

David Holladay
22 Fourth Street
Westford, MA 01886
July 3, 2002

Dear Robert Hallisby:

I live in a section of Westford, MA called Graniteville. Recently, I examined a web site <http://www.psr.org/forgotten/al-ma.html> titled *America's Forgotten Nuclear Sites*. This list is apparently based on an article from *USA Today* from a few years ago. One of the entries reads as follows:

MA – Graniteville -- C.G. Sargent & Sons -- Tests on drying and extrusion of uranium and thorium compounds in 1968. Tests indicated minimal potential for airborne contamination. – NRC

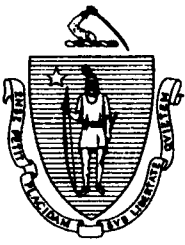
Two days ago, a neighbor told me that 4 persons in our immediate area have thyroid cancer or significant thyroid problems. Her doctor asked her whether she had been exposed to radiation. So, I would like to know more about C.G. Sargent & Sons and what they did in 1968.

I should add that I understand that C.G. Sargent is well known in the neighborhood for having disposed of noxious materials into Stoney Brook, which goes right next to the site. While the item quoted above says there is no airborne contamination, what about water and ground contamination?

I have a series of questions that are designed to help me figure out what the risks are to my neighbors and to myself. Any answers would be helpful:

- 1) Is there a file on C.G. Sargent & Sons in regards to their handling of nuclear materials.
- 2) How many months did they deal with uranium and thorium compounds?
- 3) Were there any materials missing?
- 4) Is there any record of water and ground contamination at the site?
- 5) Is they did have a license to handle nuclear materials, under what circumstances was this relinquished?
- 6) What are the health risks for living near this site?
- 7) Who has jurisdiction if there is nuclear contamination at the site?
- 8) Granted the incidence of thyroid problems in the neighborhood is not a scientific measure, it is suggestive of a continuing issue at the site. If the historical documentation at your agency says there is no contamination, how could I request a survey of the present area? In other words, how can I request that someone show up with a Geiger counter instead of only basing a response to me on the existing paper trail?
- 9) I understand that C.G. Sargent has operated in several locations in Westford. At which locations were they doing experiments with nuclear materials?

Thank you for responding to my letter.



JANE SWIFT
GOVERNOR

ROBERT P. GITTENS
SECRETARY

HOWARD K. KOH, MD, MPH
COMMISSIONER

The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
Radiation Control Program

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September 4, 2002

David Holladay
22 Fourth Street
Westford, MA 01886

**RE: Letter Re: C.G. Sargent's Sons Corp.
Docket Number: 07-3503**

Dear Mr. Holladay:

In response to your letter of July 3, 2002, this Agency has taken the following actions:

1. Conducted a tour of the existing Sargent's Sons Corp. buildings located on Broadway and Bridge Streets, Westford, Massachusetts;
2. Performed several radiation field measurements at the properties located on Broadway Street;
3. Visited the Westford Historical Society and reviewed original business records for the Sargent firm;
4. Reviewed files of the Massachusetts Radiation Control program for relevant information and;
5. Received information from Region 1 of the U.S. Nuclear Regulatory Commission (USNRC).

C.G.Sargent's Sons Corporation designed and manufactured industrial dryers for several industries including the rubber, food, textile and chemical industries. The basic process involved applying heat to aqueous, liquid or semi liquid materials in order to evaporate the liquid or aqueous phase and produce a product of controlled or total dryness.

C.G. Sargent's Sons was issued a license by the U.S. Atomic Energy Commission (USAEC) in April, 1967. This license authorized the firm to possess and use up to 1500 pounds of thorium.

In 1970, the license was amended to add uranium and limited the total amount of U and Th to 1000 pounds. The chemical forms of the Th and U were thorium hydroxide and ammonium diuranate. Sargent used the licensed materials to test various drying methods for a wet slurry of thorium hydroxide and ammonium diuranate. This work was conducted under a contract to National Lead of Ohio(NLO), probably the Fernald Plant, in Fernald, Ohio. These materials are part of the chemical process used to convert uranium ores to usable uranium chemical products. National Lead of Ohio operated the Fernald Plant for the Atomic Energy Commission from 1953 to 1986, a period of 33 years.

In 1970, Sargent's Sons Corp. provided certification that all radioactive materials were returned to their customer (presumably NLO) for their use. It is unclear but also unlikely that there was any more testing of drying processes in the research laboratory after the March, 1970.

On January 17, 1972, the President of Sargent's Sons informed the U.S.A.E.C. that the license was no longer needed. Hence, the A.E.C license was in place from April, 1967 through February, 1972. However, it appears that most of the testing was conducted from 1967 through March, 1970, a period of three years.

The research laboratory was located in the brick faced, stone block building at 70 Broadway. The license implies that all testing was conducted in this laboratory at this location.

On July 2, 1996, a radiological survey of this laboratory facility was conducted by an inspector from Region 1 of the U.S.N.R.C.. There was NO radiation fields or areas of fixed radioactive contamination above the limits set by the U.S.N.R.C for unrestricted use. The survey did not identify any area where the radiation field was greater than 10 microrem per hour above the natural background. The natural background in this part of Westford varies between 5 and 10 microrem per hour based on recent measurements. In conclusion, "The facilities are suitable for unrestricted use."

Questions:

6. Based on the information collected in this investigation, there is NO defined health risks from radiation and radioactive materials for residents in nearby homes.
7. Jurisdiction for the radiological condition of the site is shared among several state and federal agencies including the Massachusetts Department of Public Health, Massachusetts Department of Environmental Protection, US Environmental Protection Agency, the U.S. Nuclear Regulatory Commission and the U.S. Department of Energy (successor to the U.S. Atomic Energy Commission).
8. A radiological inspection of the facilities have been conducted. The recent inspection (August, 2002) confirms the findings of the 1996 inspection.

Please contact me at 617.727.6214 x 2038 or via email at stephen.larson@state.ma.us if you have additional questions or concerns.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephen R. Larson". The signature is fluid and cursive, with the first name being the most prominent.

Stephen R. Larson
Radiation Control Officer

SRL/srl

Enclosure: (1)