

## **Summary of Spectra Energy Algonquin Incremental Market (AIM) Project**

^ **Spectra Energy's Algonquin Incremental Market (AIM) gas pipeline expansion project** was approved by the Federal Energy Regulatory Commission (FERC) Docket #CP14-96. Construction began in October 2015 and is nearing completion and operation target date of November 2016. .

^ **AIM expansion project includes new 42" diameter high-pressure pipeline** crossing under Hudson River from Rockland, into Westchester to Yorktown; from Southeast in Putnam County and into Connecticut. Route continues into Rhode Island, and Massachusetts. Includes **expansion of 6 existing compressor stations, 24 existing metering and regulating stations**, and construction of 3 new metering and regulating stations.

^ **AIM pipeline was approved to be sited 105 feet from Indian Point nuclear power plant's critical safety structures** located in a significant seismic zone, next to homes, schools, houses of worship, through parkland, sensitive eco-systems and watersheds and in densely populated region.

^ **Safety experts warn that a pipeline rupture next to Indian Point could result in a scenario worse than the Fukushima nuclear disaster endangering 20 million people within the 50 mile radius in the New York tri-state area.** Drinking water sources for 11.3 million people in New York, New Jersey and Connecticut fall within that same radius including New York City water sources, which are located within 12.4 miles of Indian Point.

^ **Indian Point is the only nuclear power plant in the nation with gas pipelines on site. A comprehensive, independent and transparent risk assessment is imperative however was not conducted.**

^ **Natural gas is composed primarily of methane (97%), a greenhouse gas 86X more potent than carbon dioxide over a 20 year period according to International Panel on Climate Change (IPCC).**

^ **Gas pipelines and compressor stations** are subject to leakage, ruptures, fires and explosions. U.S. DOT Pipeline Hazardous Materials Safety Administration (PHMSA) data indicate **143 gas transmission line accidents in 2015. Spectra Energy has a significant history of safety issues and violations. Pipeline regulation and oversight are inadequate.**

^ **Municipalities may bear costs** involved with emergency training and special equipment including foam to extinguish fires, and first response to a pipeline, compressor or metering station incident.

^ **According to SEC 10K filing, Algonquin Gas Transmission LLC and Spectra Energy Partners may not have adequate resources or insurance coverage** to reimburse municipalities for costs borne by the municipality should an event occur that requires first responders' emergency response.

^ **Expansion of AIM pipeline infrastructure may interfere with the ability of property owners in or near the path of expanded AIM pipeline infrastructure to obtain or maintain a mortgage or property insurance or both.**

^ **Compressor stations (and other components of gas pipeline infrastructure and operations including but not limited to metering and regulating stations, pipelines, valves, fittings and pigging operations) emit hundreds of thousands of tons of hazardous air pollutants and greenhouse gases into the air PER YEAR** including nitrogen oxides, volatile organic compounds, particulate matter, carbon dioxide and methane gas. **Cumulative impacts** of all AIM project infrastructure components were not evaluated. **Impacts from the current Algonquin Pipeline infrastructure have not been fully evaluated** to establish a baseline for air and water quality.

^ **Combustion products from compressor stations and other gas pipeline infrastructure and operations combine with volatile organic compounds, in the presence of heat and sunlight to form ground-level ozone negatively impacting respiratory and cardiovascular systems.**

^ **Acute health impacts linked with air emissions from compressor stations and other gas pipeline infrastructure and operations:** Nosebleeds, visual impairment, respiratory impacts, bronchitis, severe headaches, decreased motor skills, irregular heartbeat, skin rashes, dizziness, allergic reactions, fatigue, joint and muscle pain, nausea, vomiting, confusion, depression, anxiety, sinus problems, skin, nose, eye, throat and lung irritation.

^ **Chronic health impacts linked with air emissions from compressor stations and other gas pipeline infrastructure and operations:** Damage to liver, kidneys, lungs, cardiovascular system, nervous system, changes in blood cells and blood clotting ability, mutagenic and neurological impacts, aplastic anemia, leukemia, reproductive damage and damage to developing fetus.

^ **Children, infants and fetuses are uniquely vulnerable to toxic exposures and are at greater risk.** Pound for pound, children take in more contaminants than adults and their organ systems are not fully developed making it more difficult for them to detoxify or eliminate toxins. **Other vulnerable populations at higher risk** include the elderly, those with respiratory and cardiovascular disease or immune compromised systems. **Health Impact Assessment (HIA) of AIM project was not conducted.**

^ **The current air emissions will be significantly increased by expansion of the Southeast and Stony Point compressor stations and other gas pipeline infrastructure and operations.** Tri-state region including Rockland, Westchester, and Putnam Counties, is already considered a **non-attainment zone** for air quality standards according to U.S. EPA and exceed limits for air pollutants including ground level ozone and particulate matter.

^ **AIM pipeline expansion project includes expansion of Stony Point Compressor Station to 50,000 horsepower and Southeast Compressor Station to 53,000 horsepower.** (Minisink Compressor Station in Orange County, NY is 12,260 hp)

^ **Planned and unplanned partial or full blowdowns of compressor stations and other gas pipeline infrastructure pose increased risk of exposure to hazardous air pollutants. Lack of public notification of blowdowns** impedes the public's ability to take prompt emergency measures.

^ **Potential exposure to Radon gas mixed in gas supply from Marcellus Shale** known for high levels of Radon. Radon mixes with and stays in the gas during transport via pipeline from wellheads to end users' gas appliances in homes, schools and businesses. **Radon is leading cause of lung cancer in non-smokers** and is odorless, tasteless, and colorless with no safe level of exposure. Lead-210, a neuro-toxicant classified as a probable carcinogen, and Polonium-210, a radioactive carcinogen, are radon decay products and solids known to attach to dust particles. Radon is absorbed by the lungs decaying further into Polonium and Lead damaging lung tissue.

^ **Potential exposure to radioactive contaminants in pipelines at Pipeline Inspection Gauge (PIG) launching staging areas** due to accumulation in pipeline of Radium precipitate, Radon and its decay products, Lead-210 and Polonium-210. PCBs, black powder, and anaerobic microbials also accumulate in pipeline infrastructure including at pigging stations where pipes are inspected or cleaned and in condensate tanks at compressor and metering and regulating stations as well as in venting operations throughout the pipeline. Radium-226 has a half-life of 1600 years.

^ **Pigging equipment becomes contaminated during pigging operations and can contaminate surrounding property.** Storm water runoff containing radioactive materials can migrate to nearby property and surface waters and seep into soil contaminating groundwater. Radioactive contaminants can be inhaled when they become airborne in dust particles.

**^ AIM pipeline expansion is far larger than capacity requested by distributors and part of multiple Algonquin pipeline expansions from which most of the gas will be transported to Canada for export overseas for higher prices. Spectra Energy's Atlantic Bridge and Access Northeast projects are the illegal segmentation of the environmental review of multiple Algonquin pipeline expansions in the same region. All of these Algonquin pipeline expansion projects must be evaluated together as one project not in segments, a clear violation of the National Environmental Policy Act (NEPA).**

**Statement from Irwin Redlener, MD, Director, National Center for Disaster Preparedness, Earth Institute and Professor of Health Policy and Management, Columbia University:** *"I am very concerned about the proposed plan to expand the Algonquin pipeline without a thorough, objective review of the environmental impact and potential public health risks that might be posed by this project. Of particular concern is the proximity of the project to a significant seismic zone and the Indian Point nuclear plant. This combination of factors presents a real risk of major disaster with profound, long term impact on the region. I truly hope that the time and resources will be made available to assess the safety of the project and reassure the public that every possible risk has been properly examined."*

#### **REFERENCES:**

- \* **Report by R. Kuprewicz (Accufacts) to Town of Cortlandt submitted to FERC, Nov 2014:** <https://sape2016.files.wordpress.com/2013/10/20141121-507829933631-2.pdf>
- \* **Letter to NYS Assemblymember Galef from R. Kuprewicz re: observations of NRC response:** <https://sape2016.files.wordpress.com/2014/05/signed-letter-to-assemblywoman-2.pdf>
- \* **Transcript of Proceedings of the Nuclear Regulatory Commission Petition Review Board, July 15, 2015 Presentation by P. Blanch and R. Kuprewicz:** <https://sape2016.files.wordpress.com/2014/05/transcript-7-15-2015-ml15216a047.pdf>
- \* **A Bridge to Nowhere: Methane Emissions and Greenhouse Gas Footprint of Natural Gas, Howarth, R.** Energy Science and Engineering, April 2014.
- \* **Movin' Out – Exporting US-Sourced LNG from the Maritimes,** RBN Energy, April 2014.
- \* **U.S. DOT Pipeline & Hazardous Materials Safety Administration (PHMSA):** <http://www.phmsa.dot.gov/>
- \* **Pipeline Safety Trust:** <http://pstrust.org/>
- \* **Feds Cite Spectra Energy for Multiple Natural Gas Pipeline Safety Violations,** Natural Gas Watch, July 2012: <http://www.naturalgaswatch.org/?p=1400>
- \* **Compendium of Scientific, Medical and Media Findings Demonstrating Risks and Harms of Gas Infrastructure, Concerned Health Professionals of NY and Physicians for Social Responsibility:** <http://concernedhealthny.org/compendium/>
- \* **Summary Report on Compressor Stations and Health Impacts,** February 2015, Southwest Pennsylvania Environmental Health Project: <http://concernedhealthny.org/wp-content/uploads/2015/05/HOD-Revisions-of-Resolution-159.pdf>
- \* **American Medical Association Resolution Protecting Public Health From Gas Infrastructure, 2015:** [www.ama.org](http://www.ama.org)
- \* **Medical Society of the State of New York Resolution on Health Effects Associated with Natural Gas Infrastructure, 2015:** <http://concernedhealthny.org/wp-content/uploads/2015/05/HOD-Revisions-of-Resolution-159.pdf>
- \* **Spectra Energy's 10K shareholder disclosure form for 2013 submitted to SEC**
- \* **Pipeline Put on Your Property May Be Mortgage Violation:** The Recorder, June 2014

[www.sape2016.org](http://www.sape2016.org)

9/16/16