

March 27, 2018

The Honorable Andrew M. Cuomo
Governor of New York State
NYS State Capitol Building
Albany, New York 12224

Commissioner Basil Seggos
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233

Commissioner Howard A. Zucker
New York State Department of Health
Corning Tower
Empire State Plaza
Albany, New York 12237

Commissioner John Rhodes
New York State Public Service Commission
Empire State Plaza
Agency Building 3
Albany, NY 12223

Dear Governor Cuomo, Commissioner Seggos, Commissioner Zucker and Commissioner Rhodes,

This letter is in response to the NYS Department of Environmental Conservation (DEC) interest in public stakeholder input in the drafting of 6 NYCRR Part 203, Oil and Gas Sector Emissions, new regulations to reduce criteria pollutants and methane emissions from the oil and gas sector, and other regulations as applicable.

We, the undersigned organizations, strongly urge the inclusion of the following recommendations in the revision of State oil and gas regulations and for the NYS DEC to work with the NYS Department of Health (DOH) accordingly.

Current situation:

The people and environment of New York have been increasingly subjected to a build-out of natural gas infrastructure, including but not limited to pipelines and distribution networks, compressor stations, power plants, combustion heating systems, metering and regulation stations, and pigging stations.

Peer-reviewed scientific studies^{1 2} link exposure between air pollutants emitted from natural gas infrastructure facilities and neurological, cardiovascular and respiratory disease, cancer, birth defects,

¹ PSR/CHPNY Compendium 5th Edition (March 2018): http://concernedhealthny.org/wp-content/uploads/2018/03/Fracking_Science_Compendium_5FINAL.pdf

² PSE for Healthy Energy Repository for Oil and Gas Energy Research: <https://www.psehealthyenergy.org/our-work/shale-gas-research-library/>

and other adverse health impacts. Acute health impacts from these toxic exposures can cause burning eyes, headaches, breathing difficulty and nausea for nearby populations and can exacerbate health problems. Chronic health impacts can include certain types of cancer as well as damage to lungs, liver, kidneys, reproductive, nervous and cardiovascular systems.

The American Medical Association and the Medical Society of the State of New York acknowledge the hazards of natural gas infrastructure and associated adverse health impacts and passed resolutions in 2015 calling for Health Impact Assessments (HIAs).

The National Ambient Air Quality Standards (NAAQS) are based on average population risks across a large area over a long period of time but do not adequately address human toxicity for residents living in close proximity to natural gas infrastructure or where they are subject to episodic high exposures during events such as blowdowns.

Current protocols used for assessing compliance with ambient air quality standards do not adequately determine intensity, frequency or durations of actual human exposures to pollutants and mixtures of pollutants emitted from natural gas infrastructure, noting that periodic 24-hour average measures can underestimate actual exposures by an order of magnitude.

Gas infrastructure facilities can emit into the air annually hundreds of tons of pollutants including toxic chemicals and criteria pollutants, some of which are known carcinogens like benzene and formaldehyde, and can also be sources of radioactive contamination.³

People who live or work in close proximity to natural gas infrastructure facilities such as compressor stations are most at risk—particularly developing fetuses, children, the elderly, and those with cardiovascular, lung or respiratory problems and other vulnerable subpopulations, although under certain weather and terrain conditions, these pollutants can have a wider impact.

Developing fetuses and children are uniquely vulnerable to exposures as they receive proportionally greater doses of pollutants than adults and have immature organs and detoxification systems.⁴

Methane is an extremely potent greenhouse gas with a global warming potential that is 34 times that of carbon dioxide over a 100-year timeframe and 86 times that of carbon dioxide over a 20-year timeframe.

Methane is the primary ingredient of natural gas and leaks at every system stage, including extraction, processing, transmission, distribution, and end-use consumption.

The DEC regulations do not currently require Best Available Control Technology (BACT) or Lowest Achievable Emissions Rate (LAER) technology for facilities that are not designated under federal Title V requirements or are not located within non-attainment areas, although such requirements could substantially reduce hazardous air emissions.

³ Environmental Health Project Report, October 2017: Health Effects Associated with Stack Chemical Emissions from NYS Compressor Stations: 2008-2014: <http://www.environmentalhealthproject-ny.org/>

⁴ Reducing the staggering costs of environmental disease in children, estimated at \$76.6 billion in 2008, Trasande, L, et al, Health Affairs, May 2011: <https://www.ncbi.nlm.nih.gov/pubmed/21543421>

The DEC does not require the use of emission control technologies for all gas infrastructure facilities that would provide a floor of protection and could significantly reduce emissions, even when such technology has become standard practice within the industry or is readily available.

The DEC does not require continuous monitoring of pollutants or methane in real time for gas infrastructure facilities, even though the technology to do so is now readily available, nor does DEC require that such data be made available to public.

The DEC determines compliance with regulatory requirements and permit conditions through self-reporting by the industry without independent verification.

The DEC does not require rigorous inspection of gas infrastructure facilities to detect and eliminate natural gas leakage at gas infrastructure facilities.

The DEC lacks requirements for advanced notification of all planned blowdowns or other chemical releases, and for notification immediately following all unplanned blowdowns or other chemical releases in order for residents, public officials and first responders to take prompt emergency action.

The DEC exempts many emission sources that exist at gas infrastructure sites from regulation requirements and lacks adequate regulatory requirements for non-combustion emission sources.

The DEC does not require a sufficiently protective set of best management practices for gas infrastructure facilities to ensure protection of public health, safety, and the environment.

The DEC does not require the timely replacement or retrofit of technology and the update of site practices for existing gas infrastructure facilities to ensure appropriate consistency with requirements for new projects and adherence to current best management practices.

The U.S. Environmental Protection Agency hosts a voluntary Natural Gas Star program for partner companies to implement technologies and practices for the reduction of methane emissions and document results.

The DEC's State Environmental Quality Review (SEQR) process for gas infrastructure projects does not adequately address greenhouse gases and climate impacts.

The DEC has announced that it intends to rewrite or revise oil and gas regulations, which can be more stringent than federal requirements.

Recommendations:

In the interest of protecting public health, safety and the environment for all New Yorkers, we strongly urge the DEC to adopt the following regulatory requirements:

1. Installation and use of Lowest Achievable Emissions Rate (LAER) technology at all new and existing gas infrastructure facilities that emit pollutants into the environment, including those not designated under federal Title V requirements or not located within non-attainment areas;
2. Inclusion of non-combustion emission sources and emission sources currently considered "exempt" within the DEC regulatory framework;

3. Installation and use of specific emission control technology, identified through the federal National Gas Star Program and elsewhere, including but not limited to:
 - Dry seals on all centrifugal compressors
 - Automatic air to fuel ratio (AFR) controls
 - Oxidation catalysts and selective catalytic reduction (SCR) on exhaust stacks
 - Vapor recovery technology for reciprocating compressors, storage tanks, and other sources of fugitive or vented emissions
 - Static seals on reciprocating compressor rods
 - Dry low-NO_x burners (DLNB)
 - Low emission combustion (LEC)
 - SCONO_x or equivalent technology
 - Zero-emission dehydrators and similar closed-system technology to avoid venting of gas
 - Electric or compressed air starters
 - Electric or compressed air actuators instead of gas-operated pneumatic actuators
 - Post-combustion particulate matter controls such as electrostatic precipitators, baghouses, and scrubbers
 - Interior and exterior corrosion protection, such as plastic enamel sprays
 - Electric motor compressors where applicable;
4. Implementation of practices, identified through the National Gas Star program and elsewhere, to reduce natural gas leakage and blowdowns, including but not limited to maintaining compressors at pipeline pressure, redirecting blowdown gas to lower-pressure lines, cap testing, use of inert gases at pigging stations, and more aggressive maintenance of packing rings and compressor rods than required by existing regulations;
5. Installation and use of equipment at the stack, fence line, and within nearby communities to provide continuous monitoring of pollutants including toxic chemicals, criteria pollutants, ultra-fine particulate matter, individual VOCs, as well as methane in real time for all gas infrastructure facilities, with such data made readily available to the public, such as by online access;
6. Onsite verification of compliance with regulatory requirements and permit conditions by independent registered inspectors through scheduled and random visits;
7. Rigorous quarterly inspection by independent registered personnel with regular reports submitted to the DEC and made available to the public to detect and ensure timely elimination of natural gas leaks at gas infrastructure facilities using the comprehensive detection methods such as aerial and ground-level laser methane assessment, organic vapor analyzers (OVAs), toxic vapor analyzers (TVAs), sorbent tubes, SUMMA canisters, infrared cameras, as well as real-time monitoring with Fourier Transform Infrared (FTIR) spectroscopy and other remote sensing along pipelines;
8. 48-hour or greater advanced notification of all planned blowdowns, regardless of size, and other chemical releases; notification within 30 minutes of all unplanned blowdowns, regardless of size, and other chemical releases at all gas infrastructure facilities; and

suspension of planned blowdowns or other chemical releases when weather conditions would increase exposure to air pollutants;

9. Timely replacement or retrofit of technology and update of site practices for existing gas infrastructure facilities to ensure compliance with current regulatory requirements and best management practices;
10. Chain of custody records and tracking for all industrial waste removed from gas infrastructure facilities;
11. Strict enforcement of all best management practices and protocols for gas infrastructure facilities to ensure protection of public health, safety, and the environment.

Additionally, it is critical for the health and safety of New Yorkers that the DEC and the DOH take the following steps:

The DEC, in cooperation with the DOH, promulgate more stringent performance requirements, including but not limited to the regulated levels of criteria pollutants, to address deficiencies in NAAQS which fail to consider human toxicity in populations proximate to gas infrastructure facilities, and any other deficiencies affecting public health, safety, or environmental protection.

The DOH in cooperation with the DEC require and oversee a comprehensive, independent Health Impact Assessment (HIA) as outlined by the Centers for Disease Control and the National Academy of Sciences, incorporating the latest peer reviewed science, to be conducted by an independent public health entity and include cumulative short and long-term, direct and indirect impacts from all natural gas infrastructure components, emissions from operations including blowdowns, leaks, and spills, and a thorough analysis of the chemical emissions and radioactive contaminants, as well as their concentrations, persistence, and dispersion; and that a health registry should be established and maintained with all data available to the public.

The DEC develop State Environmental Quality Review (SEQR) guidance to ensure that state agencies adequately address all cumulative impacts including but not limited to greenhouse gases and climate change during environmental reviews for gas infrastructure projects.

Protecting public health, reducing harm caused by gas infrastructure, and tackling climate change which is now upon us requires strong, comprehensive, and immediate action. Our health and welfare depend on your full adoption of these recommendations.

Sincerely,

350 Brooklyn
Brooklyn, NY

350 NJ - Rockland
Nanuet, NY

350 CT
Milford, CT

Alliance for a Green Economy
Syracuse, NY

Aquashicola/Pohopoco Watershed
Conservancy
Kresgeville, PA

Berks Gas Truth
Kutztown, PA

Beyond Extreme Energy
Bloomfield, NJ

Blauvelt Dominican Sisters Social Justice
Committee
New Rochelle, NY

Buddhist Association of the United States
Carmel, NY

Cahaba Riverkeeper
Birmingham, AL

Catskill Mountainkeeper
Livingston Manor, NY

Citizens Environmental Coalition
Cuddebackville, NY

Clean Air Council
Philadelphia, PA

Climate Action Rhode Island
Providence, RI

ClimateMama
Ridgewood, NJ

Coalition Against the Rockaway Pipeline
New York, NY
Coalition to Protect New York
Elmira, NY

Collaborative Center for Justice
Hartford, CT

Common Ground Community Trust
Rio Rancho, NM

Community Advocates for Sustainable Energy
(CASE)
Canaan, NY

Compressor Free Franklin
Franklin, NY

Concerned Burlington Neighbors
Burlington, NY

Concerned Citizens of Allegany County Inc.
Angelica, NY

Concerned Families of Westchester
Hastings-on-Hudson, NY

Concerned Health Professionals of New York
Ithaca, NY

Concerned Residents of Oxford
Oxford, NY

Connie Hogarth Center for Social Action
Beacon, NY

Croton Climate Initiative
Croton on Hudson, NY

Delaware Riverkeeper Network
NY, PA, NJ, DE

Dominican Sisters of Hope
Ossining, NY

Dryden Resource Awareness Coalition
Dryden, NY

Earthworks
Willow, NY

Environmental Advocates of New York
Albany, NY

Environmental Justice Task Force
Buffalo, NY

Eye of the Eagle Productions
Berthoud, CO

Food & Water Watch
Brooklyn, NY

FrackbustersNY
Spencer, NY

Gas Free Seneca
Watkins Glen, NY

Gasland
Brooklyn, NY

Grassroots Against Another Salem Power
Plant (GASPP)
Salem, MA

Grassroots Environmental Education
Port Washington, NY

Green Education and Legal Fund
Poestenkill, NY

Guernsey County Citizens Support on Drilling
Issues
Columbus, OH

Healing & Protecting Our Land Together, A
Call To Prayer
Ossining, NY

Hudson River Sloop Clearwater, Inc.
Beacon, NY

Indian Point Safe Energy Coalition (IPSEC)
Cortlandt Manor, NY

Internet Works LLC
Simsbury, CT

Keep Yorktown Safe
Yorktown, NY

Lake Purdy Property Owners Association
Purdys, NY

Lancaster Against Pipelines
Pequea, PA

Middlefield Neighbors
Cooperstown, NY

Milford Doers/Residents of Crumhorn
Mountain
Maryland, NY

Mothers Out Front – Westchester River
Towns
Croton on Hudson, NY

Mothers Out Front - Tompkins County
Brooktondale, NY

Mountain Lakes Preservation Alliance
Buckhannon, WV

New York Climate Action Group
New York, NY

New York Interfaith Power & Light
Lincolndale, NY

No Fracked Gas in Massachusetts
Cummington, MA

North American Climate, Conservation and
Environment
Roosevelt, NY

Nuclear Age Peace Foundation
New York, NY

Nuclear Information and Resource Service
Takoma Park, MD

Occupy Bergen County
Teaneck, NJ

Ohio Valley Environmental Coalition (OVEC)
Huntington, WV

Otsego 2000
Cooperstown, NY

Otsego Neighbors
Fly Creek, NY

People of Albany United for Safe Energy
(PAUSE)
Albany, NY

People Not Pipelines
Sidney, NY

Pepacton Institute LLC
Croton on Hudson, NY

Physicians for Social Responsibility - New
York
White Lake, NY

Plymouth Friends for Clean Water
South Plymouth, NY

Promoting Health and Sustainable Energy
Nanuet, NY

Protect Orange County
Westtown, NY

Ramapough Mountain Indians Inc
Mahwah, NJ

RDC Social Justice Board
Hawthorn, NY

Religious Organizations Along the River
(ROAR)
Saugerties, NY

Resist Spectra
Peekskill, NY

Resist the Pipeline
Hyde Park, MA

Responsible Drilling Alliance
Williamsport, PA

Rhode Island Interfaith Power & Light
Riverside, RI

Riverkeeper
Ossining, NY

Rochester Pachamama Alliance
North Rose, NY

Rockland Sierra Club
Nyack, NY

Sacred River Healing
Tomkins Cove, NY

Safe Energy Rights Group (SEnRG)
Peekskill, NY

Sane Energy Project
New York, NY

SCNY Office of Peace, Justice and Integrity
of Creation
Bronx, NY

Sharon Springs Against Hydrofracking
Sharon Springs, NY

Siena House
Bronx, NY

Sierra Club Atlantic Chapter
Albany, NY

Sierra Club Connecticut Chapter
West Hartford, CT

Sierra Club Lower Hudson
Mt. Kisco, NY

Shaleshock CNY
Syracuse, NY

Solutions Grassroots Project
New Lisbon, NY

South Coast Neighbors United
East Freetown, MA

Stop the Algonquin Pipeline Expansion
(SAPE)
North Salem, NY

Stop NY Fracked Gas Pipeline
Canaan, NY

Sullivan Area Citizens for Responsible Energy
Development (SACRED)
Bethel, NY

Sullivan County Residents Against
Millennium (SCRAM)
Eldred, NY

SWPA Environmental Health Project
McMurray, PA

Toxics Action Center
Boston, MA

United for Action
New York, NY

Voices Rising
Katonah, NY

WESPAC Foundation
White Plains, NY

West Branch Conservation Association
New City, NY

cc: Deputy Commissioner Jared Snyder, NYSDEC
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Ona Papageorgiou, NYSDEC
John Barnes, NYSDEC
Michael Higgins, NYSDEC
George Sweikert, NYSDEC
Densford Escarpeta, NYSDEC