



**RIVERKEEPER.**

**Testimony of:  
Misti Duvall, Staff Attorney  
Riverkeeper**

**Before the New York City Council Committee on Environmental Protection**

**In Support of Introduction 446-2014 Relating to Natural Gas Waste and Resolution  
791-2015 Relating to Hudson River PCBs**

**February 22, 2016**

Good afternoon, Council Members, and thank you for the opportunity to speak about these important issues. My name is Misti Duvall, and I am a Staff Attorney with Riverkeeper, a member-supported watchdog organization dedicated to defending the Hudson River and its tributaries and protecting the drinking water supply of nine million New York City and Hudson Valley residents.

Riverkeeper strongly supports Introduction 446-2014, which would prohibit the discharge, disposal, sale, or use of natural gas waste within New York City, and Resolution 791-2015, calling for additional remediation of polychlorinated biphenyls (PCBs) in the Hudson River. I would like to thank Chairman Constantinides for holding this hearing today and for introducing Res. 791, and Council Members Levin and Johnson for their leadership on Int. No. 446.

**Introduction 446-2014 Relating to Natural Gas Waste**

While Riverkeeper shares the concerns of many of our colleagues here today who will testify about the importation of oil and natural gas waste from Pennsylvania and its disposal at landfills and wastewater treatment facilities, my testimony will focus on the use of oil and natural gas waste on roads for de-icing, dust control, and road stabilization, and two amendments we strongly suggest to strengthen the bill. I have attached to my testimony specific suggested amendments to Int. No. 446, recent information regarding the approval of oil and natural gas waste for road spreading, and

Riverkeeper factsheets addressing the use of oil and natural gas waste for road spreading and county bans in New York State.

The process of extracting oil and natural gas using hydraulic fracturing (fracking) produces large amounts of liquid and solid waste. This is true of high-volume hydraulic fracturing (HVHF) – which is banned in New York State – and conventional, low-volume fracking that continues in western New York. Fracking wastewater includes flowback fluid, which is fluid that returns to the surface soon after a well is drilled and fracked, and production brine, which is wastewater that flows to the surface during well production. Waste generated through the extraction of oil or natural gas – including production brine – can contain a number of pollutants, such as chemicals, metals, excess salts, and carcinogens like benzene and naturally-occurring radioactive materials. Due to a loophole in state law, oil and gas industry waste is exempt from hazardous waste requirements, meaning that – no matter what it contains – this waste is not classified as hazardous.

The New York State Department of Environmental Conservation (DEC) currently allows the use of production brine from conventional, low-volume oil and natural gas wells and gas storage facilities to be spread on roads for de-icing, dust control, and road stabilization. Riverkeeper obtained records from DEC regarding this practice, and found that, between 2011 and 2014, the use of this waste was approved in portions of forty-one municipalities in nine western New York counties. The New York State Department of Transportation was also granted permission to use this waste in portions of ten counties. In all, the use of oil and/or gas waste on roads has been approved in portions of at least fifteen New York counties.

Riverkeeper also received associated test results that showed excessive levels of chloride (salts) in brine from both natural gas production wells and gas storage facilities. Sample results for brine from gas storage facilities revealed the presence of benzene, a carcinogen, and toluene, which has been linked to nervous system, kidney, and liver problems. The results from oil production wells also indicated the presence of benzene and toluene.

All anyone wishing to use this waste material for road spreading has to do is apply to DEC for permission, also called a Beneficial Use Determination (BUD). Our review of BUD documents and DEC regulations and guidance raised a number of concerns, including the lack of required testing for naturally occurring radioactive materials, absence of publicly available numerical testing criteria, and the fact that approvals authorize multiple applications of oil or natural gas brine per roadway, yet do not appear to have an expiration date.

Despite these concerns, DEC continues to allow the use oil and natural gas brine on roads. According to a list of BUDs compiled by the agency in January 2016, DEC has

currently authorized sixty-six BUDs for the use of oil or natural gas waste for road de-icing, dust control, and/or stabilization.

By enacting Int. No. 446, New York City will join numerous communities across the state with similar bans. At least fifteen counties have prohibited the use of oil and/or natural gas waste for road spreading, disposal at landfills, and/or acceptance at wastewater treatment facilities. Counties with bans similar to Int. No. 446 include Albany, Rockland, Putnam, Westchester, Orange, Ulster, Oneida, Tompkins, Nassau, Suffolk, Erie, Onondaga, Schoharie, Clinton, and Cayuga. These measures have passed with broad, bi-partisan support.

In order to ensure that Int. No. 446 is as strong as possible and protects the environment and public health of New Yorkers, Riverkeeper strongly urges the Environmental Protection Committee to make two critical amendments.

First, the definition of waste should not be limited to waste from natural gas extraction activities. It should include all relevant forms of oil and natural gas waste, including waste from oil production wells and gas storage facilities. As I discussed earlier, the test results that Riverkeeper received from DEC showed the presence of benzene and toluene in brine from oil production wells and gas storage facilities. New York City's ban should include all forms of oil and gas brine that can be used on roads, and should be amended to include brine from oil production wells and gas storage in addition to brine from natural gas production wells.

Second, the bill should be amended to include a penalty provision that increases the penalty for non-compliance to at least \$25,000. As drafted, it appears that only a \$100 fine would apply per violation, which is less than the fine for failing to pick up after your dog. A higher penalty is in line with other county bans in New York State: at least eleven counties with similar legislation have included penalty provisions that provide for a fine up to \$25,000 per violation.

Riverkeeper strongly supports Int. No. 446, and encourages New York City to join a growing number of communities across New York State and ensure that this toxic waste is never used on City roads or allowed to pollute our environment.

### **Resolution 791-2015 Relating to Hudson River PCBs**

Between 1947 and 1977, General Electric Corporation (GE) dumped millions of pounds of toxic polychlorinated biphenyls (PCBs) into the Hudson River. The source of the PCB discharges was two GE capacitor manufacturing plants located in Fort Edward and Hudson Falls, New York, approximately 50 miles north of Albany. GE's PCBs are now found in sediment, water and wildlife throughout the Hudson River ecosystem as

far as New York City. And that will continue until they are cleaned up, as PCBs from sources upriver continue to flow south and contaminate New York Harbor.

PCBs are classified by the U.S. Environmental Protection Agency (EPA) as probable human carcinogens. When people eat fish contaminated with PCBs, they face greater threats from liver, kidney and nervous system disorders, and developmental and reproductive abnormalities. PCBs become more concentrated as they move up the food chain, so that they are at their highest levels in contaminated fish. The reality of PCB contamination in the Hudson not only decimates commercial fishing, it harms recreation fishing and risks the health of any – likely lower income – fishermen who eat contaminated fish. There are also significant concerns about the health impacts of breathing in PCBs that have volatilized – moved from the River into the air – which could affect millions of New Yorkers living and recreating near the Hudson.

More than thirty years ago, EPA declared a 200 mile stretch of the Hudson River – from Hudson Falls to New York City – a Superfund hazardous waste site. GE has spent the past several years removing contaminated sediment from the Hudson pursuant to an agreement with EPA and is now calling its remediation complete. EPA agreed, giving the company permission to begin dismantling a key piece of cleanup infrastructure late last year.

However, information from the Federal Trustees for the Hudson River – the U.S. Fish and Wildlife Service (FWS) and the National Oceanic and Atmospheric Administration (NOAA) – has made clear that the original cleanup plan was inadequate and additional remediation is needed. An analysis released by NOAA in 2015 found that concentrations of PCBs will be three to five times higher after the cleanup than EPA originally predicted and that some fish will remain dangerously contaminated for forty to fifty years longer than anticipated. FWS and NOAA concluded that “additional sediment removal of PCB-contaminated sediment in the Upper Hudson River is needed.” Otherwise, GE will be leaving behind PCB contamination hotspots that amount to “several Superfund-caliber sites.”

Riverkeeper and our partners in Campaign for a Cleaner Hudson have called on EPA to immediately begin a legally-mandated review of the cleanup, and to ensure that GE lives up to its responsibility to the Hudson River and the millions of New Yorkers who use and enjoy it. So have a coalition of New York State Senators and Assemblymembers, dozens of municipalities up and down the River, and thousands of New Yorkers.

We cannot afford to let GE and EPA declare victory and go home. GE is liable for restoring the health of the Hudson River and the economic vitality of its communities. Riverkeeper strongly supports Res. 791, and urges New York City to add

its voice to a growing chorus of New Yorkers who are demanding that GE finish the job and clean up the Hudson River.

Thank you for the opportunity to speak here today. Please do not hesitate to contact me if you have any questions or if I can provide further information.

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# The New York City Council

City Hall  
New York, NY 10007

## Legislation Text

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**File #:** Int 0446-2014, **Version:** \*

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Int. No. 446

By Council Members Levin, Johnson, Arroyo, Barron, Chin, Mendez and Richards

A Local Law to amend the administrative code of the city of New York, in relation to banning the discharge, disposal, sale or use within the city of New York of any wastewater or natural gas waste produced from the process of hydraulic fracturing.

Be it enacted by the Council as follows:

Section 1. Legislative findings and intent. The Council finds that hydraulic fracturing produces millions of gallons of wastewater that is often laced with highly corrosive salts, carcinogens like benzene and radioactive elements like radium, all of which can occur naturally thousands of feet underground, and that other carcinogenic materials are often added to the wastewater including the chemicals used in the hydraulic fracturing process.

The Council further finds that there are 14 wastewater treatment plants, owned and operated by New York City Department of Environmental Protection, and a number of privately owned wastewater treatment plans, operating within the City of New York. Because these facilities release effluent back into the surface water of the City of New York, it is important that such effluent be free from any harmful contaminants.

The Council also finds that the wastewater and other waste products produced from the hydraulic fracturing method of oil and natural gas extraction are dangerous and should be prevented from being used in New York City in any capacity including deicing and snow removal.

Therefore the Council finds that the wastewater and other oil and natural gas waste products produced by the hydraulic fracturing method of oil and natural gas extraction are dangerous and should be prevented from entering into the surface waters of the City of New York, and further finds that it is in the best interests of the City of New York to ban the discharge, disposal, sale, and use of hydraulic fracturing wastes within City of

New York.

§2. Subchapter 1 of chapter 3 of title 24 of the administrative code of the city of New York is amended by adding a new section 24-303.1 to read as follows:

§24-303.1 Protection of water supply; treatment of hydraulic fracturing wastewater prohibited. a.

Definitions. 1. As used in this section, “oil or natural gas waste” means any waste that is generated as a result of oil or natural gas extraction activities, which may consist of water, chemical additives, or naturally occurring radioactive materials (“NORMs”) and heavy metals. Oil or natural gas waste includes, but is not limited to, leachate from solid wastes associated with oil or natural gas extraction activities, any waste that is generated as a result of or in association with the underground storage of natural gas or liquefied petroleum gas, or any oil or natural gas waste byproduct.

2. As used in this section, “oil or natural gas extraction activities” means all geologic or geophysical activities related to the exploration for or extraction of oil or natural gas, including, but not limited to, core and rotary drilling and hydraulic fracturing.

3. As used in this section, “hydraulic fracturing” means the fracturing of underground rock formations, including shale and non-shale formations, by manmade fluid-driven techniques for the purpose of stimulating oil, natural gas, or other subsurface hydrocarbon production.

b. Prohibitions. 1. No person shall discharge or cause to be discharged any oil or natural gas waste to any surface water bodies located within the city of New York or to any wastewater treatment plant located within the city of New York.

2. No person shall dispose or cause to be disposed any oil or natural gas waste into any landfill within the city of New York. The department of environmental protection and the department of sanitation shall enforce this paragraph.

3. No person shall sell or offer for sale any oil or natural gas waste or oil or natural gas waste byproduct within the city of New York. The department of environmental protection and the department of consumer affairs shall enforce this paragraph.

4. No person shall apply or cause to be applied any oil or natural gas waste or oil or natural gas waste byproduct on any road or real property located within the city of New York. The department of environmental

protection and the department of transportation shall enforce this paragraph.

c. Contracting. All bids or contracts related to the purchase or acquisition of materials to construct or maintain a city road shall include a provision stating that no materials containing or manufactured from oil or natural gas waste shall be utilized in providing such a service.

d. Penalties. Any violation of section 24-303.1.b shall be an unclassified misdemeanor punishable by a fine not to exceed \$25,000 per violation and/or up to thirty days imprisonment. Each sale, application, and/or discharge of oil or natural gas waste shall constitute a separate and distinct violation.

§ 3. This local law shall take effect ninety days after its enactment.

LS # 853 and 855 SS

Jtb 8/14/14 3:09pm



New York State Department of Environmental Conservation  
Division of Materials Management, Bureau of Waste Reduction & Recycling  
625 Broadway, Albany, NY 12233-7253

Granted Beneficial Use Determinations  
Sorted by Waste Type

BUD No.	Facility Name	City	State	Waste Types	Beneficial Use
453-4-01	Lafarge Building Materials, Inc.	Ravena	NY	Abrasives	Cement (Iron Source)
517-9-32	Solid Surface Acrylics, Inc.	North Tonawanda	NY	Abrasives (Glass Bead Dust)	Filler (Table Tops)
333-0-00	US Technology Corporation	Canton	OH	Abrasives (Plastic)	Marble Products (Cultured)
427-0-00	Composite Leasing Corp.	Minocqua	WI	Abrasives (Plastic)	Resin Substitute (Acrylic)
037-6-45	St. Lawrence Seaway Development Corp.	Massena	NY	Abrasives (Sandblast)	Aggregate (Concrete)
219-6-45	St. Lawrence Seaway Development Corp.	Massena	NY	Abrasives (Sandblast)	Aggregate (Concrete)
334-6-45	Northeastern Industrial Maintenance, Inc.	Waddington	NY	Abrasives (Sandblast)	Base (sub)
739-4-20	St. Lawrence Cement Co., LLC	Catskill	NY	Abrasives (Sandblast)	Cement (Iron Substitute)
728-6-22	Sunbelt Industries	Little Falls	NY	Abrasives (Sandblast-Alumina)	Sandblasting Media
375-8-37	Innovative Municipal Products, Inc. (IM U.S.)	Ava	NY	Alcohol Distillate (Ethyl)	De-icer
195-4-20	St. Lawrence Cement Co., LLC	Catskill	NY	Alumina Sand	Cement
243-4-00	ACI Industries, Ltd., LP	Delaware	OH	Alumina Sand	Cement (Red Shale Substitute)
456-4-01	Lafarge Building Materials, Inc.	Ravena	NY	Alumina Tri-Nitrate Dust	Cement
392-9-07	Dunkirk International Glass & Ceramics	New York	NY	Alumina/Silica/Lime/Ash	Glass (Aluma) Manufacture
189-4-20	Lehigh Cement Company	Catskill	NY	Alumino-Silica Clay (Bauxite)	Cement (Red Shale Substitute)
587-0-00	Lafarge Building Materials, Inc.	Ravena	NY	Alumino-Silica Clay (Bauxite)	Cement (Alumina Source)
1141-0-00	Ames Goldsmith Corporation	South Glens Falls	NY	Ammonium Nitrate Solution	Fertilizer
968-9-32	Niagara Generation, LLC	Niagara Falls	NY	Ash (Coal & Alternative Fuel)	Flowable Fill
339-3-36	MKA Realty Corp. c/o Geovation Inc.	Florida	NY	Ash (Coal)	Base (sub)
472-3-14	Town of Stanford	Stanfordville	NY	Ash (Coal)	Base (sub)
539-7-55	Cornell University Central Heating Plant	Ithaca	NY	Ash (Coal)	Traction Agent
676-6-45	Black River Power, LLC	Syracuse	NY	Ash (Coal)	Bulking Agent (Waste Sludge)
745-9-61	Hillcrest Industries	Attica	NY	Ash (Coal)	Abrasive, Blasting Media
749-3-36	Dynegy Northeast Generation	Newburgh	NY	Ash (Coal)	Cinder Ballast
240-7-09	AES Jennison, LLC	Bainbridge	NY	Ash (Coal/CTS/Tire/Wood)	Cement
641-8-51	AES Hickling, LLC	Corning	NY	Ash (Coal/CTS/Tire/Wood)	Cement
273-8-51	AES Hickling, LLC	Corning	NY	Ash (Coal/CTS/Tire/Wood-Bottom)	Traction Agent
642-7-09	AES Jennison, LLC	Bainbridge	NY	Ash (Coal/CTS/Tire/Wood-Bottom)	Traction Agent
489-9-15	NRG Huntley Operations, Inc.	Tonawanda	NY	Ash (Coal/CTS-Bottom)	Traction Agent, Asphalt, Shingles
488-9-15	NRG Huntley Operations, Inc.	Tonawanda	NY	Ash (Coal/CTS-Fly)	Aggregate, Gypsum, Calcium Chlor
578-9-07	Pohlman Materials Recovery Inc.	Lakeview	NY	Ash (Coal/Petro Coke-Fly)	Filler (Flowable Fill)
594-0-00	Pohlman Materials Recovery Inc.	Lakeview	NY	Ash (Coal/Petro Coke-Fly)	Filler (Concrete)
595-0-00	Pohlman Materials Recovery Inc.	Lakeview	NY	Ash (Coal/Petro Coke-Fly)	Filler (Aggregate)
596-0-00	Pohlman Materials Recovery Inc.	Lakeview	NY	Ash (Coal/Petro Coke-Fly)	Surface Material (Barnyard Pad)
536-9-15	Protective Closures, Inc.	Buffalo	NY	Ash (Coal/Slag/Ballast)	Fill (Structural-Bldg. Foundation)
165-7-09	AES Jennison, LLC	Bainbridge	NY	Ash (Coal/Tire-Bottom)	Traction Agent
164-7-09	AES Jennison, LLC	Bainbridge	NY	Ash (Coal/Tire-Fly)	Cement
122-0-34	NRG Dunkirk Operations, Inc.	Dunkirk	NY	Ash (Coal-Bottom)	Traction Agent, Fill (Structural)
212-7-34	NRG Dunkirk Operations, Inc.	Dunkirk	NY	Ash (Coal-Bottom)	Asphalt (Hot-Mix)
262-9-15	Valley Coal	Buffalo	NY	Ash (Coal-Bottom)	Fill (Structural), Traction Agent
286-9-32	AES Somerset, LLC	Barker	NY	Ash (Coal-Bottom)	Base (sub)
372-7-34	Trigen-Syracuse Energy Corporation	Syracuse	NY	Ash (Coal-Bottom)	Base (Road, Sub-Fill)
398-3-14	Harlem Valley Psy. Ctr c/oCDPC, Unit Q	Albany	NY	Ash (Coal-Bottom)	Base (sub)
429-8-28	Eastman Kodak Company	Rochester	NY	Ash (Coal-Bottom)	Surface Material (Trail)
443-7-38	Clark Concrete Company, Inc.	Syracuse	NY	Ash (Coal-Bottom)	Traction Agent
449-4-01	Town of Guilderland	Guilderland	NY	Ash (Coal-Bottom)	Traction Agent
450-8-26	Joseph A. Errigo	Conesus	NY	Ash (Coal-Bottom)	Traction Agent
482-8-28	Eastman Kodak Company	Rochester	NY	Ash (Coal-Bottom)	Road Construction
506-9-15	Gernatt Gravel Products, Inc.	Collins	NY	Ash (Coal-Bottom)	Concrete (Lt), Traction Agent
525-8-28	New York State Canal Corporation	Albany	NY	Ash (Coal-Bottom)	Sealant (Cofferdams)
597-0-00	NRG Huntley Operations, Inc.	Tonawanda	NY	Ash (Coal-Bottom)	Traction Agent, Fill (Structural)
598-0-00	NRG Huntley Operations, Inc.	Tonawanda	NY	Ash (Coal-Bottom)	Asphalt (Hot-Mix)
645-7-55	AES Cayuga, LLC	Lansing	NY	Ash (Coal-Bottom)	Surface Material (Running Track)
918-9-32	AES Somerset, LLC	Barker	NY	Ash (Coal-Bottom)	Fill
593-6-45	Black River Power, LLC	Syracuse	NY	Ash (Coal-FBC)	Aggregate (Road Surface)
023-4-20	Lehigh Cement Company	Catskill	NY	Ash (Coal-Fly)	Cement (Shale Substitute)
035-7-12	Pozzolanic International	Ithaca	NY	Ash (Coal-Fly)	Filler (Concrete)
048-4-20	St. Lawrence Cement Co., LLC	Catskill	NY	Ash (Coal-Fly)	Cement (Shale Substitute)
076-7-34	NRG Dunkirk Operations, Inc.	Dunkirk	NY	Ash (Coal-Fly)	Filler (Flowable Fill)

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Granted Beneficial Use Determinations  
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BUD No.	Facility Name	City	State	Waste Types	Beneficial Use
096-4-20	St. Lawrence Cement Co., LLC	Catskill	NY	Ash (Coal-Fly)	Cement (Shale Substitute)
102-4-20	St. Lawrence Cement Co., LLC	Catskill	NY	Ash (Coal-Fly)	Cement (Shale Substitute)
113-6-23	Drum Ready Mix Company	Amsterdam	NY	Ash (Coal-Fly)	Filler (Concrete)
146-4-20	St. Lawrence Cement Co., LLC	Catskill	NY	Ash (Coal-Fly)	Cement (Shale Substitute)
171-3-56	Eastern Stabilized Products	Waldwick	NJ	Ash (Coal-Fly)	Stabilizing Agent
182-4-29	Cranesville Block Company, Inc.	Amsterdam	NY	Ash (Coal-Fly)	Filler (Concrete)
208-4-29	Cranesville Block Company, Inc.	Amsterdam	NY	Ash (Coal-Fly)	Filler (Concrete)
209-9-07	Jamestown Board of Public Utilities	Jamestown	NY	Ash (Coal-Fly)	Filler (Concrete)
265-4-20	Lehigh Cement Company	Catskill	NY	Ash (Coal-Fly)	Cement (Shale Substitute)
284-9-15	NRG Energy, Inc.	Minneapolis	MN	Ash (Coal-Fly)	Fill (Structural)
303-9-32	NRG Huntley Operations, Inc.	Tonawanda	NY	Ash (Coal-Fly)	Fill
423-3-36	Ecomat, Inc.	Poughkeepsie	NY	Ash (Coal-Fly)	Filler (Lumber-Synthetic)
530-7-04	AES Westover, LLC	Johnson City	NY	Ash (Coal-Fly)	Filler (Flowable Fill)
542-7-04	AES Westover, LLC	Johnson City	NY	Ash (Coal-Fly)	Base (sub)
543-7-04	AES Westover, LLC	Johnson City	NY	Ash (Coal-Fly)	Landfill Cover (Posishell™)
599-0-00	NRG Huntley Operations, Inc.	Tonawanda	NY	Ash (Coal-Fly)	Filler (Flowable Fill)
632-4-48	Callanan Industries Incorporated	Albany	NY	Ash (Coal-Fly)	Cement (Additive)
635-9-15	NRG Huntley Operations, Inc.	Tonawanda	NY	Ash (Coal-Fly)	Absorbent
636-9-07	NRG Dunkirk Operations, Inc.	Dunkirk	NY	Ash (Coal-Fly)	Absorbent
900-8-08	United Environment & Energy, LLC	Horseheads	NY	Ash (Coal-Fly)	Fertilizer Research
944-7-09	AES Westover, LLC	Johnson City	NY	Ash (Coal-Fly)	Backfill (basement)
983-9-15	Forever Board	Buffalo	NY	Ash (Coal-Fly)	Filler
1008-8-08	United Environment & Energy, LLC	Horseheads	NY	Ash (Coal-Fly)	Bioasphalt Research
1066-9-15	Kaleida Health c/o HSE	Buffalo	NY	Ash (Coal-Fly)	Flowable Fill
272-1-52	Rolite, Inc., Ash Management	Wayne	PA	Ash (MSW)	Landfill Closure
341-3-14	Dutchess County Resource Recovery Agency	Poughkeepsie	NY	Ash (MSW)	Landfill Cover (Daily/Intermediate)
445-1-00	U.S. Environmental, Inc.	King of Prussia	PA	Ash (MSW)	Vitrified Product (Decorative Stone)
222-4-20	St. Lawrence Cement Co., LLC	Catskill	NY	Ash (Papermill Sludge)	Cement
384-6-25	Lyonsdale Energy Limited Partnership	Lyons Falls	NY	Ash (Unadulterated Wood)	Traction Agent
176-6-25	Lyonsdale Power Company LLC	Lyons Falls	NY	Ash (Wood)	Fertilizer
177-6-22	Union Tools Co., Inc.	Frankfurt	NY	Ash (Wood)	Fertilizer (Soil, Compost)
198-0-00	Generic BUD - Wood Ash	Unknown	NY	Ash (Wood)	Fertilizer
421-4-13	Norbord Industries, Inc.	Deposit	NY	Ash (Wood)	Land Application
583-5-16	International Paper Company, Ticonderoga Mill	Ticonderoga	NY	Ash (Wood)	Bulking, Stabilizing Agent
717-5-46	International Paper-Corinth	Corinth	NY	Ash (Wood)	WWTP sludge stabilizing agent
932-5-17	Boralex New York LP	Chateaugay	NY	Ash (Wood)	Aggregate
569-6-23	City of Watertown	Watertown	NY	Ash (WWTP Sludge)	Fill (Roads)
570-4-01	Albany County Sewer District	Albany	NY	Ash (WWTP Sludge)	Landfill Cover, Soil (Top)
933-1-30	Port Washington WPCD	Port Washington	NY	Ash (WWTP Sludge)	Fill
382-9-15	Natural Environmental, Inc.	Buffalo	NY	Asphalt Shingle	Base (road)
483-9-32	Modern Landfill, Inc.	Model City	NY	Asphalt Shingle	Landfill Base (Road-Parking)
484-4-01	King Road Materials, Inc.	Albany	NY	Asphalt Shingle	Asphalt (Hot-Mix) Pavement
516-9-32	Parker Bay Consultants, Inc.	Buffalo	NY	Asphalt Shingle	Base (Road, Sub)
970-9-15	Triad Recycle & Energy, Inc.	Tonawanda	NY	Asphalt Shingle	Asphalt (Hot-Mix)
1028-9-15	M&C Enterprise	Lockport	NY	Asphalt Shingle	Driveway Surfacing
1044-8-28	Lorric Development Corp of NY	Spencerport	NY	Asphalt Shingle	Driveway Surfacing
1070-0-00	Callanan Industries Incorporated	Albany	NY	Asphalt Shingle	Asphalt Pavement (Hot-Mix)
1108-4-42	Greenbush Renewables LLC	East Greenbush	NY	Asphalt Shingle	Feedstock (Asphalt-Hot-Mix)
1109-4-01	Shine Renewables	Colonie	NY	Asphalt Shingle	Feedstock (Asphalt-Hot-Mix)
145-0-41	Prolerized Schiabo Neu Co.	Jersey City	NJ	Auto Shredder Residue	Landfill Cover (Daily)
730-9-07	Hazard Evaluations, Inc.	Orchard Park	NY	Bauxite/alumiglass/ceramics	Fill
859-4-20	Lehigh Cement Company	Glens Falls	NY	Biosolids (Class A)	Fuel
1080-5-58	Maine Drilling & Blasting	Argyle	NY	Blasting Mats	Structural Berm
789-2-24	New York City Department of Sanitation	New York	NY	Brick (Refractory)	Fill
193-6-45	Aluminum Company of America (ALCOA)	Massena	NY	Brick (Refractory)/Cement	Base (Road), Fill
451-7-38	BBL Environmental Services, Inc.	Syracuse	NY	Brine (Calcium Chloride)	De-icer, Dust Control
1152-8-51	Town of Wayne B10-09	Wayne	NY	Brine (LPG Storage Cavern)	Dust Control
1153-7-12	Town of Virgil B11-09	Cortland	NY	Brine (LPG Storage Cavern)	Dust Control
1168-8-51	Town of Cohocton B27-11	Cohocton	NY	Brine (LPG Storage Cavern)	Road Stabilization, Dust Control

New York State Department of Environmental Conservation  
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625 Broadway, Albany, NY 12233-7253

Granted Beneficial Use Determinations  
Sorted by Waste Type

BUD No.	Facility Name	City	State	Waste Types	Beneficial Use
1169-8-51	Town of Howard B28-11	Avoca	NY	Brine (LPG Storage Cavern)	Road Stabilization, Dust Control
1170-7-54	Town of Berkshire B29-11	Berkshire	NY	Brine (LPG Storage Cavern)	Road Stabilization, Dust Control
1172-8-51	Town of Prattsburgh B31-11	Prattsburgh	NY	Brine (LPG Storage Cavern)	Road Stabilization, Dust Control
1175-7-54	Town of Newark Valley B34-11	Newark Valley	NY	Brine (LPG Storage Cavern)	Road Stabilization, Dust Control
1180-7-12	Cortland County B40-11	Cortland	NY	Brine (LPG Storage Cavern)	Deicing
1183-8-51	Town of Urbana B43-12	Hammondsport	NY	Brine (LPG Storage Cavern)	Road Stabilization, Dust Control
1184-8-51	Town of Pulteney B44-12	Pulteney	NY	Brine (LPG Storage Cavern)	Dust Control
1186-8-51	Town of Thurston B46-12	Cameron Mills	NY	Brine (LPG Storage Cavern)	Road Stabilization, Dust Control
1187-7-54	Town of Richford B47-12	Richford	NY	Brine (LPG Storage Cavern)	Road Stabilization, Dust Control
1190-8-51	Town of Bath B50-12	Bath	NY	Brine (LPG Storage Cavern)	Road Stabilization, Dust Control
1196-7-12	Cortland City DPW B56-12	Cortland	NY	Brine (LPG Storage Cavern)	Deicing
1211-7-09	Al-Kleen, LLC B14-09	Earlville	NY	Brine (LPG Storage Cavern)	Deicing, Dust Control
1148-8-51	Town of Wheeler B06-08	Bath	NY	Brine (Non-HVHF Gas/Oil Well)	Road Treatment
1149-7-04	NYS DOT-Binghamton B07-08	Binghamton	NY	Brine (Non-HVHF Gas/Oil Well)	Road Treatment
1150-7-34	NYS DOT-Syracuse B08-08	Syracuse	NY	Brine (Non-HVHF Gas/Oil Well)	Road Treatment
1151-7-04	Town of Binghamton B09-09	Binghamton	NY	Brine (Non-HVHF Gas/Oil Well)	Road Treatment
1154-9-07	Triple C Trucking B12-09	Portland	NY	Brine (Non-HVHF Gas/Oil Well)	Dust Control
1155-9-07	DLH Energy B13-09	Lakewood	NY	Brine (Non-HVHF Gas/Oil Well)	Dust Control
1156-9-07	Chautauqua County B15-09	Falconer	NY	Brine (Non-HVHF Gas/Oil Well)	Deicing
1157-9-07	St. George Enterprise B16-09	Fredonia	NY	Brine (Non-HVHF Gas/Oil Well)	Dust Control
1158-9-07	Village of Mayville B17-09	Mayville	NY	Brine (Non-HVHF Gas/Oil Well)	Deicing
1159-8-28	NYS DOT-Rochester B18-09	Rochester	NY	Brine (Non-HVHF Gas/Oil Well)	Deicing
1160-9-61	Town of Sheldon B19-10	Strykersville	NY	Brine (Non-HVHF Gas/Oil Well)	Deicing
1161-8-19	Genesee County B20-10	Batavia	NY	Brine (Non-HVHF Gas/Oil Well)	Deicing
1162-8-19	Town of Oakfield B21-10	Oakfield	NY	Brine (Non-HVHF Gas/Oil Well)	Deicing
1163-9-61	Town of Bennington B22-10	Attica	NY	Brine (Non-HVHF Gas/Oil Well)	Dust Control
1164-8-19	Town of Darien B23-10	Darien	NY	Brine (Non-HVHF Gas/Oil Well)	Deicing
1165-8-51	Town of Hornellsville B24-10	Hornell	NY	Brine (Non-HVHF Gas/Oil Well)	Dust Control
1166-8-19	A.D. Call & Sons B25-10	Stafford	NY	Brine (Non-HVHF Gas/Oil Well)	Dust Control
1167-8-51	Town of Rathbone B26-10	Addison	NY	Brine (Non-HVHF Gas/Oil Well)	Dust Control
1171-9-02	Town of Allen B30-11	Filmore	NY	Brine (Non-HVHF Gas/Oil Well)	Dust Control
1173--9-15	Fox Construction B32-11	North Collins	NY	Brine (Non-HVHF Gas/Oil Well)	Road Stabilization, Dust Control
1174-9-05	Dallas Energy/ Morris & Sons B33-11	Bradford	PA	Brine (Non-HVHF Gas/Oil Well)	Road Stabilization, Dust Control
1176-9-15	Kabel's Service B35-11	Eden	NY	Brine (Non-HVHF Gas/Oil Well)	Dust Control
1177-9-02	Town of Ward B36-11	Scio	NY	Brine (Non-HVHF Gas/Oil Well)	Road Stabilization, Dust Control
1178-9-07	Town of Gerry B37-11	Gerry	NY	Brine (Non-HVHF Gas/Oil Well)	Deicing
1179-9-15	NYS DOT-Buffalo B39-11	Buffalo	NY	Brine (Non-HVHF Gas/Oil Well)	Deicing
1181-9-02	Town of Almond B41-12	Almond	NY	Brine (Non-HVHF Gas/Oil Well)	Road Stabilization, Dust Control
1182-9-02	Town of Genesee B42-12	Little Genesee	NY	Brine (Non-HVHF Gas/Oil Well)	Road Stabilization, Dust Control
1185-9-02	Town of Bolivar B45-12	Bolivar	NY	Brine (Non-HVHF Gas/Oil Well)	Road Stabilization, Dust Control
1188-8-51	Town of Jasper B48-12	Jasper	NY	Brine (Non-HVHF Gas/Oil Well)	Road Stabilization, Dust Control
1189-8-51	Town of Cameron B49-12	Cameron	NY	Brine (Non-HVHF Gas/Oil Well)	Road Stabilization, Dust Control
1191-9-15	WNYS&GA B51-12	Alden	NY	Brine (Non-HVHF Gas/Oil Well)	Road Stabilization, Dust Control
1192-8-51	Town of West Union B52-12	Rexville	NY	Brine (Non-HVHF Gas/Oil Well)	Road Stabilization, Dust Control
1193-8-51	Town of Hartsville B53-12	Hornell	NY	Brine (Non-HVHF Gas/Oil Well)	Road Stabilization, Dust Control
1194-8-50	D.C. Rauscher, Inc. B54-12	Waterloo	NY	Brine (Non-HVHF Gas/Oil Well)	Road Stabilization, Dust Control
1195-9-07	Town of North Harmony B55-12	Stow	NY	Brine (Non-HVHF Gas/Oil Well)	Deicing
1197-9-07	Town of Dunkirk B57-12	Dunkirk	NY	Brine (Non-HVHF Gas/Oil Well)	Deicing
1198-9-07	Village of Lakewood B58-13	Lakewood	NY	Brine (Non-HVHF Gas/Oil Well)	Deicing, Dust Control
1199-9-07	Town of Ellery B59-13	Bemus Point	NY	Brine (Non-HVHF Gas/Oil Well)	Deicing
1200-9-07	Town of Sheridan B60-13	Sheridan	NY	Brine (Non-HVHF Gas/Oil Well)	Deicing
1201-9-07	Town of Clymer B61-13	Clymer	NY	Brine (Non-HVHF Gas/Oil Well)	Road Stabilization, Dust Control, Deicing
1202-9-02	Town of Wirt B62-13	Richburg	NY	Brine (Non-HVHF Gas/Oil Well)	Road Stabilization, Dust Control
1203-9-02	Town of Alma B63-13	Allentown	NY	Brine (Non-HVHF Gas/Oil Well)	Road Stabilization, Dust Control
1204-9-02	K.S. Laforge B64-13	Wellsville	NY	Brine (Non-HVHF Gas/Oil Well)	Road Stabilization, Dust Control
1205-9-07	Lee's Water Hauling B65-13	Mayville	NY	Brine (Non-HVHF Gas/Oil Well)	Road Stabilization, Dust Control
1206-9-07	Empire Energy B66-13	Mayville	NY	Brine (Non-HVHF Gas/Oil Well)	Road Stabilization, Dust Control
1207-8-19	Town of Alexander B67-13	Alexander	NY	Brine (Non-HVHF Gas/Oil Well)	Deicing
1208-9-07	Town of Harmony, Village of Panama B68-13	Ashville	NY	Brine (Non-HVHF Gas/Oil Well)	Deicing

New York State Department of Environmental Conservation  
Division of Materials Management, Bureau of Waste Reduction & Recycling  
625 Broadway, Albany, NY 12233-7253

Granted Beneficial Use Determinations  
Sorted by Waste Type

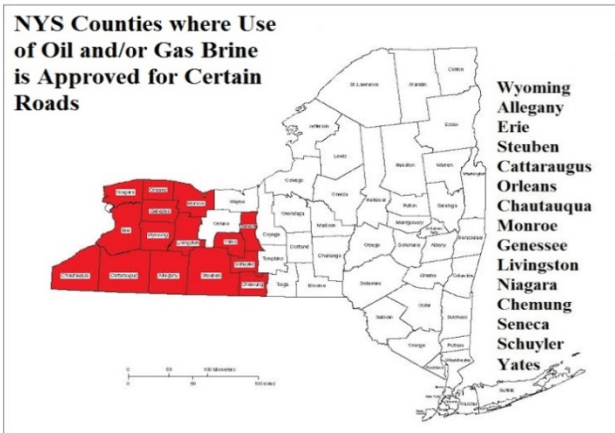
BUD No.	Facility Name	City	State	Waste Types	Beneficial Use
1209-9-05	Copper Ridge Oil B69-14	Olean	NY	Brine (Non-HVHF Gas/Oil Well)	Road Stabilization, Dust Control, Deicing
1210-8-08	NYS DOT-Hornell B38-11	Hornell	NY	Brine (Non-HVHF Gas/Oil Well)	Deicing
1223-9-02	Town of Alfred B70-15	Alfred	NY	Brine (Non-HVHF Gas/Oil Well)	Road Stabilization, Dust Control
1224-8-26	Robert Bourgoine B71-15	Dansville	NY	Brine (Non-HVHF Gas/Oil Well)	Road Stabilization, Dust Control
309-3-03	Gun Hill Trucking, Ltd	Bronx	NY	C&D	Landfill Cover, Fill
1045-6-23	ReEnergy Black River, LLC	Fort Drum	NY	C&D (Adulterated Wood)	Fuel
180-9-15	Hartford Paving Corporation	Cheektowaga	NY	C&D (Concrete)	Base (Sub)
197-0-00	New York State Department of Transportation	Albany	NY	C&D (Concrete)	Aggregate (Concrete)
271-9-15	Custom Topsoil, Inc.	Buffalo	NY	C&D (Concrete)	Aggregate
278-9-15	Swift River Associates, Inc.	Tonawanda	NY	C&D (Concrete)	Base (sub)
353-9-32	Carborundum Company	Niagara Falls	NY	C&D (Concrete)	Aggregate
254-0-00	Generic BUD - Recycled Concrete	Unknown	NY	C&D (Concrete/Masonry)	Aggregate
698-3-36	TKM Materials, Inc.	Montgomery	NY	C&D (gypsum wallboard)	Feedstock
1017-9-15	Triad Recycle & Energy, Inc.	Tonawanda	NY	C&D (gypsum wallboard)	Soil Amendment
1073-3-14	DAKA Plumbing & Heating Co.	Poughquag	NY	C&D (non-exempt)	Fill
892-6-23	NYS DOT Region 7	Watertown	NY	C&D (Recognizable Debris)	Fill
912-3-44	Mirant Lovett, LLC	Tomkins Cove	NY	C&D (Recognizable Debris)	Fill
914-2-31	New York City Department of Transportation	New York	NY	C&D (Recognizable Debris)	Fill
259-0-00	Generic BUD - Roofing Gravel	Unknown	NY	C&D (Roofing Gravel)	Fill, Roads
287-8-28	Xerox Corporation	Webster	NY	C&D (Roofing Gravel)	Base (Road)
290-3-44	CEK International	Setauket	NY	C&D (Screenings)	Landfill Cover (Daily)
336-3-24	Waste Management of New York	Brooklyn	NY	C&D (Screenings)	Landfill Cover (Daily/Interim)
656-2-41	Keyspan Energy	Hicksville	NY	C&D (Screenings)	Fill
948-3-44	Pebble Lane Associates	Stony Point	NY	C&D (Screenings)	Fill
989-3-56	Callanan Industries Incorporated	East Kingston	NY	C&D (Screenings)	Subbase
1075-3-56	Callanan Industries Incorporated	East Kingston	NY	C&D (Screenings)	Fill
904-1-52	New York State Department of Transportation	Hauppauge	NY	C&D (Street Sweepings)	Fill, Topsoil
1050-6-23	ReEnergy Black River, LLC	Fort Drum	NY	C&D (Unadulterated Wood)	Fuel
1085-3-44	MBC Contractors Inc.	Stony Kill	NY	C&D Debris	Fill
1006-3-44	Town of Haverstraw	Garnerville	NY	C&D Debris (non-exempt)	Fill
1010-9-32	Niagara Generation, LLC	Niagara Falls	NY	C&D Debris Wood	Fuel
1121-1-52	Crown Recycling Facility	Calverton	NY	C&D Debris Wood	Absorbent
849-3-60	L.C. Main, LLC	Bedford Hills	NY	C&D Material/Soil	Fill
344-3-40	COH Corporation, Inc.	Brewster	NY	Carbon (Activated)	Carbon (Reactivate)
510-3-60	Waste Conversion Technologies	White Plains	NY	Cardboard (Waxed)	Fuel Pellets
647-4-11	Will-Roc Farms c/o Earthworks	Claverack	NY	Cardboard (Waxed)	Bedding (Animal-Farm)
881-6-25	Lyonsdale Biomass, LLC	Lyons Falls	NY	Cardboard (Waxed)	Fuel
637-4-01	Lafarge Building Materials, Inc.	Ravena	NY	Catalyst (Alumina Silicate)	Cement (Alumina Source)
1047-9-32	Stollberg, Inc.	Niagara Falls	NY	Catalyst (Alumina Silicate)	Feedstock
149-4-20	St. Lawrence Cement Co., LLC	Catskill	NY	Catalyst (Alumina)	Cement (Alumina Source)
158-4-20	St. Lawrence Cement Co., LLC	Catskill	NY	Catalyst (Alumina)	Cement (Alumina Source)
223-4-20	St. Lawrence Cement Co., LLC	Catskill	NY	Catalyst (Alumina)	Cement (Alumina Source)
414-4-01	Lafarge Building Materials, Inc.	Ravena	NY	Catalyst (Alumina)	Cement (Alumina Source)
452-4-01	Lafarge Building Materials, Inc.	Ravena	NY	Catalyst (Alumina)	Cement (Alumina Source)
242-4-00	ACI Industries, Ltd., LP	Delaware	OH	Catalyst (Fe-Cr)	Cement (Iron Oxide Substitute)
241-4-00	ACI Industries, Ltd., LP	Delaware	OH	Catalyst (Ni-Mo)	Cement (Alumina Substitute)
605-4-20	St. Lawrence Cement Co., LLC	Catskill	NY	Catalyst (Regenerated Fluid)	Cement
972-0-00	Schlumberger	Horseheads	NY	Cement (Excess)	Flowable Fill
370-7-27	Gray-Syracuse, Inc. c/o PLS Engineering	Chittenango	NY	Ceramic Castings	Base (Road)
323-8-51	Corning, Inc.	Corning	NY	Ceramic Cullet	Fill (Structural)
742-9-05	Dal-Tile Corp.	Olean	NY	Ceramic Cullet	Aggregate Substitute
1040-7-55	Cornell University	Ithaca	NY	Char (Pyrolysis)	Soil Amendment
841-9-15	Zoladz Construction Co.	Alden	NY	China, off-spec	Base (sub)
009-9-15	Concrete Recycling Corp.	Niagara Falls	NY	Concrete	Aggregate (Concrete), Base (Sub)
091-9-32	Carbon/Graphite Group, Inc.	Niagara Falls	NY	Concrete	Fill (General Fill)
115-3-56	Fin-Pan	Albany	NY	Concrete	Base (Sub), Fill
894-3-60	General Motors Corp.	Sleepy Hollow	NY	Concrete	Fill
943-8-51	Corning, Inc.	Corning	NY	Concrete	Fill
032-9-32	Carbon/Graphite Group, Inc.	Niagara Falls	NY	Concrete	Fill (General Fill)

## Fracking Waste in NY: Road Spreading

New York allows the use of production brine from conventional, low-volume oil and gas wells and natural gas storage to be used on roads for de-icing, dust control, and road stabilization. Once applied, this waste can run off into adjoining property and ultimately could contaminate rivers, streams, and underground aquifers. Riverkeeper obtained information from the NYS Department of Environmental Conservation regarding approval of oil and gas brine for road spreading from 2011 to 2014.

### Brine Sources

The brine comes from conventional, low-volume oil and gas extraction and natural gas storage operations in New York State. Brine from conventional oil and gas extraction in Pennsylvania has also been sent to New York for use on roads.



### Road Spreading Quick Facts:

- Approved in portions of 41 municipalities in western New York.
- The NYS Department of Transportation also received approval to spread this brine in portions of 10 counties.
- Cumulatively, road-spreading of oil and/or gas brine has been approved in portions of at least 15 New York counties.
- Counties where road spreading has been approved on certain roads can be seen in the map to the left.

Riverkeeper also received associated test results that showed excessive levels of chloride (salts) in brine from both natural gas production and storage facilities. Sample results for brine from natural gas storage facilities revealed the presence of benzene, a carcinogen, and toluene, which has been linked to nervous system, kidney, and liver problems. The results from oil production wells also indicated the presence of benzene and toluene.

### Additional Concerns about the Approval Process

- Approvals authorize multiple applications of oil or gas brine per roadway, and do not appear to have an expiration date.
- The specific batch of oil or gas brine used for road spreading does not have to be tested. Rather, applicants need only submit testing results for representative samples, even though the level of contaminants may vary according to the specific well source.
- Testing for naturally-occurring radioactive materials is not required.
- There are no provisions for follow up monitoring or enforcement.
- New York State does not publish numerical testing criteria.

Learn more at [www.riverkeeper.org/fracking-waste-in-new-york](http://www.riverkeeper.org/fracking-waste-in-new-york)

## Fracking Waste in New York: County Bans

At least 15 New York counties have enacted fracking waste bans. These bans prohibit the use of oil and/or gas waste on roads, disposal at landfills, and/or discharge into wastewater treatment facilities.

### NYS Counties with Fracking Waste Bans

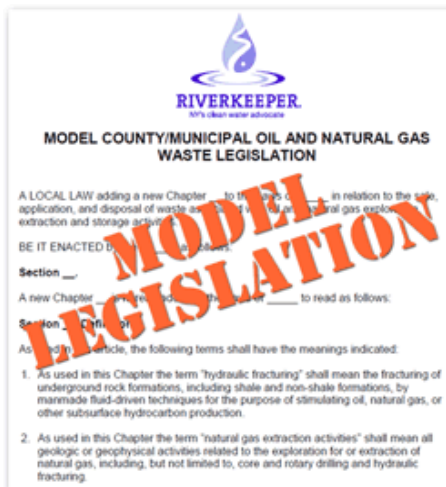
Albany	Rockland	Cayuga	Nassau
Putnam	Westchester	Schoharie	Erie
Orange	Ulster	Clinton	Suffolk
Oneida	Tompkins	Onondaga	

### Case Study: Clinton County

In August 2014, Clinton County passed one of the most rigorous fracking waste bans in New York State, based on Riverkeeper's model legislation.

The measure prohibits application of oil and gas waste on roads, its sale within county limits, disposal at landfills, and acceptance at wastewater treatment facilities.

The legislation also provides for a fine of up to \$25,000 per violation.



Riverkeeper model legislation is available to help New York localities craft their own bans.

For questions, please contact [info@riverkeeper.org](mailto:info@riverkeeper.org).

Learn more at [www.riverkeeper.org/fracking-waste-in-new-york](http://www.riverkeeper.org/fracking-waste-in-new-york)