



New York State Department of Environmental Conservation
Division of Hazardous Waste Remediation



BEEKMAN TOWN GARAGE
INACTIVE HAZARDOUS WASTE DISPOSAL SITE #314094
TOWN OF BEEKMAN, DUTCHESS COUNTY
UPDATE FEBRUARY 1996

INTRODUCTION

The Beekman Town Garage (site # 314094) is located on town property on Beekman Poughquag Road in the Hamlet of Poughquag. The site consists of approximately 5 acres on which there are two buildings that the town uses to house and maintain heavy equipment and a salt storage barn. The salt storage barn is co-operated by the town and the New York State Department of Transportation. In the late 1960s to early 1970s the site was mined for sand. C&D material and tree stumps were used to build the area back up to grade.

In 1992, during an investigation of a known salt water contamination problem, it was discovered that nine private wells in the Hamlet of Poughquag, Town of Beekman were contaminated with 1,1,1 trichloroethane, a volatile organic compound (VOC). Eight of the nine private wells contained 1,1,1 trichloroethane at levels that exceeded the NYS drinking water standard for that compound. Plans are currently being reviewed for a central public water system to serve the Hamlet of Poughquag and provide a long term solution to the contaminated groundwater problem. The Town of Beekman and the NYSDEC are currently conducting negotiations regarding further investigation and potential cleanup measures that will be needed at this site.

SITE HISTORY

April 1992 - The Dutchess County Health Department received complaints about salt in residential wells. The New York State Department of Health (NYSDOH) was contacted and the wells of the residents adjacent to the town property were sampled.

May 1992 - The Dutchess County Department of Health (DCDH) discovered, as part of the salt contamination investigation, that the groundwater in a portion of the hamlet of Poughquag was contaminated with an organic solvent; 1,1,1-trichloroethane.

June to September 1992 - The DCDH sampled 25 drinking water wells in Poughquag. The concentration

of 1,1,1-trichloroethane ranged from 1.0 micrograms per liter (mcg/l or ug/l) to 170 mcg/l. A microgram per liter is the measure of the concentration of a chemical in water, and is about one part [chemical] per billion [parts water] (ppb). Nine of the wells that were tested were contaminated with 1,1,1-trichloroethane. Eight of these wells contained levels that exceeded the New York State public drinking water standard (5 mcg/l for 1,1,1-trichloroethane).

The health departments told the town to provide bottled water to all affected residents. (The town continues to provide bottled water to the present time.) The source of the VOCs was unknown at the time. NYSDOH contacted the New York State Department of Environmental Conservation (NYSDEC).

December 1992 - NYSDEC made the site a "P" site and named it the Original Beekman Landfill. A "P" site is a potential hazardous waste disposal site, meaning that hazardous waste disposal is suspected but there is no proof. The salt and VOC contamination migrated to other residential wells. Public information meetings were held and fact sheets distributed.

January 1993 - NYSDEC's Division of Water ordered the town to cover its salt pile to address the salt contamination in groundwater and residential wells.

May 1993 - The town and New York State Department of Transportation conducted a joint project to build a salt barn. The town also constructed four dry wells to be used as storm drains for the salt barn.

A group of 17 affected residents formed the Citizens of Poughquag. They hired an attorney and a consultant. They initiated a citizen suit against the town. The town also hired a consultant.

June 1994 - The citizen's consultant sampled the Town Garage and several other areas on the town property. High levels of trichloroethane (TCE) and perchloroethene (PCE) were found in a drain in one of the garage bays.

July 1994 - NYSDEC confirmed sampling results on the drain in the Town Garage. The Town's consultant conducted a magnetometer survey to look for possible buried drums which may have been used to fill the site after sand mining was conducted. This survey, which uses an electromagnetic field to locate metal objects, found only crushed pipes.

September 1994 - The NYSDOH sampled 17 private wells for VOCs and sodium and chloride (salt components to monitor the drinking water contamination. The results closely duplicated the DCHD 1992 findings.

The Town's consultant conducted an environmental investigation, collecting soil and groundwater samples throughout the hamlet. The results of the investigation indicated that the Town of Beekman Garage was a source of contamination of the groundwater.

October 1994 - The NYSDEC conducted a Preliminary Site Assessment (PSA) on the site. Hazardous waste disposal was confirmed. Spent solvents were found in the groundwater at levels above state groundwater standards, impacting residential wells and possessing the potential to migrate to a nearby stream.

March 1995 - The site name was renamed the Beekman Town Garage and the site was listed as a Class 2 site on the New York State Registry of Inactive Hazardous Waste Disposal Sites. A class 2 site is one where there is a significant threat to the public health and/or the environment.

April 1995 - The town and the citizens of Poughquag settled their court case. The town will create a water district to supply all affected residents with a new water supply. Construction is scheduled to begin in 1996.

PRELIMINARY SITE ASSESSMENT (PSA)

The PSA was conducted by the NYSDEC in October of 1994 to determine how widespread the contamination is and to confirm the garage is a source. The final conclusions to be drawn from these investigations are still in progress. Elements of the PSA include:

- Summarize all data collected about the site by consultants for the various parties; i.e. the town, the citizens and the NYSDEC;
- Sample groundwater to characterize the groundwater flow and contamination from the affected residential wells to the source; and

- Install six additional monitoring wells to determine groundwater flow direction and contamination levels.

HEALTH CONCERNS

The New York State Department of Health recommends that individuals whose wells are contaminated with chemicals at concentrations above public drinking water standards take actions to minimize their exposure. The bottled water being provided by the Town of Beekman should be used for drinking and cooking. You may also wish to take other measures to further reduce exposure. 1,1,1-trichloroethane is a volatile organic chemical which tends to evaporate into the air and can then be inhaled or absorbed through the skin while using water for washing or bathing. You can reduce your exposure by using less water for bathing and cleaning. You can also use kitchen and bathroom exhaust fans to reduce chemicals in the air when washing dishes, showering or bathing.

The Town of Beekman is providing bottled water to residents who are affected by the salt water contamination problem as well as the 1,1,1-trichloroethane contamination. The majority of homes that are affected by the 1,1,1-trichloroethane are the same homes that are affected by the salt water. The construction of the multi-municipal salt barn on the town property is expected to minimize the salt contamination to the private wells. Bottled water is only a short term solution.

Annual private well monitoring for chemical solvents will continue until a central water system is in place. The NYSDOH will conduct the sampling and testing if the town can not or will not do it.

STEPS IN THE REMEDIAL PROGRAM

For a Class 2 site, the responsible party must enter into an Order on Consent to conduct a Remedial Investigation/Feasibility Study (RI/FS). An Order on Consent is a legal document that allows work on a remedial program to proceed. A Remedial Investigation (RI) is a study conducted to determine the nature and extent of contamination associated with the site to enable the evaluation of appropriate remedial actions. The Feasibility Study (FS) is a review of several remedial action alternatives to find the best one for the site, based on information in the RI.

For this site, negotiations for the RI/FS Order on Consent

between the Town of Beekman and the NYSDEC are just beginning. Once the order is signed, work can proceed on the RI/FS.

After completion of the FS, NYSDEC will review the alternatives and the information about each contained in the FS and develop a Proposed Remedial Action Plan (PRAP). The PRAP will describe the selected remedial action and give the rationale for choosing it. The department will then hold a 30-day public comment period and associated public meeting to receive public comments on the PRAP. After consideration of comments received at the public meeting and during the comment period, the NYSDEC will issue a Record of Decision (ROD) which is the final decision on what remedial actions will be implemented at the site.

After the ROD is issued, the responsible party designs and implements the remedial action.

CITIZEN PARTICIPATION

The NYSDEC, the NYSDOH and the Town of Beekman are committed to keeping the public informed of the progress and activities at the site.

Periodic updates, such as this fact sheet or a public information meeting, will be given to the community. To enable us to reach appropriate individuals with announcements and mailings, NYSDEC has compiled a contact list. To be placed on the contact list send your name and address to Theresa Ludanyi at the address listed below.

A local document repository will be established where documents about the site will be housed for public review as they become available. Individuals on the contact list will be notified when the repository is established.

For more information about the site, contact one of the following individuals.

Dan Eaton	Keith Browne
Bureau of Hazardous	Environmental
Site Control	Engineer
NYSDEC	NYSDEC Region 3
50 Wolf Road	21 South Putt Corners Rd
Albany NY 12233	New Paltz NY 12561-1696
(518) 457-0639	(914) 256-3152

Theresa Ludanyi
Citizen Participation Specialist
21 South Putt Corners Rd
New Paltz NY 12561
(914) 256-3154

NYSDEC Toll Free: 1-800-342-9296

For information on health related concerns:

Kim Evans	Nina Knapp
NYS Dept. of Health	NYS Dept. Health
Bureau of Environmental	Bureau of Toxic
Exposure Investigation	Substance Assessment
2 University Place	2 University Place
Room 205	Room 240
Albany NY 12203	Albany NY 12203
1-800-458-1158 ext. 305	1-800-458-1158 ext.402

FOR MORE INFORMATION