



Legislation Text

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Int. No. 749-A

By Council Members Constantinides, Richards, Brannan, Kallos, Lander, Grodenchik, Rivera, Rosenthal, Adams, Menchaca, Miller and Ulrich

A Local Law to amend the administrative code of the city of New York, in relation to developing a pilot program in southeastern Queens County to use dewatering discharge as a means of heating and cooling buildings

Be it enacted by the Council as follows:

Section 1. Subchapter 2 of chapter 1 of title 3 of the administrative code of the city of New York is amended by adding new sections 3-128, 3-129 and 3-130 to read as follows:

§ 3-128 Efficiency and efficacy study of existing geothermal systems. a. For purposes of this section, the term “geothermal system” means a system used to exchange geothermal energy between the earth and one or more buildings to provide heating or cooling.

b. An office or agency designated by the mayor shall conduct an efficiency and efficacy study of existing geothermal systems in city buildings.

c. In order to complete such study, remote monitoring sensors and data loggers shall be installed in five or more city buildings with existing geothermal systems for the purpose of collecting data from any such system for a period of not less than 12 months.

d. No later than two years after the installation of such remote monitoring sensors and data loggers, the office or agency designated by the mayor to conduct such study shall, prepare and electronically submit a report to the mayor and the speaker of the council, and make such report publicly available online.

e. The report required by subdivision d of this section shall include, but need not be limited to, the following:

1. the cost of installing any such geothermal system;
2. any problems encountered in installing any such system and solutions developed to address such problems and any costs or savings associated with such solutions;
3. the cost of operating any such system, including energy consumption, maintenance, and other expenditures;
4. any problems encountered in operating any such system and solutions developed to address such problems;
5. an energy modeling analysis of the performance of any such system;
6. comparisons of such performance to the performance of conventional heating and cooling systems located in comparable city buildings; and
7. recommendations for continuing or expanding the use of geothermal systems.

§ 3-129 Study of beneficial reuse of dewatering discharge from the aquifers in Queens County. a. An office or agency designated by the mayor shall conduct a feasibility study concerning the beneficial reuse of discharge waters as a result of continuous dewatering operations in southeastern Queens County. The results of such study shall be submitted to the mayor and the speaker of the council no later than two years after its commencement.

b. Such study shall include, but need not be limited to, the following;

1. An investigation of the flow, temperature, quality, consistency and reliability of discharge waters and recommended measures for beneficial reuse including, but not limited to, landscaping, grey water systems, and the extraction or deposition of heat energy from or to such waters for the purposes of heating and/or cooling buildings;
2. An investigation of alternatives to dewatering;
3. An evaluation of existing buildings that are owned or operated by the city or receive financial assistance from the city that have demonstrated continuous groundwater infiltration to basements and cellars for

the purpose of determining the feasibility of dewatering and subsequently reusing discharge waters in an open loop heat pump system for heating and cooling such buildings;

4. An evaluation of existing groundwater conditions at each such building site to identify adverse groundwater quality and hydrogeological conditions, if any;

5. An analysis of the environmental impacts and permitting requirements related to the discharge of groundwater, specifically groundwater that has been heated or cooled and discharged to a surface water body or other surface structures;

6. An evaluation of possible impacts of potential sea level rise in southeastern Queens County on geothermal systems; and

7. If such beneficial reuse is not feasible, identification of impediments to such beneficial reuse, whether such impediments may be addressed by the city and, if so, any plans to address to such impediments.

§ 3-130 Pilot program to provide heating and/or cooling or other beneficial reuse of discharge waters from dewatering operations in southeastern Queens County. a. If the office or agency designated by the mayor to conduct the study required pursuant to section 3-129 determines, based on such study, that it may be feasible to use discharge waters from existing basements, cellars and other dewatering pumping operations in southeastern Queens County in connection with a heat pump system to provide heating and/or cooling to one or more buildings that are owned or operated by the city or receive financial assistance from the city, then such office or agency, in consultation with the department of design and construction and the department of environmental protection, shall develop a pilot program for the purpose of providing such heating and/or cooling.

b. Such program shall continue for at least three years after the date on which the city commences providing heating and/or cooling through such system to such buildings.

c. No later than February 1 in the second year that commences after heating and/or cooling has been provided to such buildings for three full calendar years through such program, such office or agency, in

consultation with such departments, shall prepare and electronically submit, and make publicly available online, a report to the mayor and the speaker of the council with a detailed assessment of the impacts of such program, including recommendations for continuing or expanding such program.

§ 2. This local law takes effect immediately.

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