



THE THREAT OF OIL & GAS POLLUTION

New York

Methane, the primary component of gas, is an invisible, odorless greenhouse gas that is a powerful driver of climate change — 87 times as powerful as carbon dioxide during the time it remains in the atmosphere.¹ The oil and gas sector is the largest source of methane in the U.S., leaking or intentionally venting large quantities of this dangerous pollutant into our air every day. In 2014, the oil and gas industry emitted over 9.8 million metric tons of methane, a number 34% higher than previous estimates.² The near-term climate impact of these emissions is equal to the pollution caused by more than 200 coal-fired power plants over 20 years.

Along with methane, oil and gas facilities often release other air pollutants that can harm our health, including formaldehyde, benzene, acetaldehyde, and ethyl benzene. These toxins can cause cancer, respiratory symptoms, anemia, brain damage and birth defects, eye irritation, and blood and neurological disorders.

THE THREAT RADIUS

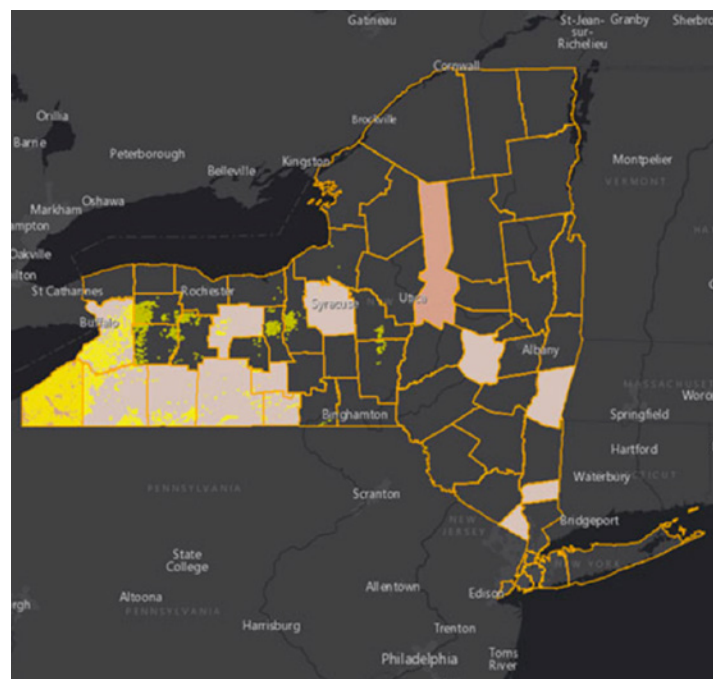
Peer-reviewed studies have documented higher levels of harmful air pollutants in and around areas with oil and gas production activity, and have shown that oil and gas facilities are the source of the excess pollution. Research indicates links between risks and/or prevalence of disease and proximity to facilities.³ The half mile “threat radius” is a very conservative estimate of the area within which higher levels of toxic pollution are seen, and the distance within which health impacts have most clearly been correlated with the presence of oil and gas facilities.⁴

There are currently 12.4 million people living within a half mile of one of 1,193,118 active oil and gas wells, compressors, and processors in the United States. In total, 184,578 square miles are covered by the threat radius⁵, which includes 11,543 schools and 639 medical facilities. Nationwide, 238 counties in 21 states face a

cancer risk that exceeds EPA’s one-in-a-million threshold level of concern.

OIL & GAS THREATENS NEW YORKERS

Over 200 thousand New Yorkers live within the half mile threat radius. The Appalachian Basin, covering roughly



MAP: OILANDGASTHREATMAP.COM/THREAT-MAP/NEW-YORK

half of New York and parts of other neighboring states was the fifth highest methane emitting oil- and gas-producing basin in 2014, emitting 3,455,036 metric tons of carbon dioxide equivalent from 76,800 wells.⁶

THE NUMBERS⁷

TOTAL POPULATION Living in the Threat Radius (within a half mile of a facility)	292,000
TOTAL NUMBER of Active Oil and Gas Wells, Compressors, and Processors	12,330
NUMBER OF COUNTIES that Exceed EPA's Cancer Risk Level of Concern	0
NUMBER OF SCHOOLS in the Threat Radius	317
NUMBER OF MEDICAL FACILITIES in the Threat Radius	8
SQUARE MILES COVERED by the Threat Radius	2,432

STRONG FEDERAL STANDARDS ARE KEY

On May 12, 2016, the Environmental Protection Agency (EPA) finalized the first-ever federal standards addressing new and modified sources of methane pollution from the oil and gas sector. These standards require, among other things, that companies regularly monitor for and repair leaks.⁸ The EPA expects this rule to cut 510,000 tons of methane pollution from oil and gas facilities and

ENDNOTES

- http://www.ipcc.ch/pdf/assessment-report/ar5/wg1/WGIAR5_Chapter08_FINAL.pdf
- <https://www3.epa.gov/climatechange/Downloads/ghgemissions/US-GHG-Inventory-2016-Main-Text.pdf>
- <http://ehp.niehs.nih.gov/1306722/>
- <http://oilandgasthreatmap.com/about/threat/>
- <http://oilandgasthreatmap.com/threat-map/>
- <https://cdn.americanprogress.org/wp-content/uploads/2016/06/20070044/MethanePollution-report.pdf>
- <http://oilandgasthreatmap.com/threat-map/new-york/>

equipment, the emissions equivalent of 11 coal-fired power plants or taking 8.5 million cars off the road every year.⁹ These standards will also significantly impact public health by curbing emissions of smog-forming volatile organic compounds (VOCs) and toxic air pollutants.

The 2016 standards were an important first step, but in 2018, nearly 90% of methane emissions will come from existing sources not covered by this rule.¹⁰ Strong methane standards for both new *and existing* sources are key to the Administration's ability to meet its Paris climate commitments to reduce greenhouse gas emissions 26-28% below 2005 levels by 2025.¹¹ Therefore, the EPA must develop strong and effective standards for existing sources as soon as possible, both to meet its legal commitments and to protect public health and welfare. **Without strong standards on existing sources, millions of people — including the 292 thousand in New York within the threat radius — will continue to be at risk.**

COMMON-SENSE SOLUTIONS ARE READILY AVAILABLE

Thankfully, common-sense solutions exist not only to clean-up and fix methane leaks, but to boost local economies as well. More than 500 locations in 46 states are already manufacturing the equipment and providing the services needed to reduce methane pollution, **including 5 locations in New York.** These businesses are helping to grow the local economy by creating highly skilled, good-paying jobs.¹²

- <https://www.epa.gov/newsreleases/epa-releases-first-ever-standards-cut-methane-emissions-oil-and-gas-sector>
- <https://www.epa.gov/newsreleases/epa-releases-first-ever-standards-cut-methane-emissions-oil-and-gas-sector>
- https://www.edf.org/sites/default/files/methane_cost_curve_report.pdf
- <https://www.whitehouse.gov/the-press-office/2015/03/31/fact-sheet-us-reports-its-2025-emissions-target-unfccc>
- https://www.edf.org/sites/default/files/us_methane_mitigation_industry_report.pdf

APPENDIX

NY Counties	Total Population	Threatened Population	Number of Facilities	Threatened Schools	Threatened Medical Facilities	Threatened Square Miles	Other Risks
Erie County	919,040	136,443	1,514	96	2	437.84	
Chautauqua County	134,905	83,076	4,297	92	4	926.57	
Cattaraugus County	80,317	17,363	2,676	23	1	301.36	
Genesee County	60,079	14,540	536	16	0	147.48	
Wyoming County	42,155	7,715	337	12	0	125.56	
Cayuga County	80,026	6,228	298	19	1	58.31	
Allegany County	48,946	5,605	1,551	16	0	116.33	
Steuben County	98,990	4,008	411	10	0	65.34	
Livingston County	65,393	3,685	141	4	0	58.92	
Seneca County	35,251	3,363	220	14	0	60.22	
Chemung County	88,830	2,787	44	0	0	31.99	
Ontario County	107,931	2,122	51	5	0	22.92	
Onondaga County	467,026	1,251	1	0	0	0.79	
Yates County	25,348	987	17	5	0	9.26	
Chenango County	50,477	736	45	2	0	20.69	
Niagara County	216,469	703	1	1	0	0.79	
Madison County	73,442	700	55	0	0	19.11	
Schuyler County	18,343	493	110	1	0	14.40	
Tioga County	51,125	351	13	0	0	6.53	
Oswego County	122,109	135	4	1	0	2.64	
Wayne County	93,772	109	4	0	0	2.84	
Cortland County	49,336	40	2	0	0	0.88	
Oneida County	234,878	22	2	0	0	1.47	
Albany County	304,204	0	0	0	0	0.00	
Bronx County	1,385,108	0	0	0	0	0.00	
Broome County	200,600	0	0	0	0	0.00	
Clinton County	82,128	0	0	0	0	0.00	
Columbia County	63,096	0	0	0	0	0.00	
Delaware County	47,980	0	0	0	0	0.00	
Dutchess County	297,488	0	0	0	0	0.00	
Essex County	39,370	0	0	0	0	0.00	
Franklin County	51,599	0	0	0	0	0.00	
Fulton County	55,531	0	0	0	0	0.00	
Greene County	49,221	0	0	0	0	0.00	
Hamilton County	4,836	0	0	0	0	0.00	
Herkimer County	64,519	0	0	0	0	0.00	
Jefferson County	116,229	0	0	0	0	0.00	
Kings County	2,504,700	0	0	0	0	0.00	
Lewis County	27,087	0	0	0	0	0.00	
Monroe County	744,344	0	0	0	0	0.01	
Montgomery County	50,219	0	0	0	0	0.00	
Nassau County	1,339,532	0	0	0	0	0.00	
New York County	1,585,873	0	0	0	0	0.00	
Orange County	372,813	0	0	0	0	0.00	
Orleans County	42,883	0	0	0	0	0.00	
Otsego County	62,259	0	0	0	0	0.00	
Putnam County	99,710	0	0	0	0	0.00	
Queens County	2,230,722	0	0	0	0	0.00	

APPENDIX, CONT.

NY Counties	Total Population	Threatened Population	Number of Facilities	Threatened Schools	Threatened Medical Facilities	Threatened Square Miles	Other Risks
Rensselaer County	159,429	0	0	0	0	0.00	
Richmond County	468,730	0	0	0	0	0.00	
Rockland County	311,687	0	0	0	0	0.00	
St. Lawrence County	111,944	0	0	0	0	0.00	
Saratoga County	219,607	0	0	0	0	0.00	
Schenectady County	154,727	0	0	0	0	0.00	
Schoharie County	32,749	0	0	0	0	0.00	
Suffolk County	1,493,350	0	0	0	0	0.00	
Sullivan County	77,547	0	0	0	0	0.00	
Tompkins County	101,564	0	0	0	0	0.00	
Ulster County	182,493	0	0	0	0	0.00	
Warren County	65,707	0	0	0	0	0.00	
Washington County	63,216	0	0	0	0	0.00	
Westchester County	949,113	0	0	0	0	0.00	