



June 8, 2018

Mr. Christopher Grossman
Nuclear Material Safety and Safeguards
Division of Decommissioning, Uranium Recovery, and Waste Programs
Materials Decommissioning Branch
U.S. Nuclear Regulatory Commission
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**SUBJECT: SITE SUMMARY REPORT FOR THE SETH THOMAS CLOCK
COMPANY PROPERTY AT 219 ELM STREET IN THOMASTON,
CONNECTICUT
CONTRACT NO. NRC-HQ-50-17-A-0001; DCN 5307-TR-08-1**

Dear Mr. Grossman:

Oak Ridge Associated Universities (ORAU) is pleased to provide the attached site summary report for the Seth Thomas Clock Company property at 219 Elm Street, Thomaston, Connecticut.

Please feel free to contact me at 865.574.0685 or Erika Bailey at 865.576.6659 if you have any questions.

Sincerely,

David A. King, CHP, PMP
Sr. Health Physicist/Project Manager
ORAU

DAK:lw

Attachment

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Seth Thomas Clock Company, 219 Elm Street: Site Summary

**Prepared by
Oak Ridge Associated Universities
Under NRC Contract Number HQ-50-17-A-0001**

June 8, 2018

**Prepared for
U.S. Nuclear Regulatory Commission**

Seth Thomas Clock Company, 219 Elm Street: Site Summary

The following information was extracted from public records.

Address

219 Elm Street, Thomaston, Connecticut 06787

Site Description/History

The Seth Thomas Clock Company (Seth Thomas) began making clocks in 1813 in the town of Plymouth Hollow, later renamed Thomaston after the clock maker. They continued to manufacture clocks and watches until the early 1980s (Master Clock Repair 2017, HBC 2014). In review of historic maps, there was a Seth Thomas Clock Company Movement Shop identified on Elm Street in addition to the 135 South Main Street Seth Thomas Clock Company location. Note, the balance of the Elm Street complex (242 Elm Street) is dispositioned under a separate summary report. As will be discussed, it is not completely certain that radium was either present or used at the Elm Street Movement Shop, which was part of the former Seth Thomas complex. Possible radium use at the property is suggested by the 1911 Sanborn map (Figure 1) that notes "Dial Painting" and the fact that radium contamination was positively identified at the South Main Street facility (ATSDR 1999, Sciencetech 2003, ORAU 2017a). The 0.5-mi distance between the Elm Street and South Main Street facilities is illustrated in Figure 2.

The three-story, approximately 30,000-ft² 219 Elm Street building, pictured in Figures 3 and 4, was constructed in 1900 (Thomaston 2017). The 0.97-acre property includes a 2,000-ft² asphalt parking lot to the west of the structure and resides in an area that is developed for both commercial and residential use. The original building, pictured in Figure 4, consists of brick, stone, and concrete. It is unknown when the additional, adjacent structures were added. The current owner of the property is the Drawn Metal Tube Company (Thomaston 2017), a company that has manufactured metal tubing since 1937. A comparison of the 1911 Sanborn map and recent photographs shows that the 219 Elm Street building is one of two original structures that remain from the Seth Thomas Movement Shop era.

According to the Thomaston Town Clerk's Office, the Seth Thomas Company owned the site until 1936 when it was transferred to the General Time Instruments Corporation (ORAU 2017b). Seth Thomas became a division of the General Time Instruments Corporation in 1930 or 1931, later known as General Time Corporation (Master Clock Repair 2017, Antique Clocks Guy 2017, ClockHistory.com 2017, HBC 2017). In 1970, General Time Corporation was taken over by Talley Industries, which closed the Thomaston plant (presumably including the building at 219 Elm Street) and moved all operations to Norcross, Georgia (HBC 2014). Since the current owner obtained the deed to 219 Elm Street in October 1967 (Thomaston 2017), the property may not have been owned by Talley Industries. The sign painted on the outside of the building reads: "The Drawn Metal Tube Co" and "Hartley Tool & Die Company" (Figure 4), while an article in the Hartford Courant (1962) discussing a fire at the site refers to the "Hartley Drawn Metal Tube Co. and Hartley Tool and Die Co." This suggests that the two businesses are owned by the same individual/group (Hartford Courant 1962). It is unknown if there were any different owners between General Time Corporation and the Drawn Metal Tube Company.

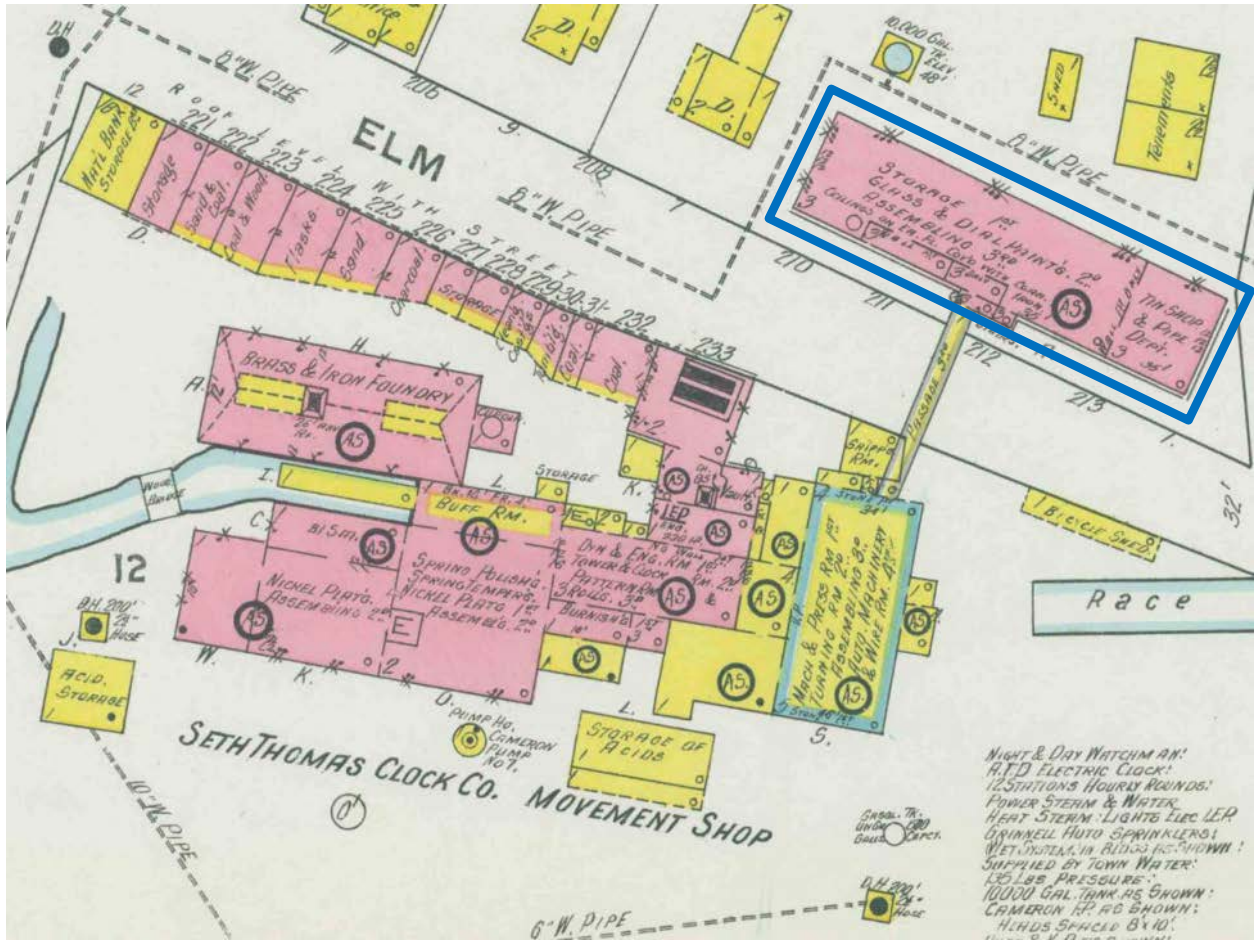


Figure 1. Seth Thomas Clock Company Movement Shop (Sanborn 1911)

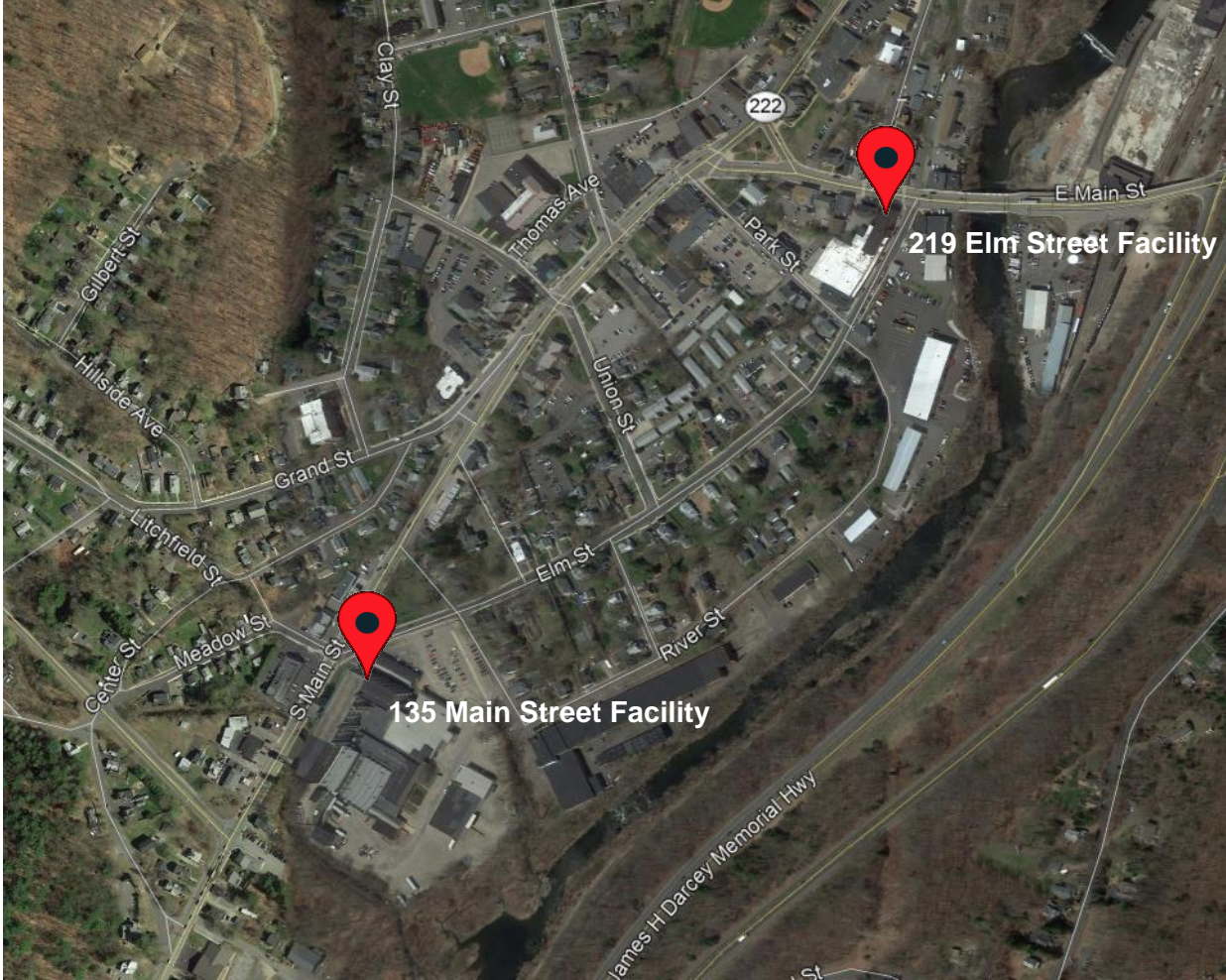


Figure 2. Seth Thomas Main Facility at 135 S Main Street in Relation to the Site at 219 Elm Street (Google Earth Pro 2017)



Figure 3. April 2016 Photo of Site at 219 Elm Street (original building outlined in blue) (Google Earth Pro 2017)



Figure 4. October 2008 Street View Photo of 219 Elm Street (Google Earth Pro 2017)

Information Regarding Radium Sources/Contamination at the Site

It is not known whether radium was either present or used at the Elm Street facility; though a 1911 Sanborn map (Figure 1) indicates that the building at 219 Elm Street was used for “Storage,” “Glass & *Dial Painting*,” (emphasis added) and “Assembling.” Radium dial painting did not begin in general until 1917 and not at Seth Thomas until after 1917 (Clark 1997). Therefore, the potential link between radium contamination and the Elm Street “Movement Shop” is based on the term “Dial Painting” and knowledge that radium dial painting was practiced within the Seth Thomas complex as late as the 1940s (CT DPH 1998). Radium contamination was positively identified at the South Main Street facility (ATSDR 1999, Scientech 2003, ORAU 2017a). However, radium use at the Elm Street Movement Shop could not be confirmed.

The 219 Elm Street site is on the Connecticut Department of Energy and Environmental Protection’s (DEEP’s) list of “Contaminated or Potentially Contaminated Sites” (DEEP 2017). According to DEEP, the site was investigated, starting in 1996, and was given an Environmental Land Use Restriction (ELUR) for no residential use. DEEP could not indicate why the ELUR was given, but only confirmed that the site was somehow out of compliance with Connecticut regulations (ORAU 2017c). The earliest known radiological investigation of any Seth Thomas property is in 1998 (ATSDR 1999), so it is possible that the DEEP 1996 investigation of the 219 Elm Street site property is unrelated to radium operations.

Summary of Current Radium Levels:

As of October 2017, it is not known if radium sources and/or radium contamination are present at the site.

Location and Population Near the Site

The site at 219 Elm Street is located in the town of Thomaston in Litchfield County, Connecticut. The area contains businesses and residences (shown in Figures 2 and 3) and is within approximately 300 feet of the Naugatuck River. According to the 2010 U.S. Census, the population of Thomaston was 7,887; the 2016 population estimate for Thomaston was 7,595 (U.S. Census Bureau 2017).

Current State/other Federal Involvement

DEEP has put an ELUR of no residential use on the property. An extensive Internet search of public records did not reveal any other information about state or federal involvement at the site.

Current Access and Activities at the Site

The site appears to be accessible and is currently occupied by the Drawn Metal Tube Company. The company manufactures and distributes different types of metal tubing. The Drawn Metal Tube Company can be contacted by phone at (888) 339-1442.

Existing Engineering and Administrative Controls

No information about engineering or administrative controls could be identified.

Prioritization Ranking

NRC assigns a prioritization ranking for each site based on two factors. The first factor relates to whether or not the historical record confirms the presence of radium and there is no documentation that the radium contamination was previously remediated. The second factor considers the potential for human exposure. Based on these factors, the site is assigned Tier 1, 2, 3, or 4 using the following criteria:

- Tier 1 = the historical record confirms the presence of radium, the building or adjacent lands are occupied or frequented by visitors, and site access is not controlled.
- Tier 2 = the historical record confirms the presence of radium, the building or adjacent lands are not occupied or frequented by visitors, and site access is weakly controlled.
- Tier 3 = the historical record confirms the presence of radium, the building or adjacent lands are not occupied or frequented by visitors, and site access is strongly controlled.
- Tier 4 = the presence of radium is suspected but not confirmed by the historical record.

Radium use is suspected at the former Movement Shop based on the term “Dial Painting” on the Sanborn map (1911) and given that radium use was confirmed at the 135 Main Street facility. However, radium use has not been confirmed within any Movement Shop building, including the 219 Elm Street facility. Therefore, the former Seth Thomas building located on 219 Elm Street is classified as Tier 4.

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