

Local Law Filing

(Use this form to file a local law with the Secretary of State.)

Text of law should be given as amended. Do not include matter being eliminated and do not use italics or underlining to indicate new matter.

County City Town Village
(Select one:)

of Clinton

Local Law No. 1 of the Year 2014

A local law in relation to the sale, application and disposal of waste associated with oil and natural gas exploration, extraction and storage activities.

Be it enacted by the Clinton County Legislature of the
(Name of Legislative Body)

County City Town Village
(Select one:)

of Clinton as follows:

Section 1. Definitions.

As used in this article, the following terms shall have the meanings indicated:

1. As used in this Chapter the term "hydraulic fracturing" shall mean 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.
2. As used in this Chapter the term "natural gas extraction activities" shall mean all geologic or geophysical activities related to the exploration for or extraction of natural gas, including, but not limited to, core and rotary drilling and hydraulic fracturing.
3. As used in this Chapter the term "oil extraction activities" shall mean all geologic or geophysical activities related to the exploration for or extraction of oil, including, but not limited to, core and rotary drilling and hydraulic fracturing.
4. As used in this Chapter the term "natural gas waste" shall mean:
 - a. any liquid or solid waste or its constituents that is generated as a result of natural gas extraction activities, which may consist of water, brine, chemicals, naturally occurring radioactive materials, heavy metals or other contaminants;
 - b. leachate from solid wastes associated with natural gas extraction activities;
 - c. any waste that is generated as a result of or in association with the underground storage of natural gas;

- d. any waste that is generated as a result of or in association with liquefied petroleum gas well storage operations; and
 - e. any products or byproducts resulting from the treatment, processing or modification of any of the above wastes.
5. As used in this Chapter the term "oil waste" shall mean:
- a. any liquid or solid waste or its constituents that is generated as a result of oil extraction activities, which may consist of water, brine, chemicals, naturally occurring radioactive materials, heavy metals or other contaminants;
 - b. leachate from solid wastes associated with oil extraction activities; and
 - c. any products or byproducts resulting from the treatment, processing or modification of any of the above wastes.
6. As used in this Chapter the term "application" shall mean the physical act of placing or spreading natural gas waste or oil waste on any road or real property located within the County of Clinton.
7. As used in this Chapter the term County shall mean the County of Clinton.

Section 2. Prohibitions.

- 1. The application of natural gas waste or oil waste, whether or not such waste has received a Beneficial Use Determination pursuant to 6 NYCRR Part 360, on any road or real property located within the County for any purpose is prohibited.
- 2. The introduction of natural gas waste or oil waste into any wastewater treatment facility within or operated by County is prohibited.
- 3. The introduction of natural gas waste or oil waste into any solid waste management facility within or operated by the County is prohibited.
- 4. The sale, acquisition, storage, handling, treatment and/or processing of natural gas waste or oil waste within the County is prohibited.

Section 3. Provision to be included in bids and contracts related to the construction or maintenance of publicly owned and/or maintained roads or real property within the County.

- 1. All bids and contracts related to the purchase or acquisition of materials to be used to construct or maintain any publicly owned and/or maintained road or real property within the County shall include a provision stating that no materials containing natural gas waste or oil waste shall be provided to the County.
- 2. All bids and contracts related to the retention of services to construct or maintain any publicly owned and/or maintained road or real property within the County shall include a provision stating that no materials containing natural gas waste or oil waste shall be utilized in providing such a service.
- 3. The following statement, which shall be a sworn statement under penalty of perjury, shall be included in all bids related to the purchase or acquisition of materials to be used to construct or maintain any publicly owned and/or maintained road or real property within the County and all bids related to the retention of services to construct or maintain any publicly owned and/or maintained road or real property within the County:

"We, _____, hereby submit a bid for materials, equipment and/or labor for the (County/City/Town/Village) of _____. The bid is for bid documents titled _____. We

hereby certify under penalty of perjury that no natural gas waste or oil waste will be used by the undersigned bidder or any contractor, sub-contractor, agent or vendor agent in connection with the bid; nor will the undersigned bidder or any sub-contractor, agent or vendor agent thereof apply any natural gas waste or oil waste to any road or real property within the (County/City/Town/Village) of _____ as a result of the submittal of this bid if selected.”

Section 4. Duty of Employees to be familiar with this Chapter.

The (County Executive/Mayor/Town Supervisor) or, at the (County Executive’s/Mayor’s/Town Supervisor’s) option, any Department Head or Commissioner appointed by the (County Executive/Mayor/Town Supervisor) is authorized to develop policies to ensure (County/City/Town/Village) employees are familiar with the provisions of this Chapter and take such steps as are directed by the (County Executive/Mayor/Town Supervisor) or such Department Head or Commissioner to ensure a diligent effort by the (County/City/Town/Village) that materials supplied to the (County/City/Town/Village) or used on (County/City/Town/Village) roads or property comply with this law. This Section shall not excuse non-compliance by a contractor or vendor of the (County/City/Town/Village).

Section 5. Penalties.

This law shall apply to any and all actions occurring on or after the effective date of this law. Any violation of Section 4 of this Chapter 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 acceptance of natural gas waste or oil waste shall constitute a separate and distinct violation.

Section 6. Severability.

If any clause, sentence, paragraph, subdivision, section or part of this local law or the application thereof to any person, individual, corporation, firm, partnership, entity or circumstances shall be adjudged by any court of competent jurisdiction to be invalid or unconstitutional, such order or judgment shall not affect, impair, effect or invalidate the remainder thereof, but shall be confined in its operation to the clause, sentence, paragraph, subdivision, section or part of this law or in its application to the person, individual, corporation, firm, partnership, entity or circumstance directly involved in the controversy in which such order or judgment shall be rendered. To further this end, the provisions of this Chapter are hereby declared to be severable.

Section 7. Effective date.

This local law shall take effect sixty days after it is filed with the New York State Department of State.

Public Health Concerns Regarding Oil and Gas Drilling Waste for Local Governments

Hydraulic fracturing waste contains high levels of naturally occurring radioactive material brought to the surface by drilling as well as a toxic mixture of chemicals used in the fracking process. Bringing this waste to a region will:

- **Contaminate landfills with radioactive material** that could last *thousands* of years
- **Risk human exposure to radioactive material** from road spreading, truck accidents, leaks and spills
- **Risk safety of drinking water aquifers** from runoff, inadequate processing and containment tank corrosion, leaks and ruptures.
- **Risk of viability of wastewater treatment plants** due to processing of hazardous chemicals.
- **Risk contamination of food supply** from runoff, a contaminated water supply, airborne radioactive particles and disposal on farmland.

Hydraulic fracturing, also known as “hydrofracking” or “fracking,” is a technology used for oil and gas extraction from shale formations which involves the injection of millions of gallons of fresh water mixed with hundreds of chemicals and sand forced under high pressure into the well bores to crack open the shale. The fissures created by this fracturing are held open by the sand particles so that oil or gas can be released up the drill shaft.

Ten to forty percent of this highly toxic chemical mixture is returned to the surface with the oil or gas and additional naturally occurring contaminants, including volatile organic compounds (VOCs), heavy metals (e.g., arsenic, lead, chromium, mercury), brine eight times saltier than seawater, and radioactive elements, including radium-226, radium-228 and radon.

The extraction process produces two types of wastewater. **Flowback water** is the chemically treated fracking fluid that returns to the surface shortly after a fracking operation. **Produced water**, also known as “formation water” or “fracking brine” is the fluid that comes out of the shale formation along with the oil or gas. The process also produces tons of semi-solid waste in the form of drilling muds, sludge and cuttings.

The **Marcellus Shale** contains potentially high levels of naturally occurring radioactive materials (“NORM”).¹ Hence the gas from the region can contain high levels of **radon**, a proven carcinogen and the leading cause of lung cancer among non-smokers, and the produced water and semi-solids can contain high levels of **radium-226** and **radium-228**, both known carcinogens.² Radium-226 emits gamma radiation which can travel fairly long distances through air, raising risks for cancer in distant communities. It has a half-life of 1600 years, and is linked to anemia, cataracts, and bone, liver and breast cancers.

There is no safe disposal plan for the billions of gallons of wastewater and tons of sludge and cuttings currently being produced by oil and gas drilling operations:

- As a result of special exemptions given to the oil and gas industry, all oil and gas drilling waste is classified as “industrial waste” under federal and state laws, eliminating any tracking requirements for its handling,

¹Naturally occurring radioactive materials (NORM) are distributed through geologic formations and exist undisturbed in nature far below the surface. However, when NORM are disturbed and transported by human activity to human environments, they are considered “technologically enhanced naturally occurring radioactive materials” (TENORM) increasing potential of exposure that may result in concentration levels above background levels.

²According to a U.S. Geological Survey study, levels of total radium tested in the wastewater from eleven active New York vertical gas wells averaged over 8,400 pCi/L, exceeding the EPA’s maximum contaminant level for drinking water by more than 1,000 times (5 pCi/L for combined radium-226 and radium-228).

storage, treatment and disposal.³

- Truck accidents, spills, and leaks from unmarked vehicles can expose drivers, police, EMTs and the public to hazardous chemicals and radioactive materials.
- Public and private wastewater treatment facilities are not capable of processing the hazardous chemicals and radioactive materials produced by drilling activities.⁴
- Road spreading of fracking wastewater for dust control and de-icing on roads increases risk of exposure to drivers and pedestrians and contamination of nearby fields and surface waters. It also impacts groundwater, increasing risk for human and livestock inhalation and ingestion of highly radioactive materials, and carcinogenic and endocrine disrupting chemicals.
- Landfill disposal of radioactive sludge from oil and gas drilling operations could contaminate them for thousands of years. Storage in closed containment tanks could eventually result in permanent groundwater and surface water contamination.
- Presence of highly radioactive materials and other contaminants in local food products could cause irreparable damage and serious impacts to the economy.

When NORM is brought to the surface by drilling it is considered “technologically enhanced naturally occurring radioactive material” (“TENORM”). There are no established federal regulations that govern TENORM waste from oil and gas drilling. The potential of cumulative effects from simultaneous exposure to several radionuclides is unknown.

RECOMMENDATION:

Prohibit the procurement, acquisition, storage, handling, treatment, processing, application or disposal of all treated or untreated oil and gas drilling waste byproducts and their constituents for any purpose.

*This report prepared by Grassroots Environmental Education,
a science-based non-profit educational organization*

RESOURCES:

Consideration of Radiation in Hazardous Waste Produced from Horizontal Hydrofracking, Ivan White, Staff Scientist for the National Council on Radiation Protection: <http://www.grassrootsinfo.org/pdf/whitereport.pdf>

Impacts of Shale Gas Wastewater Disposal on Water Quality in Western Pennsylvania, R. Jackson, A. Vengosh, October 2013, Environmental Science and Technology: <http://pubs.acs.org/doi/abs/10.1021/es402165b>

Analysis of Reserve Pit Sludge from Unconventional Natural Gas Hydraulic Fracturing and Drilling Operations for the Presence of Technologically Enhanced Naturally Occurring Radioactive Material (TENORM), A. Rich, E. Crosby, New Solutions, Vol 23(1), 117-135, 2013: <http://www.ncbi.nlm.nih.gov/pubmed/23552651>

Radium Content of Oil-and Gas-Field Produced Waters in the Northern Appalachian Basin, Rowan, Engle, Kirby, Kraemer, USGS 2011, <http://pubs.osgs.gov>

³Exemptions for oil and gas drilling enacted by Congress as part of the Energy Act of 2005 include the Safe Drinking Water Act, the Clean Water Act, the Clean Air Act, the Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the National Environmental Policy Act (NEPA) and the Toxic Release Inventory of the Emergency Planning and Community Right-to-Know Act.

⁴High bromide levels in oil and gas drilling waste byproducts are highly corrosive to equipment and can react during water treatment to form brominated trihalomethanes linked to bladder and colon cancers and are associated with birth defects. Once added to drinking water supplies, trihalomethanes are difficult to eliminate.

(Complete the certification in the paragraph that applies to the filing of this local law and strike out that which is not applicable.)

1. (Final adoption by local legislative body only.)

I hereby certify that the Local Law annexed hereto, designated as Local Law No. 1 of 2014 of the (County) (City) (Town) (Village) of Clinton was duly passed by the Clinton County Legislature on July 23, 2014 in accordance with the applicable provisions of law.
(Name of Legislative Body)

2. (Passage by local legislative body with approval, no disapproval or repassage after disapproval by the Elective Chief Executive Officer*.)

I hereby certify that the Local Law annexed hereto, designated as Local Law No. ____ of 20__ of the (County) (City) (Town) (Village) of _____ was duly passed by the _____ on _____
(Name of Legislative Body)
20__, and was (approved) (not approved) (repassed after disapproval) by the _____
(Elective Chief Executive Officer*)
and was deemed duly adopted on _____, 20__ in accordance with the applicable provisions of law.

3. (Final adoption by referendum.)

I hereby certify that the Local Law annexed hereto, designated as Local Law No. ____ of 20__ of the (County) (City) (Town) (Village) of _____ was duly passed by the _____ on _____
(Name of Legislative Body)
20__, and was (approved) (not approved) (repassed after disapproval) by the _____
on _____, 20__.
(Elective Chief Executive Officer*)
Such Local Law was submitted to the people by reason of a (mandatory) (permissive) referendum, and received the affirmative vote of a majority of the qualified electors voting thereon at the (general) (special) (annual) election held on _____, 20__ in accordance with the applicable provisions of law.

4. (Subject to permissive referendum and final adoption because no valid petition was filed requesting referendum.)

I hereby certify that the Local Law annexed hereto, designated as Local Law No. ____ of 20__ of the (County) (City) (Town) (Village) of _____ was duly passed by the _____ on _____,
(Name of Legislative Body)
20__, and was (approved) (not approved) (repassed after disapproval) by the _____
(Elective Chief Executive Officer*)
on _____, 20__. Such law was subject to permissive referendum and no valid petition requesting such referendum was filed as of _____, 20__ in accordance with the applicable provisions of law.

5. (City local law concerning Charter revision proposed by petition.)

I hereby certify that the Local Law annexed hereto, designated as Local Law No. ____ of 20__ of the City of _____ having been submitted to referendum pursuant to the provisions of Section (36) (37) of the Municipal Home Rule Law, and having received the affirmative vote of a majority of the qualified electors of such city voting thereon at the (special) (general) election held on _____, 20__, became operative.

*Elective Chief Executive Officer means or includes the Chief Executive Officer of a county elected on a county-wide basis or, if there be none, the chairperson of the county legislative body, the mayor of a city or village, or the supervisor of a town where such officer is vested with the power to approve or veto local laws or ordinances.

6. (County local law concerning adoption of Charter.)

I hereby certify that the Local Law annexed hereto, designated as Local Law No. ____ of 20__ of the County of _____, State of New York, having been submitted to the electors at the General Election of November __, 20__, pursuant to Subdivisions 5 and 7 of Section 33 of the Municipal Home Rule Law, and having received the affirmative vote of a majority of the qualified electors of the cities of said county as a unit and a majority of the qualified electors of the towns of said county considered as a unit voting at said general election, became operative.

(If any other authorized form of final adoption has been followed, please provide an appropriate certification.)

I further certify that I have compared the preceding Local Law with the original on file in this office and that the same is a correct transcript therefrom and of the whole of such original local law, and was finally adopted in the manner indicated in paragraph 1 above.



Clerk of the County Legislative Body, City, Town or Village
Clerk or Officer Designated by Local Legislative Body

(Seal)

Date: 7/23/14