

Local Law Filing

NEW YORK STATE DEPARTMENT OF STATE
41 STATE STREET, ALBANY, NY 12231

(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.

STATE OF NEW YORK
DEPARTMENT OF STATE
FILED

~~County~~

~~City~~

~~Town~~

~~Village~~

of Shelter Island

APR 22 2009

Local Law No. 2 of the year 2009

MISCELLANEOUS
& STATE RECORDS

A local law ENTITLED NEW CHAPTER 74, GEOTHERMAL SYSTEM PROHIBITION.
(Insert Title)

Be it enacted by the Town Board of the
(Name of Legislative Body)

~~County~~

~~City~~

~~Town~~

~~Village~~

of Shelter Island

as follows:

Section 1. Chapter 74 of the Shelter Island Town Code entitled Geothermal System Prohibition, shall be added to read as follows:

74-1. Purpose.

The Town Board of the Town of Shelter Island adopts this Chapter to prohibit the use of geothermal heating and cooling systems in order to protect the Town's unique and limited fresh water resources.

74-2. Findings.

A. The Town of Shelter Island has a sole source aquifer from which to draw its groundwater, as it is cut off from fresh groundwater inflow from adjacent areas of the east end of Long Island. Shelter Island is low in topography, resulting in a shallow water table and a thin groundwater aquifer.

B. The Town Board has utilized an engineer, and the many scientific materials listed in Town files, to develop the knowledge upon which to base this Law. These materials indicate that in most areas of Long Island there are three freshwater aquifers—the Upper Glacial, the Magothy and the Lloyd aquifer. Shelter Island is a smaller and more fragile sub-set of the Long Island aquifer system, with access to only a thin layer of the Upper Glacial aquifer. This means that the Town has a limited fresh water supply that requires careful stewardship.

C. The Suffolk County Department of Health Services has prepared a groundwater model of Shelter Island. Suffolk County reports that the freshwater lenses on Ram Island, Montclair and West Neck peninsulas are extremely limited and will be impacted by increased groundwater withdrawals. Excessive pumping from inland areas can impact outlying areas by inducing salt water intrusion or upconing.

(If additional space is needed, attach pages the same size as this sheet, and number each.)

- D. The first Comprehensive Plan for Shelter Island, which was adopted in May 1994, emphasizes the need to protect our groundwater, which is supplied by a local sole source aquifer.
- E. Geothermal heat pump technology is a sustainable source of energy and can be a positive environmental and community benefit. Geothermal wells have two basic designs: open loop and closed loop systems.
- F. A consultant supported Town Working Group has studied geothermal open loop systems and has determined that these systems draw a considerable amount of water and have the potential to cause localized saltwater upconing and intrusion and aquifer contamination. The improper use of this technology in a thin and fragile aquifer system such as Shelter Island can cause harm to the Island's water supply.
- G. A consultant supported Town Working Group has studied geothermal closed loop systems and has determined that these systems threaten the aquifer by piercing deep clay units (which help control salt water intrusion and the draining of the freshwater aquifer), and have the potential to leak contaminants into the general fresh water supply.
- H. A review of existing Federal, State, County and Town regulations on geothermal well systems has determined that they provide insufficient control of such systems in an aquifer as unique as Shelter Island's. The Town Board has determined that a local law is required to provide adequate protection.
- I. The Town Board intends to prohibit the use of geothermal systems, because the potential risks of contamination and salt-water intrusion in the aquifer shared by all inhabitants of the Town far outweigh the potential environmental benefits of these systems.

74-3. Statutory authority.

This Chapter is adopted as a Local Law pursuant to the authority of the Municipal Home Rule Law.

74-4. Definitions.

As used in this Chapter, the following terms, words and phrases and their derivations shall have the meanings indicated:

CLOSED LOOP GEOTHERMAL SYSTEM: In a closed looped system, an opening (either a borehole or trench) is made in the Earth. A series of pipes are installed into the opening and connected to a heat exchange system in the dwelling. The pipes form a "closed loop" (hence the name) and are filled with a heat transfer fluid. The fluid is circulated through the piping from the opening into the heat exchanger and back. The system functions in the same manner as the open looped system, except there is no pumping of groundwater.

GEOTHERMAL SYSTEM: A geothermal system uses the Earth's thermal properties in conjunction with electricity to provide greater efficiency in the heating and cooling of buildings. It shall include both open loop geothermal and closed loop geothermal systems.

OPEN LOOP GEOTHERMAL SYSTEM: In an open looped system, groundwater is pumped from a water well into a heat exchanger located in a surface dwelling. The water drawn from the Earth is then pumped back into the aquifer through a different well, or in some cases the same well. Alternatively, the groundwater could be discharged to a surface water body. In the heating mode, cooler water is returned to the Earth while in the cooling mode, warmer water is returned.

74-5. Prohibition on the installation of geothermal systems.

- A. The installation of a geothermal system is prohibited in the Town of Shelter Island.

74-6. Penalties.

A. Any person, including but not limited to any owner, builder, architect, tenant, contractor, subcontractor, well driller, construction superintendent or their agents, who shall violate any of the applicable provisions of this Chapter, or any order, notice, directive, permit or certificate of the Building Inspector shall be liable to a fine or penalty no less than \$500 and no more than \$2,000 or 15 days in jail, or both, for each and every violation.

B. Any person, including but not limited to any owner, builder, architect, tenant, contractor, subcontractor, well driller, construction superintendent or their agents, who installs such a geothermal system in violation of this prohibition shall immediately remove the system and be liable for a penalty of \$1,000 per day until such system is removed.

Section 2. Effective Date.

This Local Law shall take effect immediately upon filing with the Secretary of State.

(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. 2 of 2009 of the ~~(County)(City)~~(Town)(Village) of Shelter Island was duly passed by the Town Board on April 17 2009, 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 _____ 20 _____, and was (approved)(not approved) (repassed after disapproval) by the _____ and was deemed duly adopted on _____ 20 _____, in accordance with the applicable provisions of law.
(Name of Legislative Body)
(Elective Chief Executive Officer*)

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 _____ 20 _____, and was (approved)(not approved) (repassed after disapproval) by the _____ on _____ 20 _____. 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.
(Name of Legislative Body)
(Elective Chief Executive Officer*)

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 _____ 20 _____, and was (approved)(not approved) (repassed after disapproval) by the _____ on _____ 20 _____. Such local 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.
(Name of Legislative Body)
(Elective Chief Executive Officer*)

* 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.

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

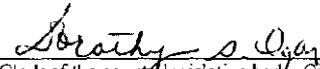
I hereby certify that the local law annexed hereto, designated as local law No. _____ of 20____ of the City of _____ having been submitted to referendum pursuant to the provisions of section (36)(37) of the Municipal Home Rule Law, and having received the affirmative vote of a majority of the qualified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

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

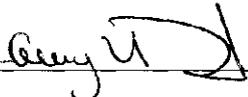
(Seal)

Date: April 17, 2009

(Certification to be executed by County Attorney, Corporation Counsel, Town Attorney, Village Attorney or other authorized attorney of locality.)

STATE OF NEW YORK
COUNTY OF Suffolk

I, the undersigned, hereby certify that the foregoing local law contains the correct text and that all proper proceedings have been had or taken for the enactment of the local law annexed hereto.



Signature

Town Attorney

Title

~~County~~
~~City~~ of Shelter Island

Town
~~Village~~

Date: April 17, 2009