

2010 Inventory of Connecticut's Contaminated Sites

Produced by the volunteers and members of
The Citizens for Clean Groundwater



Preface

This report was prepared by the Citizens for Clean Groundwater with the assistance and advice of the Council on Environmental Quality. The goal was to produce an accurate and easily accessible inventory of sites in Connecticut that are believed to be contaminated. The organizations will work to expand and improve the report in future years to include mapping and other features that will assist the reader and researchers to identify and understand the location and nature of these sites. With this database and inventory, many organizations and individuals will use this data to produce their own conclusions, make recommendations and set action priorities.

About the Citizens for Clean Ground Water (CCG)

The CCG purposes include the following:

- 1) To inform the public about existing and potential threats to groundwater quality through informational meetings, publications and our website.
- 2) To provide residents and local officials with the documents and data they need to address specific groundwater contamination issues.
- 3) To lobby public officials on behalf of residents to ensure progress is made towards cleanup.
- 4) To evaluate laws regarding groundwater protection and work to change laws where necessary to ensure safe drinking water for all citizens.

www.citizensforcleangroundwater.org

About the Council on Environmental Quality (CEQ)

The CEQ's purposes include the following:

- 1) To monitor, analyze and report the status of Connecticut's air, water, land and wildlife to the Governor, General Assembly and Citizens of Connecticut.
- 2) Recommend appropriate legislation and program improvements to correct deficiencies in state environmental policy.
- 3) Publish the Environmental Monitor on line and send copies to all municipalities.
- 4) Investigate and resolve citizen's complaints on environmental matters
- 5) Review projects and policies of other state agencies and provide advice.

For more information on the activities of the Council on Environmental Quality go to www.ct.gov/ceq

Acknowledgements and Disclaimer

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Every effort has been made to ensure the accuracy of the data contained in this report. The data were not edited except as needed to remove duplicate entries and clarify town names. All the data was obtained from government sources and the Citizens for Clean Groundwater is not responsible for errors in data that may exist in the data or findings contained herein.

Table of Contents

- 1) Introduction
- 2) Background
- 3) Data
- 4) Conclusions
- 5) Middlesex County
- 6) New London County
- 7) New Haven County
- 8) Fairfield County
- 9) Tolland County
- 10) Windham County
- 11) Litchfield County
- 12) Statewide Summary

Appendix

Data Sources and dates of compilation

1. INTRODUCTION

The 2010 Inventory of Contaminated sites in Connecticut, describes the number and location of contaminated sites for all of Connecticut's 169 towns. This report reveals that there are approximately 10,000 contaminated sites listed in our state. Many of these sites have contamination dating to the early 1980s. The Citizens for Clean Groundwater has produced this report to draw attention to the problem of ongoing groundwater pollution in Connecticut. It is recognized there are many additional contaminated sites that are not currently listed herein.

Groundwater pollution affects public health in many ways. A significant percentage of Connecticut's residents receive their drinking water through wells. Groundwater contamination often affects these wells directly. Connecticut's residents and others who receive treated water from reservoirs may also be affected by groundwater contamination when uncorrected sources of pollution are allowed to flow into our lakes, streams and rivers. It is no surprise to people who study groundwater contamination that fish from the Connecticut River and Long Island Sound are often not safe to eat.

Following this brief summary of the process, each town is summarized by county with contaminated sites itemized and listed in a consistent manner.

The goal of this document is to spur public action towards remediation of these sites with the eventual goal of restoring our aquifers and waterways to a state of health.

2. BACKGROUND

Connecticut has a long history of industrial and commercial land use. For much of its history, these activities had limited impacts on the quality of drinking water. Starting in the 1900s chemicals were used extensively in both manufacturing industries (which used solvents, petroleum-based fuels and heavy metals) and in agriculture (herbicides and pesticides). Although all states face the same issues with regard to post-war chemical use and improper disposal, Connecticut's reliance on wells and reservoirs, both public and private, means that contamination of groundwater with these pollutants has very serious public health implications. This problem is exacerbated by the state's geology and a shallow depth to groundwater in many parts of the state. The consequences are that contaminants that are on the ground or in our septic systems, eventually occupy the same space from which well water is pumped out of.

Regulatory Framework

In Connecticut, hazardous waste sites are jointly regulated by the United States Environmental Protection Agency (USEPA) and the state of Connecticut Department of Environmental Protection (CTDEP). Many sites were originally overseen by the USEPA and then delegated to the CTDEP for their management. Some sites are regulated individually by one agency, others by multiple agencies. This report lists all sites included in the Hazardous waste lists regardless of the agency. The Department of Public Health regulates primarily large public wells and has no direct involvement in hazardous waste sites. They typically have limited knowledge about the locations of pollution creating the risk that new wells will be located in areas of known toxic contamination.

To further complicate the process, CTDEP law allows property owners to hire consultants to work on hazardous waste sites. Although the DEP has some oversight, the actual investigation, remediation or other recommended actions are contracted out to one of many Licensed Environmental Professions (LEPs). This allows property owners to hire and manage consultants to conduct analysis that determines the nature and extent of contamination and make recommendations for clean up strategies. The polluters can delay the process for years and even decades as they need not adhere to compliance schedules and CTDEP has limited authority to require LEPs to maintain approved programs and commitments.

There is no available list that describes which agency or private party is in charge of studies or remediation at any given site. As a result, many sites are supposed to be actively worked on, fail to do so and escape CTDEP enforcement. Environmental lawyers can also be retained by polluters to dispute the remedial actions, furthering delaying the study and clean up of known contaminated sites.

Well Water

The Connecticut Department of Public Health estimates that there are approximately 500,000 water supply wells active in our state. This estimate includes wells that serve a single home, and public water supply wells that supply a group of homes or a group of businesses. The DEP estimates that there are

thousands of unremediated hazardous waste sites in Connecticut. The Citizens for Clean Groundwater believes that many of our public and private water supply wells are suspect of being impacted by contamination.

Despite the requirement to test water quality exists when property changes hands, it is not easy for any individual to know whether or not their tap water is potable. The State Department of Public Health has no regulations that require further testing of well water even in known areas of contamination. At present, standard water potability tests that are performed when purchasing a house or opening a new business, include only inorganic attributes and bacterial analysis and do not provide information about other common contaminants that may be present in drinking water (such as pesticides, herbicides, volatile organic compounds, petroleum products and toxic metals).

When groundwater is known to be contaminated, the DEP is tasked with determining whether or not residents and businesses need to filter their water. They are also tasked with maintaining records of water quality tests for all affected residences and businesses. CCGs review of this information suggests that water sampling data is rarely tabulated or made readily available to towns, health departments or the regulated community.

When contamination is identified in well water above the action levels, the CTDEP may coordinate the installation of a filtration system that is paid for with tax dollars. While considered a short term remedy, many filters are left in place for decades. The DEP is tasked with monitoring and maintaining these filters and often has difficulty meeting the required schedules or communicating the results to affected residents. Often citizens, local elected officials and planning and health department officials are unaware of the contamination issues within their own jurisdictions. These public officials often have the responsibility of approving new developments, new water supply wells, and new businesses but have little information on the locations of DEP installed filters or water sampling locations.

The following are the state laws pertain to the construction and maintenance of wells:

- 19-13-B51 requires permits and establishes construction standards for all wells after January 12, 1971
- Sec. 25-128-61 requires a permit for construction, repair, development, hydrofracturing or abandonment, September 27, 1978
- Section 25-128-54 requires wells to be maintained in proper condition to protect groundwater, September 27, 1978
- Section 19-13-B101 requires limited water testing of private wells, December 30, 1996.

But there are many gaps in the existing regulations that make it impossible for contamination to go undetected for years. Here are just a few:

- There is no routine inspection of many wells or their surroundings.
- Wells are automatically granted for many locations based on development pressures.
- There is no routine monitoring of water system maintenance.
- There is no routine monitoring of private wells.

- There is no routine report required for private wells.
- Existing private wells are allowed to operate near areas of known contamination without requiring testing for known contamination.
- Existing small public wells are allowed to operate near areas of known contamination without testing for known contaminants.
- There is no mechanism for variances for new (replacement) or existing well locations).

It is critical that we monitor the location of wells in the context of the location of hazardous waste sites. When sites go un-remediated, the soils become source areas that, with every rainstorm, leach contaminants into the water table. These long and persistent releases can cause plumes of contamination that extend for miles and affect neighboring wells and bodies of water.

Why are there so many contaminated sites?

When contamination is discovered, landowners can retain legal and engineering counsel that can delay clean up of these sites for decades. Many of the sites described in this report have been listed as hazardous waste sites since the early 1980s and many have never been fully characterized to determine the extent and severity of the groundwater contamination they harbor.

The CEQ has noted in a 2009 letter these important findings pursuant to cleanup of contaminated properties under CTDEP regulations and laws:

- 1) The landowner has two years to complete investigations when under orders. If a landowner wants to wait until the 23rd month to start the investigation, he or she can. Any change in the Licensed Environmental Professional working on the site must be reported to the DEP, but long periods of inactivity need not be.
- 2) There is a requirement for annual progress reports but no progress is required to have occurred.
- 3) After investigation, the landowner has one additional year to commence remediation.
- 4) There is no deadline for achieving remediation.

The Citizens for Clean Groundwater is deeply concerned about the volume of contaminated sites that are located in our state, and the inefficiency of the system which has failed to provide water quality tests where needed, and failed to provide resolution to groundwater contamination issues even when polluters are identified, and decades have passed. Failure to rigorously assess the groundwater pollution at these sites and to disseminate information about the threat they pose has allowed many sites to go un-remediated with health and environmental concerns left as a legacy for future generations.

3. DATA

The 2010 Inventory of Contaminated Sites report contains information on all known and documented properties where contamination is reported or documented to exist within Connecticut. These sites are assumed to have levels of contamination that exceed the CT DEP and US EPA soil or groundwater standards for specific chemicals and may therefore posed a risk to the environment and to public health. Many of these sites are under investigation and the full extent of the release area is unknown. Others are in the process of additional study or clean up. The sites include hazardous waste releases, state and federal superfund sites, leaking fuel tanks, landfills and sites with reported contaminated water supply wells.

All of the data that is included in this report was gathered from readily accessible government lists which are itemized in Appendix A. The three major sources of data that are included are

- the United States Environmental Protection Agency (EPA),
- the Connecticut Department of Environmental Protection (DEP)
- the Connecticut Department of Public Health (DPH)

While all of the information contained in this report is in the public domain, it is not easily decipherable. So we consolidated and categorized the data, where appropriate to make it streamlined. Lists from all available sources were combined and edited to remove duplicate entries and to combine information by sites when there are multiple sources of pollution at the same site. We have made every effort to make this information easy to read and understand without technical knowledge of the science involved or public regulations.

We have included a count, organized by town which includes 1) the total number of hazardous waste sites” unique sites” and 2) “Notable sites” which are sites that show up on multiple lists. We also compiled each town summary by county so one can compare the numbers with other nearby towns.

How the data was compiled

During the 1980s the federal and state government embarked on a process of identifying and categorizing sites that required EPA and DEP oversight and management. This process was initiated largely by public outcry relating to public concerns from locations such as Love Canal where hazardous wastes were buried and later extended into neighborhoods and residential properties. This prompted a series of federal environmental laws that required the tracking of hazardous wastes and created the term Superfund to identify buried waste sites that the USEPA would later track and study for consideration of clean up using federal monies. Many sites were considered for the federal Superfund list during the early 1980s (referred to as the CERCLIS List) and other programs and state lists were also created for sites that had real or potential contamination that fell short of being managed by USEPA but required oversight and management by other environmental programs or agencies. Today we have

dozens of different lists and programs and agencies that manage pollution and sites often occur on multiple lists simultaneously.

The town data in this report focuses on information pertaining to 1) basic demographic and land area and 2) known hazardous waste facilities and locations where contamination was reported to be present. The data was all compiled from government sources available on line, and from routine requests under the Freedom of Information Act or the internet. A full list of the sources, definitions and dates of collection are included in the Appendix.

This review includes an overview of the sites in Connecticut that are currently listed as federal or state hazardous waste sites, contaminated sites and sites believed to be contributing to the degradation of groundwater and or surface water. These include the following categories:

- @32 Federal EPA Superfund High Priority Final Listed National Priority List sites (NPL). These sites were reviewed by the USEPA and determined to have significant issues that required management and federal cleanup activities. They are the most serious of the CERCLIS or superfund sites.
- @400 Federal EPA reviewed Superfund or CERCLIS sites being considered for NPL and known to have some hazardous waste issues that are suspect of requiring remediation.
- @450 Federal EPA CERCLIS(No Further Remedial Action) NFRAP sites where EPA has decided the site is not requiring further EPA study but these sites are often included on the State Superfund list.
- @238 Federal EPA active RCRA hazardous waste sites whereby companies have a permit to (T) treat, (S) store or (D) dispose of hazardous wastes and are called RCRA TSDf sites. These are locations where hazardous wastes are onsite in regulated quantities and subject to RCRA hazardous waste rules and requirements for management and closure once the site is closed.
- @150 Federal EPA active Hazardous Wastes TSDf Sites under orders (RCRA corrective Action). These are sites where contamination is known to exist and the EPA or the DEP have entered into a legal enforcement agreement with the operator or land owner to study and remediate the site from current or former releases of hazardous wastes that are documented to exist.
- @390 State DEP "Inventory of Hazardous Waste Sites" also referred to as state superfund sites. These are state sites that are being monitored for historic releases that have been documented by the DEP and have ongoing requirements for study and or remediation of soil and groundwater contamination.
- @3350 State DEP Transfer Act Form 3 and 4 sites where contamination is acknowledged by private parties (Property Transfer sites). These are locations where a declaration was made as part of a change in real estate or company ownership that acknowledges that a release of hazardous constituents has occurred that requires remediation in the future.
- @6500 State DEP active Leaking Underground Storage Sites (LUST). These are locations where large (over 2100 gallons) underground storage tanks are known to have experienced a release of contaminants and require remediation. Sites in this program are being managed on an ongoing

basis with varied amounts of soil and groundwater contamination being addressed with each tank release.

- @750 State DEP Significant Environmental Hazard sites (SH) where contamination was identified and reported that exceeds the DEP standards and often includes water supplies impacts. These sites are considered to be serious enough to required immediate reporting to the DEP when certain conditions exist and are identified by consultants or companies that become aware of releases of hazardous substances.

This report does NOT include information on the following hazardous waste sites:

- 1) Pesticide and Herbicide release sites
- 2) Nuclear Sites and Department of Defense Sites
- 3) Sewage treatment plants or major water discharge locations
- 4) Department of Transportation (DOT) sites that have had releases and were not otherwise included on DEP or EPA lists.

We recognize some sites listed have gone through some level of remediation but we cannot accurately track these sites and have not been able to obtain any lists from CTDEP to identify sites that are currently remediated to their satisfaction. We specifically requested these lists and were told they did not exist.

This report used information that is obtained from various governmental records and the lists often refer to old company names, and include other inaccuracies. We recognize the possibility that there will be errors in some of the data that is reported and did not change the government data or alter the information as it was presented to us, except to eliminate known duplicates.

4.0 Conclusions

There are many conclusions that can be drawn from a review of the data compiled herein. The first group of conclusions are based on the compilation of the data itself and include the following:

- 1) The data is difficult to compile and is not easily gleaned from any current DEP or EPA tools or web sites. Use of the lists often requires rigorous understanding of current laws and the history of laws.
- 2) The data is separated by department and often includes duplicate sites and locations which results in sites being listed multiple times with different names or addresses.
- 3) The data is not maintained, compiled or organized in a consistent manner between agencies or departments. The compiled data was riddled with inconsistencies and variations in reporting styles.
- 4) The data has no master site identification system so names are often inconsistent or historic in nature and therefore do not reflect current site occupants of the properties.
- 5) There is no one system that tracks or manages these sites and the status of any given project or location is often difficult to obtain. Often multiple government agents are working on a site at the same time and sharing of information within the programs is not typically documented.
- 6) There is no single list of sites that have been remediated, are complete or considered clean.
- 7) The coordination of human health issues, description of contamination or recommendation for further actions is not computerized or readily available for the public or health officials to be aware of.
- 8) There is no complete list of carbon filter locations or areas of active DEP water sampling and testing that are available.

A review of the town information also includes the following conclusions

- 1) There are numerous sites within in most towns.
- 2) Many sites are listed as being active but are not being actively studied or remediated.
- 3) There are no easy ways to track the point person on a given project and many projects are not being actively managed by the agency and are not assigned to staff.
- 4) Sites range in complexity from single leaking tanks to complex large locations involving large acreage and decades of study.
- 5) Some sites are being remediated voluntarily with limited ability to track the progress and time frame for final remediation.
- 6) Many sites have been on the lists for many years and a status or summary is not available.

Appendix

Data Sources

- 1) NPL list -Source EPA Envirofacts website dated 1/24/2010
- 2) CERCLIS Active List- Source EPA Envirofacts website dated 6/24/2009
- 3) NFRAP List-Source EPA Envirofacts websites date 11/20/2009
- 4) RCRA TSDf List- Source CTDEP RCRA Department dated 2/5/2010
- 5) RCRA Corrective Action Sites- EPA Envirofacts website dated 11/20/2009
- 6) Inventory of Hazardous Waste Sites-CTDEP original list 1/1987 updated to 1989
- 7) Leaking Underground Storage Tanks Sites- CTDEP website dated 9/1/2009
- 8) Transfer Act form 3 and 4 sites-CTDEP website date 9/1/2009
- 9) Significant Environmental Hazard Sites-FOIA request dated 5/27/2009