. Heller and Jennifer M. Heller

SMC members Brian D. Heller and Jennifer M. Heller live at 8666 Guilford Road, Seville, OH 44273 with their minor children. Their residence is located less than one-half mile from the proposed site of the Wadsworth Compressor Station, Medina County, Ohio. Ms. Heller is allergic to exposure to the chemical formaldehyde. Formaldehyde will be constantly emitted from the Wadsworth Compressor Station. If the proposed compressor station is granted an OEPA permit, Mr. and Ms. Heller and their children will be residing within a recognized “blast zone” radius from the compressor, and in the course of normal day-to-day operations of the compressor station would be constantly exposed to land and air contamination from station operations. The air pollution from the compressor station will consist of volatile organic chemicals (VOCs), polyaromatic hydrocarbons (PAHs) and radon gas at levels above the threshold set by the U.S. Environmental Protection Agency for individual health. The Hellers oppose the permit for the compressor station because its operation and emissions will be inimical to their personal health and that of their children, and the physical environment in and about their residence.

IV. SPECIFIC OBJECTIONS

A. Misleading, Insufficient and Defective Public Notification of Draft PTIO

The permit is being sought for the convenience of NEXUS Gas Transmission, LLC. The

Wadsworth Compressor Station is a component of the NEXUS Gas Transmission Project, which is the formal name for the pipeline project which NEXUS has established in formal proceedings pending before the Federal Energy Regulatory Commission.

The legal notice of issuance of the draft PTIO which was published by the Ohio EPA in the Medina area has been reproduced in full in the margin.¹ It contains no mention whatsoever of the Wadsworth Compressor Station as being related at all to the NEXUS Project.

The Draft PTIO was sent to “Reagan Mayces, Wadsworth Compressor Station, P.O. Box 1642, Houston, TX 77251-1642,” and not to a person identified as working for Spectra Energy or NEXUS Gas Transmission, LLC. In the 51-page draft PTIO for the Wadsworth station, there is one (1) mention of the word “NEXUS”, which appears inconspicuously on the 3rd page.

The misleading reference to the Wadsworth station as though it were a self-contained legal or business entity and not an asset of a major pipeline construction plan thwarts notification to the public that a major fixture within the NEXUS gas pipeline project has been recommended

¹The following matters are the subject of this public notice by the Ohio Environmental Protection Agency. The complete public notice, including any additional instructions for submitting comments, requesting information, a public hearing, or filing an appeal may be obtained at: <http://www.epa.ohio.gov/actions.aspx> or Hearing Clerk, Ohio EPA, 50 W. Town St. P.O. Box 1049, Columbus, Ohio 43216. Ph: 614-644-2129 email: HCLerk@epa.ohio.gov Draft Issuance of Permit- To-Install and Operate Wadsworth Compressor Station Guilford Road, Wadsworth, OH 44281 ID #: P0119280 Date of Action: 01/12/2016 Permit Desc: Initial Installation PTIO for a natural gas compressor station powered by a 29,517 hp natural gas-fired combustion turbine. A public hearing and information session will be held at 6:00PM on 02/16/2016 at the Cloverleaf Elementary School Cafeteria, 8337 Friendsville Rd, Seville, OH 44273. All interested persons are entitled to attend or be represented and give written or oral comments on the draft permit at the hearing. Written comments on the draft permit must be received by the close of the business day on 02/22/2016. The permit and complete instructions for requesting information or submitting comments may be obtained at: <http://epa.ohio.gov/dapc/permitsonline.aspx> by entering the ID # or: Kelly Kanoza, Akron Regional Air Quality Management District, 1867 West Market St., Akron, OH 44313. Ph: 330-375-2480. M.G. 1/14/16 20537703

to be issued a key, federally-required permit.

OAC § 3745-49-08(D)(5) requires notice to contain “The name and address of the person to whom the action was issued.” Reagan Mayces was no doubt acting on behalf of NEXUS Gas Transmission, LLC in seeking or pursuing the permit. The means by which the public has been notified of the draft PTIO, however, deliberately misrepresent the key protagonist of the pipeline as being “Reagan Mayces, Wadsworth Compressor Station” in Houston, Texas, instead of NEXUS Gas Transmission, LLC. Notably, the Ohio EPA staff used the same method of identification of the applicant to the public in both the Wadsworth and Waterville compressor station PTIOs.

The identification used is misleading and inadequate and tends to conceal, rather than to publicize, the draft regulatory action of the OEPA. It follows that the public notice is insufficient and fatally defective and must be re-issued. Concomitantly, the public hearing in Medina County should be rescheduled and reconvened after proper advance notice is published.

B. The Draft Permit Approves CO, NO₂ and VOC Emissions Which Exceed Limits

The draft permit would allow emissions of, among other chemicals, up to 7.81 tons per year of carbon monoxide, 31.2 tons per year of nitrogen oxides, and 29.3 tons per year of volatile organic compounds. But in a table dubbed “Preliminary Emissions Estimates” from a NEXUS slideshow entitled “Proposed Air Permitting Strategy” dated April 2015 (slide 21/24 of .pdf), NEXUS stated that the Wadsworth Compressor Station would emit 33 tons of nitrogen oxides, 10 tons of carbon monoxide, and 32 tons of volatile organic compounds. There is neither mention of, nor accounting for, these apparent discrepancies in the draft PTIO. The permit simply certifies in conclusory, boilerplate wording that the proposed compressor station will fall

beneath these thresholds. There is no mention of predicted emissions based on tests or actual emissions experience from the equipment and facilities planned for the Wadsworth Compressor Station.

According to OAC § 3745-15-08, “No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant which would otherwise violate Chapter 3704., 3714., 3734., 3745., 6109., or 6111. of the Revised Code or any rule adopted thereunder.” Such a concealment may be found in the above-cited discrepancies.

C. Projected Formaldehyde Emissions Portend Allergy and Cancer Risks

There is no specific information contained within the draft PTIO concerning the presence of formaldehyde in the air emissions from the proposed compressor station, but formaldehyde inevitably will be discharged during operations. Objectors’ expert witness, Joanne M. Belovich, Ph.D., a chemist and biomedical scientist, investigated the draft permit and has stated her opinion² as follows:

Thus, residents at ¼ 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 ¼ mile have a cancer risk level of 1/100,000 from lifetime exposure to this expected formaldehyde level.

OAC § 3745-15-07(A) prohibits as unlawful the “emission or escape into the open air from any source or sources whatsoever, of . . . fumes, gases, vapors, or any other substances or combinations of substances, in such manner or in such amounts as to endanger the health, safety or welfare of the public, or cause unreasonable injury or damage to property.” Such is “found

²The full text of Dr. Belovich’s report is annexed hereto and incorporated herein by reference as though rewritten.

and declared to be a public nuisance.” And “It shall be unlawful for any person to cause, permit or maintain any such public nuisance.”

Moreover, OAC § 3745-15-08 requires that “No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant which would otherwise violate Chapter 3704., 3714., 3734., 3745., 6109., or 6111. of the Revised Code or any rule adopted thereunder.”

Wadsworth Compressor Station operations will cause unknown but unmistakable formaldehyde pollution and poisoning of surrounding residents. Reagan Mayces should not be granted an approved permit for the Wadsworth Compressor Station, nor should NEXUS Gas Transmission, LLC.

D. The Compressor Station Must Use Electric Compressor Pumps as BAT

The Wadsworth draft permit states (p. 29/51 of .pdf) that “The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM, SO₂, CO and VOC emissions from this air contaminant source since the potential to emit of each is less than 10 tons/year.” This is incorrect.

A table entitled “Preliminary Emissions Estimates” appearing in a NEXUS slideshow by the name of “Proposed Air Permitting Strategy” dated April 2015 (slide 21/24 of .pdf) predicts that the Wadsworth Compressor Station would emit 32 tons of volatile organic compounds, and the draft PTIO limits the station to emissions of 29.3 tons per year of VOCs. Therefore, OAC § 3745-31-05(A)(3) will be violated by the failure of the NEXUS to use, and for OEPA to require, the best available technology, which means installation of electric compressor pumps instead of

gas-fired compressor turbines, a technology substitution which would reduce air pollution emissions substantially.

***E. Unknown But Presumably Toxic Levels of Benzene
Will Be Routinely Emitted During Compressor Operations***

The draft PTIO contains almost no data or description of the emissions or quantities of chemical toxins which will constantly be released from the compressor station. Objectors' expert witness, Joanne M. Belovich, Ph.D., predicts from review of the literature on compressor stations, and from studies of actual emissions data from similar compressors that benzene will be routinely released from the Wadsworth station.³ Dr. Belovich warns that benzene is a "known human carcinogen," and found that studies of benzene levels around condensate tanks and compressor equipment at other sites show levels of 1.6 parts per billions (ppb) or more. Even 1.6 ppb, Dr. Belovich notes, is four (4) times the U.S. Environmental Protection Agency-identified air level of 0.4 ppb which over a lifetime carries a cancer risk of 1/100,000. There is no "safe" level of benzene contamination. Dr. Belovich found that "Additional measurements and weather models on average benzene concentrations at the residences in proximity to CSs are needed to properly evaluate the carcinogenic risk."

According to OAC § 3745-15-02, "the purpose of all air pollution rules adopted under Chapter 3704. or Chapter 3745. of the Revised Code or any rule adopted there under to set forth such requirements as shall be necessary to secure and maintain those levels of air quality which are consistent with the protection of health and the prevention of injury to plant, animal life, and property in the state of Ohio, and to provide for the comfortable enjoyment of the natural

³The full text of Dr. Belovich's report is annexed hereto and incorporated herein by reference as though rewritten.

attractions of the state to the greatest extent practical.” Consequently, “[a]ll regulations of the director shall be construed in such manner as to effectuate this purpose.”

According to OAC § 3745-15-08, “No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant which would otherwise violate Chapter 3704., 3714., 3734., 3745., 6109., or 6111. of the Revised Code or any rule adopted thereunder.” By providing no calculations nor even explicit acknowledgment of the inevitable emissions of benzene family compounds from the Wadsworth station, there is concealment of a very serious health-threatening contaminant and the permit does not suffice to protect the public nor to disclose the threat from the family of benzene compounds.

Respecting the inevitable emissions of benzene from the Wadsworth Compressor Station, the Director of the Ohio EPA cannot protect health and prevention of injury to plant, animal life and property, as he is required by OAC § 3745-15-02 to do, and the permit should be denied.

***F. Clinically Significant Quantities of Particulate Matter
Will Be Routinely Emitted During Compressor Operations***

The draft PTIO contains almost no data or description of the emissions or quantities of fine particulates which will constantly be released from the compressor station. There is only a maximum limitation of 6.24 tpy, but no showing of how that limitation will be observed. Objectors’ expert witness, Joanne M. Belovich, Ph.D., predicts from review of literature and actual emissions data concerning similar compressors that benzene will be routinely released from the Wadsworth station.⁴ She states in her report:

⁴The full text of Dr. Belovich’s report is annexed hereto and incorporated herein by reference as though rewritten.

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. While this type of study is not conclusive, these symptoms are consistent with exposure to air pollutants such as VOCs.

According to OAC § 3745-15-02, “the purpose of all air pollution rules adopted under Chapter 3704. or Chapter 3745. of the Revised Code or any rule adopted thereunder to set forth such requirements as shall be necessary to secure and maintain those levels of air quality which are consistent with the protection of health and the prevention of injury to plant, animal life, and property in the state of Ohio, and to provide for the comfortable enjoyment of the natural attractions of the state to the greatest extent practical.” Consequently, “[a]ll regulations of the director shall be construed in such manner as to effectuate this purpose.”

Respecting the inevitable emissions of fine particulate matter from the Wadsworth Compressor Station, there is a double whammy. The particulate is extremely irritating and harmful to pulmonary functioning, but additionally, it can carry chemical toxins expelled as part of the overall emissions from the compressor facility. The Director of the Ohio EPA cannot protect health and prevent injury to plant, animal life and property, as required by OAC § 3745-15-02, without defining and imposing threshold levels of particulate matter which will not implicate health problems for the individually-named Objectors nor denigrate the organic

agricultural activities of Objector Smith.

***G. Greenhouse Gases From the Compressor Station
Will Total at Least 111,925 Tons Per Year***

Objectors' expert Wilma Subra, an award-winning chemist and expert petrochemical facility analyst, has calculated that the Wadsworth Compressor Station will emanate some 111,925 tons of greenhouse gases per year.⁵ This figure dwarfs the OEPA's indirect disclosures of carbon monoxide (7.81 tpy).

In *Massachusetts v. EPA*, 549 U.S. 497 (2007), the Supreme Court found that greenhouse gases are air pollutants covered by the Clean Air Act.

OAC § 3745-15-07(A) prohibits as unlawful the "emission or escape into the open air from any source or sources whatsoever, of . . . fumes, gases, vapors, or any other substances or combinations of substances, in such manner or in such amounts as to endanger the health, safety or welfare of the public, or cause unreasonable injury or damage to property." Such is "found and declared to be a public nuisance." And "It shall be unlawful for any person to cause, permit or maintain any such public nuisance."

The discharge of such massive tonnage of greenhouse gases will add greatly to the enormous and growing volume of GHG's which is causing the acceleration of global warming and climate change. The compressor station's operations will comprise a nuisance because the GHG emissions will materially worsen global climate change along with projected damage and dangers. The Director of the Ohio EPA cannot protect human health and prevention of injury to plant, animal life and property, as required by OAC § 3745-15-02, by granting the PTIO.

⁵The full text of Ms. Subra's report is annexed hereto and incorporated herein by reference as though rewritten.

H. Compressor Station Operations Will Generate Ozone and Cause Respiratory Problems for Persons Living in the Area of the Station

Objectors' expert, Wilma Subra, further concluded in her analysis of the Wadsworth station⁶ that

. . . [T]he 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.

Ms. Subra noted in her report that the location of the Wadsworth Compressor Station “has air quality in marginal non-attainment for ozone.”

By OAC § 3745-31-05(A)(1), the Director is required to issue a PTIO “if he/she determines that the installation, modification or operation of the air contaminant source will: . . . Not prevent or interfere with the attainment or maintenance of applicable ambient air quality standards. . . .” But permitting this additional ozone source will contradict this rule. And according to OAC § 3745-15-08, “No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant which would otherwise violate Chapter 3704., 3714., 3734., 3745., 6109., or 6111. of the Revised Code or any rule adopted thereunder.” By not taking into account the marginal ozone attainment status in the Wadsworth vicinity, OEPA has abdicated its regulatory responsibility.

OAC § 3745-15-07(A) prohibits as unlawful the “emission or escape into the open air from any source or sources whatsoever, of . . . fumes, gases, vapors, or any other substances or

⁶The full text of Ms. Subra's report is annexed hereto and incorporated herein by reference as though rewritten.

combinations of substances, in such manner or in such amounts as to endanger the health, safety or welfare of the public, or cause unreasonable injury or damage to property.” Such is “found and declared to be a public nuisance.” And “It shall be unlawful for any person to cause, permit or maintain any such public nuisance.”

The effect of adding to the existing ozone problems in northeastern Ohio creates a public nuisance and requires that the draft PTIO be rejected by the Director of OEPA. The Director cannot protect human health and prevention of injury to plant, animal life and property as required by OAC § 3745-15-02 if he acts other than to deny the permit.

***I. Fugitive Natural Gas and VOCs from Liquids Transfer
And Handling/Storage May Be Underestimated***

The liquid truck loading emission calculations do not appear to include transfer hose emissions.

Liquid truck loading emission calculations did not appear to include transfer hose emissions and it is not obvious whether there would be vapor balancing when the trucks are filled back to the storage tanks. If this is the situation, then there is a significant omission and under-representation of air pollutant emissions from the compressor station.

According to OAC § 3745-15-08, “No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant which would otherwise violate Chapter 3704., 3714., 3734., 3745., 6109., or 6111. of the Revised Code or any rule adopted thereunder.” It appears that hose emissions are not encompassed within the quantification of vapor leakage from the compressor station.

OAC § 3745-15-08 states that “No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant which would otherwise violate Chapter 3704., 3714., 3734., 3745., 6109., or 6111. of the Revised Code or any rule adopted thereunder.” The failure to identify and quantify hose emissions serves to conceal the true volume of VOC, PAH, GHG and particulate emissions. The draft PTIO must be denied.

***J. Undisclosed Radon Gas Emissions and
Possible Radioactive Particulate Matter***

According to NEXUS Gas Transmission LLC, the NEXUS Project will leak radon gas. Radon is a naturally-occurring odorless and tasteless radioactive gas which is produced by the radioactive decay of Radium-226 and is found in uranium ores and shales. NEXUS Gas Transmission Project, Resource Report 9, “Air and Noise Quality,” November 2015, p. 9-22. The Gogolak/USDOE study looked at the radon concentration in natural gas from eight wells in West Virginia and Kentucky and found an average radon concentration of 151 picocuries per liter (“pCi/L”). *Id.* p. 9-23. The Johnson/USEPA study found an average concentration of radon in natural gas of 37 pCi/L from over 2,000 wells nationwide. *Id.* The Anspaugh study focused on gas samples taken at eight locations on the Texas Eastern system in West Virginia, Pennsylvania and New Jersey and found an average radon concentration of 29 pCi/L.

In addition to these studies, the U.S. Geological Survey (“USGS”) released a report in 2012 regarding radon activities in natural gas from certain wells. The USGS found an average concentration of radon of 37 pCi/L based on gas samples from eleven wells in Pennsylvania. *Id.* The Marcellus sample activities studied by the USGS ranged from 1 to 79 pCi/L. Rowan and

Kraemer, “Radon-222 Content of Natural Gas Samples from Upper and Middle Devonian Sandstone and Shale Reservoirs in Pennsylvania: Preliminary Data” (USGS 2012) p. 4.

The NEXUS Gas Transmission, LLC prediction of an average concentration of radon of 37 pCi/L is more than nine (9) times levels of radon deemed relatively harmless by the U.S. Environmental Protection Agency.⁷

There is no acknowledgment of the presence of radon gas in any of the publicly-available documents for the Wadsworth PTIO. There is no analysis nor data as to whether the 6.24 tons of particulate matter anticipated to be emitted annually from the compressor station will contain particles of uranium, radium, thorium or other radioisotopes associated with the slow decay of uranium found throughout petroleum-bearing shale. There are no means of measurement, monitoring, or assessment of whether radioactive natural gas can safely be transported through the populous location in Medina County where the compressor will be situated.

OAC § 3745-15-07(A) prohibits as unlawful the “emission or escape into the open air from any source or sources whatsoever, of . . . fumes, gases, vapors, or any other substances or combinations of substances, in such manner or in such amounts as to endanger the health, safety or welfare of the public, or cause unreasonable injury or damage to property.” Given the many unknown and unexamined aspects of the radon and radioactive pollution that may be leaked from the Wadsworth Compressor Station, the Director of OEPA cannot fulfill his responsibility to protect health and prevent injury to plant, animal life and property, as required by OAC § 3745-15-02, unless he acts to deny the PTIO.

⁷The U.S. Environmental Protection Agency (EPA) threshold for remediation of radon in indoor air is 4 pCi/L. <http://www.epa.gov/radon/aboutus.html>.

K. Air Emissions Discharged from the Compressor Station Will Potentially Cause Negative Health Effects 2 to 5 Miles Downwind

Objectors' expert, Wilma Subra, further found as a result of her analysis of the Wadsworth station⁸ that:

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 maintennces, routine opertions, equipment leaks, startup and shutdown activities and pigging operations will hae the potential to negatively impact the health of individuals living, working and recreating within 2 to 5 miles of the compressor stations.

In her report, Ms. Subra provided a list of some 36 dangerous industrial chemicals that she predicted will be routinely discharged into the air by operations and miscues at the Wadsworth station. She further listed dozens of health maladies that have been experienced by populations in close proximity to similar compressor facilities. Ms. Subra concluded in her report that the Wadsworth compressor must be denied a PTIO because of potentially devastating public health effects:

The above listed chemicals and associated 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 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.

OAC § 3745-15-07(A) prohibits as unlawful the "emission or escape into the open air

⁸The full text of Ms. Subra's report is annexed hereto and incorporated herein by reference as though rewritten.

from any source or sources whatsoever, of . . . fumes, gases, vapors, or any other substances or combinations of substances, in such manner or in such amounts as to endanger the health, safety or welfare of the public, or cause unreasonable injury or damage to property.” Given the many unknown and unexamined aspects of the pollution that will constantly be venting or leaking from the Wadsworth Compressor Station, the Director of OEPA cannot fulfill his responsibility to protect health and prevent injury to plant, animal life and property, as required by OAC § 3745-15-02, unless he acts to deny the PTIO.

L. Objectors Reserve the Right to Amend Their Objections

The Objectors explicitly reserve the right to amend these Objections upon the discovery and disclosure of new information, as allowed by OAC § 3745-47-03(B)(1).

Respectfully,

February 15, 2016

Terry J. Lodge
316 N. Michigan St., Suite 520
Toledo, OH 43604-5627
(419) 255-7552
Fax (440) 965-0708
tjlodge50@yahoo.com
Counsel for Sustainable Medina County and
Individual Objectors