

English Station Public Meeting 11/19/19 – Questions

1. Does UI plan on removing the Station B foundation? When UI is done, what will be there? Can the site be developed in the future?

At the current time, UI is not removing the basement floor of Station B. However, once UI receives approval of the Remedial Action Plan(s) from CTDEEP, the basement floor will be broken up to account for surface water drainage and incorporated as part of the four feet of clean fill. The remediation work being performed will not preclude the Station B area from being developed in the future.

2. During the demolition of Station B was there air monitoring? We didn't see any monitoring and there were large piles of soil for multiple days. What do the devices look like?

Yes, there is currently air monitoring being performed on a daily basis during work activities. The air monitoring consists of two dust monitoring stations– the location of the dust monitoring station(s) depends on wind direction up and down stream of the work zone and where exactly the work is being performed on a given day. The dust monitoring stations are made up of a grey plastic box approximately 2 feet square that sits on tripods (see picture below). These stations continuously log data on a specified time interval (typically every ten minutes) throughout work activities and provide an audio alarm if the action level is exceeded. The site-specific action level for the Dustrak dust monitoring devices is 0.150 milligram per cubic meter or mg/m³.



Air-monitoring station set-up at East entrance of the Site

In addition to the dust monitoring stations, air samples were also taken for the purpose of fiber count/asbestos monitoring. Sample locations were at the work area perimeter and for personnel sampling. These samples were taken using a small vacuum style pump. The action level for the fiber count/asbestos monitoring is 0.10 fibers per cubic centimeter or f/cc.

Results for both dust and fiber count/asbestos were logged daily to ensure compliance with UI's Air Monitoring Program and requirements under certain regulatory authorizations.

- a. Are there results? If so, where are they, and where can we see that data?

Yes, UI has results for days where abatement and demo activities occurred. These results can be viewed below and on UI's website, titled as follows: English Station Phase 1 Remediation & Station B Abatement & Demolition Air Monitoring.

**English Station Phase 1 Remediation & Station B Abatement &
Demolition Air Monitoring**

A. Asbestos Air Monitoring Protocol

As the designated Project Monitor for asbestos abatement and demolition activities associated with the English Station Phase 1 remediation activities and Station B, TRC Environmental Corp. has been performing the following air monitoring to monitor activities involving materials and building components containing friable and non-friable asbestos:

1. Collect air samples in accordance with the current revision of the National Institute for Occupational Safety and Health (NIOSH) 7400 Method of Air Sampling for Airborne Asbestos Fibers while overseeing the activities of the Abatement Contractor. Frequency and duration of the air sampling during abatement is representative of the actual conditions at the abatement site. The size and configuration of the work area is a factor in the number of samples required to monitor the abatement and demolition activities and is determined by the Project Monitor. The following is an outline of the schedule of samples that have been collected by the Project Monitor:
 - a. Daily During Abatement involving enclosed containments
 - i. At the exhaust of air filtering device
 - ii. At the Decontamination Enclosure System
 - b. Daily During Demolition involving Asbestos Containing Building Materials
 - i. At the four corners of the building demolition area
 - c. Post-Abatement (re-occupancy air clearance testing)
 - i. Interior Regulated NPE Area - At least five (5) per homogenous area

The air samples are collected over the duration of the work activity on a daily basis. The sample pumps are small portable battery powered vacuum pumps designed for drawing the ambient air through a filter cassette at a pre-set flowrate that collects the particulate in the air. At the end of each day, the filter cassettes are removed from the sample pump and processed by the Project Monitor who is an American Industrial Hygiene Association (AIHA) Registered Asbestos Analyst. Each sample is then placed under a Phase Contrast Microscope to determine the total individual fiber count for the sample. The total fiber count does not differentiate between asbestos and non-asbestos fibers. Once the total fiber count for the sample is determined, then it is divided by the total volume of air, in cubic centimeters (cc) to determine the ratio of fibers per cc. The Occupational Safety and Health Administration (OSHA) has set the permissible exposure level for an 8-hour time weighted average (TWA) period at 0.10 fibers/cc. The US EPA and Connecticut Department of Health (CT DPH) recognize 0.010 fibers/cc as the clearance level in approvals for the work activity. 0.010 fibers/cc is therefore the level that the Project Monitor uses to determine the acceptability of the contractor work practices to control the work area and maintain a safe work environment for workers and the general public adjacent to the site.

At the completion of abatement activities, each containment area was visually inspected by a TRC licensed Asbestos Project Monitor following ASTM Standard E1368-90 to ensure complete abatement. Following inspection, post abatement asbestos clearance air sampling was conducted by TRC inside each containment area. Post abatement air samples are analyzed on-site by an AIHA Registered Asbestos Analyst from TRC for Phase Contrast Microscopy (PCM) analysis via the National Institute for Occupational Safety and Health (NIOSH) 7400 method for containments in which the removal involves less than 500 LF or 1500 SF of ACM, or via Transmission Electron Microscopy (TEM) for containments in which the removal involves greater than 500 LF or 1500 SF of ACM. The abatement contractor dismantles each containment area following successful post abatement air sampling and analysis. Each containment area received acceptable post abatement clearance criteria air results (less than 0.01 f/cc for each air sample per set of five for each containment area). The abatement contractor dismantled each containment area following successful post abatement air sampling and analysis.

Station B Asbestos Monitoring (8-hour TWA) during Demolition Activity Only Results Summary July 22, 2019 thru Nov. 27, 2019

Total Demolition Work Days = 60

Total Air Samples Collected = 247

Total Air Samples Non-Detect < 0.002 fibers/cc = 138 (55.9%)

Total Air Samples = 0.002 fibers/cc = 38 (15.4%)

Total Air Samples = 0.003 fibers/cc = 56 (22.7%)

Total Air Samples = 0.004 fibers/cc = 11 (4.5%)

Total Air Samples = 0.005 fibers/cc = 2 (0.8%)

Total Air Samples = 0.006 fibers/cc = 2 (0.8%) – Maximum fiber count measured during demolition activities

B. Ambient Work Area and Site Perimeter Monitoring

During work activities involving soil disturbance and demolition activities, the contractor is required to perform daily workday air monitoring. The air monitoring is performed with equipment that is positioned upwind and downwind of the active work area(s). The two devices being used by the contractor continuously sample the ambient air for total dust concentration and store the readings electronically for post-processing daily. At the end of each workday, the dust concentration data are downloaded from each device and the readings at 10-minute intervals are processed to determine the average workday TWA concentration of milligrams of dust per cubic meter of air (mg/m^3). The maximum daily instantaneous dust concentration from each device is also recorded. During the course of the day, the contractor manually reads and records the instantaneous dust concentration from each device on approximately a one-hour basis. Each device has an alarm that is triggered based on a preset threshold to alert the contractor and Site Monitor of activities that need to be adjusted to reduce the airborne dust concentration. The contractor is employing TSI DUSTRAK II Model 8530 monitoring devices which collect and record continuous dust concentrations in the particle size range of $0.1\mu\text{m}$ to $10\mu\text{m}$ using light scattering methods. The device has a reading range of $0.001\text{ mg}/\text{m}^3$ to $400\text{ mg}/\text{m}^3$.

Acceptable ambient workday TWA dust concentrations for this project are based upon two factors. The first is maintaining particulate matter emissions for PM_{10} below the Connecticut and National Ambient Air Quality Standard of $0.150\text{ mg}/\text{m}^3$ on a 24-hour average basis. The second is OSHA's permissible exposure limit (PEL) for polychlorinated bi-phenyls (PCBs) using the more restrictive criterion for PCBs with 54% chlorine and an average molecular formula of $\text{C}_{12}\text{H}_5\text{Cl}_5$. The OSHA PEL based on an 8-hour TWA using this criterion is $0.500\text{ mg}/\text{m}^3$ (OSHA 1998a). The action level of $0.150\text{ mg}/\text{m}^3$ was set to protect against exceeding the PEL and to comply with the ambient air criteria. Since the DUSTRAK devices are measuring total dust concentration, the actual concentration of PCBs in the dust will be a fraction of the total dust concentration, so the monitoring method is overly conservative and more protective as it relates to the OSHA PEL.

Summary of Ambient Dust Monitoring Performed July 22, 2019 thru Nov. 27, 2019

Total Workdays Monitoring = 63 days

Average Workday TWA (based on all 126 Monitor Events (2 x 63 days)) = $0.022\text{ mg}/\text{m}^3$

Maximum Workday TWA = $0.054\text{ mg}/\text{m}^3$

Minimum Workday TWA = $0.002\text{ mg}/\text{m}^3$

3. What is UI finding in the groundwater samples?

Heavy metals, hydrocarbons and semi-volatile organic compounds from the widespread fill material that comprises the soil on the entire island. The pollutants in the fill material have been documented through previous studies performed by previous consulting and engineering firms and are indicative of much of the dredged fill material used to fill the waterfront in the area of the site. In 2003, the Connecticut Department of Energy and Environmental Protection (CTDEEP) granted a variance for the pollutant mobility of the constituents in the fill material to a prior owner of the site.

PCBs were not found in any of the 130 plus groundwater samples collected from the 5 rounds of sampling at the site.

4. Is the groundwater hydraulically connected to the Mill River?

Groundwater beneath the site discharges to the Mill River. The site groundwater is influenced slightly by tidal fluctuation in close proximity to the bulkhead, and this influence decreases rapidly as waters move toward the interior of the site. The depth to groundwater is approximately three to five feet below the ground surface.

5. Are the results of all tests (groundwater and soil) going to be available?

The North side and South side soil investigation reports have been approved by CTDEEP and are posted on UI's website. The Groundwater Investigation Report has been submitted to CTDEEP and is under their review. Once this report has been approved by CTDEEP, UI will post it to the website.

6. Is UI contesting the unilateral order from CTDEEP concerning the Mill River?

At the 11/19/19 public meeting, CTDEEP staff commented that the order is on the adjudications docket and no date has been set for a hearing. The Partial Consent Order partially resolved the order. UI continues to engage with CTDEEP on the remainder of this order. CTDEEP has asked the CTDEEP Hearing Officer to continue this proceeding, while UI and CTDEEP continue discussions. Status reports are filed periodically by CTDEEP in this proceeding. In the last status report, CTDEEP staff reported that CTDEEP and UI "remain interested in and committed to pursuing a resolution" of this matter but that they are still finding "due to the extremely complex nature" of the onsite remediation, CTDEEP and UI "are still directing a significant amount of their attention to work required of each of them to continue to implement the onsite work." CTDEEP is scheduled to submit the next status report in February 2020.

7. What is the criteria for offsite sources of soil to be used for fill?

The fill material which will be brought to the site and used for the barrier is required to meet CTDEEP's definition for "clean fill." To ensure this criterion is met, a quality control sample will be taken of the fill material every 500 cubic yards, submitted to a certified lab for analysis, and signed off on by a Licensed Environmental Professional to confirm the material being brought to the site meets the definition of "clean fill."

8. With regard to the current security, the current owners have no control over this?

Based on the Partial Consent Order, UI took over the security equipment that was previously being operated by the owner. Based on the status of the equipment and collaboration with CTDEEP, UI upgraded the security system to meet the needs agreed upon by UI and CTDEEP. The upgraded system provides both visual and motion sensor monitoring of the site 24 hours per day. This system is operated by an offsite third-party security firm who works directly with UI to communicate any trespass issues.

In addition to the system, during working hours a site security guard is present. This individual ensures that properly trained and authorized personnel are the only ones allowed on the site.

The current owners will not be responsible for site security until the site access is returned to them at the end of the remediation work and completion of the Partial Consent Order.

9. It sounds like all of UI's testing is being done inside the bulkhead. Who is testing the river?

The Partial Consent Order addresses only assessment/investigation and remediation within the site boundary which is defined as all areas within the bulkhead and does not address the river. As part of this project, UI is responsible for addressing soil and sediment, surface water, groundwater within the site boundary and building materials as defined by the Partial Consent Order within the limits of the bulkhead.

10. What is on the site and where is it on the site?

In addition to the PCB areas, there are hydrocarbon impacts caused by prior fuel oil storage and use on the site. Heavy metals and semi-volatile organic compounds found in the soil that were present in the fill material used to create the site will be rendered inaccessible with either 4 feet of suitable fill or 2 feet of suitable fill combined with 3 inches of bituminous concrete pavement. Environmental Land Use Restrictions will be placed on the site to control future use to industrial/commercial and to prevent uncontrolled disturbance of the underlying polluted soil/fill that remains.

11. How polluted is the site? Can maps of the contamination be provided?

The site has impacts from PCBs, metals, hydrocarbons and semi-volatiles from both previous operations and the dredged spoils used to develop the island. Maps showing contaminant areas along with where and at what depth contaminants can be found are in the North and South Side Soil Investigation Reports which are posted on the website.

12. How much soil will be removed during the remediation?

During Phase I of the remediation activities, approximately 30,000 tons of soil will be excavated from the site and transported to an appropriate disposal facility.

13. What will be left when UI is done with the investigation and remediation?

The site will be remediated to at least industrial/commercial standards and be suitable for redevelopment. The final remediation plan for the Main Power Plant has not yet been finalized. UI is not aware of a final decision by the owners as to the future use of the English Station site.

14. Are any of the remediation activities adjacent to the bulkhead?

Yes, there are excavations which need to be performed next to the bulkhead. The bulkhead extends approximately 20 feet below the bottom of the river. At this time, UI does not anticipate excavating to that depth. UI, TRC and the contractor performing the remediation are making the necessary preparations to protect the bulkhead during the site remedial activities.

15. Does UI see the \$30 million as including only the cost of direct onsite work or is administrative project support cost included?

UI maintains a ledger of all costs incurred or accrued regarding compliance with the Partial Consent Order. UI is required to provide a detailed accounting of all of its costs when requested by CTDEEP. Based on that accounting, the amount remaining from the \$30 million, if any, can be calculated and submitted to the State.

16. Will the site have a mound where Station B was located when the basement is broken and filled?

The Site will not have a "mound." Four feet of suitable fill will be placed over the existing ground surface. The elevation of the site will be close to the elevation of the sidewalk on Grand Avenue. The top of the fill will have a 2% grade to allow for proper surface drainage and post-construction stormwater management.

17. The site is below the 100-year flood level. What happens to the soils that were filled in if there is a flood?

The site is outside the coastal wave zone and is not subjected to wave forces that would cause erosion. Inundation alone should not result in damage to the surface fill that is being placed to render underlying soils inaccessible. Prior storm events have not resulted in erosion damage to the island.

18. What is being hauled off site now?

UI has not yet performed any soil remediation. The materials that have been removed from the site to date are building materials and other types of waste, such as universal waste, aerosols, steel, and asbestos wastes, generated from the interim clean-up activities in the Main Power Plant, the demolition of Station B, and abatement of smaller structures located around the site.

19. What are the auxiliary buildings?

The auxiliary buildings are the smaller structures at the site, including the guard shack, the employee office, the contractor office, two former chlorination structures, two cable houses, the foam house, and the former aboveground oil storage tank enclosure.

20. For those with an interest in saving the Main Power Plant, should they bring this interest up with CTDEEP now? Are there talks happening?

No final plans have yet been developed for the Main Power Plant. Several reports have been submitted to CTDEEP for the building investigations that are undergoing review. In the future, there will be technical discussions that address building remediation alternatives.

21. Is it possible the abatement and remediation will damage the Main Power Plant?

Until all of the data is collected and evaluated UI can't be sure what impact future abatement or remediation activities may have on the structure.

22. Could someone rebuild a building the size of Station B and could that be done without going to CTDEEP?

Yes, it would be possible to construct a building similar in size to Station B. This would require local City Plan Commission approval and coordination with CTDEEP to obtain a temporary release from the ELURs.

23. Will sampling in English Station cause structural damage to the building?

Sampling requirements are strict and addressed by regulatory provisions. UI submits sampling plans to CTDEEP prior to implementation. UI does not expect the sampling on English Station to result in damage to the structure.

24. Since September, all doors, etc. at the Main Power Plant are open. What does that mean for security?

The site itself is fenced and monitored 24 hours a day with security cameras and motion sensors.

25. It appears that there are leaks in the bulkhead and there are a lot of pipes that run for two to three hours after low tide is over. There is continuous flow. What is going on with the pipes at the facility?

The pipes incorporated into the bulkhead are associated with both the surface water and stormwater management system on the Site. These pipes have been in existence for decades in order to manage the stormwater. The pipes are installed below the high tide line and, with the river being a tidally influenced body of water, the pipes become charged with river water every high and low tide tidal cycle.

26. What is the structural integrity of English Station?

UI has performed testing to ensure the safety of workers doing the abatement. UI has not performed a general structural integrity analysis of the Main Power Plant.

27. Can UI invite the owners to the next meeting?

UI can notify the owners of the next meeting, inviting them to attend.

28. Originally there was supposed to be an eight- to nine-foot mound instead of what the plan is now. Why has the plan changed? Was it due to pressure from the site owner?

In March 2019, the City Plan Commission approved a plan that had soil fill on Parcel A being placed 7 to 8 feet above existing grade in the center of the parcel. That plan complied with the CTDEEP remediation standards. Since then, CTDEEP has issued a conditional approval for a plan that reduces the center of the fill area to approximately 4 feet above existing grade with a 2% grade to allow for proper surface drainage. This is the plan that UI will be moving forward with subject to the approval of the City Plan Commission. The updated approach is not due to pressure from the owners, but rather discussions and the approval from CTDEEP.

29. When will the remediation part of the project begin and how long will it take?

UI does not yet have approvals from CTDEEP for the Phase 1 soil remediation activities. Once those approvals are received, the remediation activities should take approximately 6 to 8 months. UI does not yet have a specific timeframe for Phase 2 activities, which would include the Main Power Plant, as UI is still in the investigation stage.

30. Will financials be made available to the public?

UI does not anticipate releasing publicly the financials related to this project. Under the Partial Consent Order, UI is required to maintain an accounting of all costs incurred or accrued regarding compliance with the Partial Consent Order. UI is required to provide a detailed accounting of costs upon CTDEEP request so that the amount remaining from the \$30 million, if any, can be calculated and submitted to the State.

31. What is the approximate depth of the groundwater?

Approximately three to five feet below the existing ground surface of the site.

32. Has UI found PCBs?

Yes, PCBs have been found in the soil and in building materials. The proposed remediation plan is to remove the PCB impacted soils until the remedial criteria are met. Currently, the deepest excavation for PCBs is approximately 11 feet below grade. For other contaminants, such as semi-volatiles and metals, either 4 feet of suitable fill or 2 feet of suitable fill combined with 3 inches of bituminous concrete pavement will be placed on top of the soils rendering the underlying soils inaccessible.

33. What water monitoring will be performed?

During the excavation dewatering activities, the treated discharge will be monitored in accordance with the CTDEEP General Permit approved/issued for the project. Stormwater discharge is monitored monthly in accordance with the CTDEEP General Permit for Construction Activities.

34. In terms of communication with the community, when will the next meeting be? Greater effort is needed to notify the community and should include the Community Management Team and the Environmental Advisory Council.

UI intends to conduct community outreach meetings as significant milestones are achieved. UI will broaden the invite list based on information provided at the 11/19/19 public meeting.