

# **SCOPE OF STUDY**

**EASTERN PORTION OF ENGLISH STATION (PARTIAL):  
BOILER 1-12 AREA & BOILER 13/14 AREA  
510 GRAND AVENUE  
NEW HAVEN, CONNECTICUT**

*Prepared for:*

## **The United Illuminating Company**

180 Marsh Hill Road  
Orange, Connecticut

*Prepared by*



Windsor, Connecticut

November 2018

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180 Marsh Hill Road  
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TRC Project No. 263951

November 2018



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## **Acronym/Abbreviation List**

AEI	Advanced Environmental Interface, Inc.
AHERA	Asbestos Hazard Emergency Response Act
AIHA	American Industrial Hygiene Association
AOC	Area of Concern
ASNAT	ASNAT Realty, LLC
AST	Aboveground storage tank
ASTM	American Society for Testing and Materials
AWP	Alternate Work Practices
CET	Complete Environmental Testing, Inc.
cm	Centimeter
cm/sec	Centimeters per second
COC	Contaminant of concern
CSM	Conceptual site model
CTDEEP	Connecticut Department of Energy and Environmental Protection
CT DPH	Connecticut Department of Health
CTL	Connecticut Testing Laboratories, Inc.
DEC	Direct Exposure Criteria
DQA	Data Quality Assessment
DQO	Data Quality Objectives
DUE	Data Usability Evaluation
ECAF	Environmental Condition Assessment Form
ELLAP	Environmental Lead Laboratory Accreditation Program
ELUR	Environmental Land Use Restriction
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
ETPH	Extractable Total Petroleum Hydrocarbons
ftbgs	Feet below ground surface
GEI	GEI Consultants, Inc.
GWPC	Groundwater Protection Criteria
HPLC	High Performance Liquid Chromatography
I/C DEC	Industrial/Commercial Direct Exposure Criteria
LCS	Laboratory Control Sample
IDW	Investigation-Derived Waste
LEP	Licensed Environmental Professional
LF	Linear feet
LQG	Large Quantity Generator
MDL	Minimum Detection Limit
mg/cm <sup>2</sup>	Milligrams per square centimeter
mg/kg	Milligrams per kilogram
MS	Matrix Spike
MSD	Matrix Spike Duplicate
NAPL	Non-Aqueous Phase Liquids

NESHAP	National Emissions Standard for Hazardous Air Pollutants
NOB	Non-Friable Organically Bound
NTU	Nephelometric Turbidity Unit
NVLAP	National Voluntary Laboratory Accreditation Program
PAH	Polycyclic Aromatic Hydrocarbons
pc	Point counting
PCB	Polychlorinated Biphenyl
PCO	Partial Consent Order
PID	Photoionization Detector
PLM	Polarized Light Microscopy
PMC	Pollutant Mobility Criteria
PPE	Personal Protective Equipment
ppm	Parts per million
QA/QC	Quality Assurance/Quality Control
QE	Quinnipiac Energy, LLC
%R	Percent Recovery
RAP	Remedial Action Plan
RCP	Reasonable Confidence Protocols
RCRA	Resource Conservation and Recovery Act
RCSA	Regulations of Connecticut State Agencies
RES DEC	Residential Direct Exposure Criteria
RL	Reporting Limit
RPD	Relative percent difference
RSR	Remediation Standard Regulations
SEH	Significant Environmental Hazard
SOP	Standard Operating Procedure
SOS	Scope of Study
SPLP	Synthetic Precipitation Leachate Procedure
SVOC	Semi-Volatile Organic Compound
SWPC	Surface Water Protection Criteria
TCLP	Toxicity Characteristic Leaching Procedure
TEM	Transmission Electron Microscopy
TPH	Total Petroleum Hydrocarbon
TRC	TRC Environmental Corporation
UI	The United Illuminating Company
USCG	United States Coast Guard
USDOT	U.S. Department of Transportation
UST	Underground Storage Tank
vae	Visual area estimation
V	Volt
VC	Volatilization Criteria
VOC	Volatile Organic Compound
XRF	X-ray fluorescence

## 1.0 INTRODUCTION

### 1.1 Overview

TRC Environmental Corporation (TRC) has been retained by The United Illuminating Company (UI) to provide Licensed Environmental Professional (LEP) services as they relate to adherence to and completion of all tasks outlined in Partial Consent Order (PCO) COWSPCB 15-001, including the preparation of this Eastern Portion of English Station Building Scope of Study (SOS) which focuses solely on the Boiler 1-12 area and Boiler 13/14 area. On August 4, 2016, the PCO pertaining to environmental matters at the approximate 8.9-acre parcel of land located at 510 Grand Avenue in New Haven, Connecticut known as “English Station” (the “Site”), see Figure 1, became effective. For the purposes of the PCO, the Site includes the two main buildings (both the English Station and Station B buildings), several smaller buildings and all associated structures located on the 510 Grand Avenue parcel of land, as well as the soil, sediment, groundwater and surface water located within the confines of the perimeter of the Site as defined in Exhibit A to the PCO (provided herein as Figure 2).

As the Respondent, UI has committed to conducting the investigation and remediation of the Site in accordance with the provisions of the PCO within three years of the Access Date (with the exception of any post-remediation monitoring requirements), unless there is an alternate completion date approved in writing by the Commissioner of Connecticut’s Department of Energy and Environmental Protection (CTDEEP). Per the definition of the Access Date provided in the PCO, this means that the investigation and remediation shall be completed by August 10, 2019. Other general requirements of the PCO include:

- Development of the SOS and associated schedule;
- Implementation of the SOS once approved by the CTDEEP (and if required, any approved supplemental plans);
- Development and submission for review and approval by the CTDEEP an Investigation Report that fully describes the investigatory activities conducted, evaluates the results of analyses conducted for all sample media as identified in the PCO, evaluates remedial alternatives and proposes a preferred alternative;
- Development of plans and specifications for the approved remedial actions, including a list of permits required in order to complete the remedial actions;

- Implementation of the CTDEEP-approved remedial actions;
- Preparation of a report describing, in detail, the remedial actions performed at the Site and the proposed monitoring program designed to determine the effectiveness of the remediation; and
- Implementation and documentation of the results of the post-remediation monitoring activities.

There are two focal points of the investigation and remediation required by this PCO, environmental media and building materials. This SOS focuses specifically on the investigation of building materials. Whereas the general requirements of the PCO were outlined above, the following section provides more detailed information about the objectives associated with the development of this SOS document for building materials. The PCO is included for reference in Appendix A.

As indicated above, this SOS pertains specifically to the eastern portion of the English Station Building (the Boiler 1-12 & Boiler 13/14 Areas that until recently were undergoing asbestos abatement to complete the “make-safe” effort discussed below) and shall be considered a companion document to the following SOS documents prepared by TRC:

- Scope of Study - English Station, Prepared October 2016, Revised July 2017;
- Scope of Study – Western Portion of English Station Interior (Partial), Prepared May 2018, Revised August 2018;
- Scope of Study – Eastern Portion of English Station Interior (Partial): Boiler 1-12 Area, Prepared August 2018, Revised September 2018 (environmental media only); and
- Scope of Study –English Station Interior (Partial): High Pressure Boilers #13 & #14, Prepared October 2018 (environmental media only).

At the time of the development of the original SOS in 2016/2017, widespread friable and damaged asbestos conditions within the English Station building did not allow for adequate or safe inspection of the interior in order to develop a sampling plan and therefore, it was determined by all parties that the investigation of building materials in the building would be addressed upon completion of the make safe abatement of the area.

In the time between the execution of the original SOS and the publishing of this current SOS, an interim plan was developed for removal of asbestos waste/debris as part of a “make-safe” effort. This interim plan was developed to allow for later inspection of floor surfaces for stains or other evidence of spills/releases and to allow for complete access to all building materials. The SOS development and interior investigation was originally scheduled to be conducted following the completion of the “make-safe” effort within the English Station building structure. Cold temperatures in January 2018 created conditions in the building that would not allow the “make-safe” effort to continue safely or efficiently, as the Contractor conducting the work was unable to consistently maintain containment temperatures above 32 degrees. As such, there was a delay in the project, and safety clearances were not granted in the Boiler 1-12 portion of the English Station building until early summer 2018. The abatement activities inside the high-pressure boiler portions of the building (southeastern portion of the building that contains Boiler 13 and 14) continued through August of 2018.

## 1.2 Objectives

The primary objective of this SOS document is to provide a framework for investigation/characterization of the Boiler 1-12 & Boiler 13/14 portions of the English Station building, therefore allowing for the fulfillment of the obligations of the PCO. Specifically, the SOS objectives as they relate to building materials includes:

- Identifying asbestos and asbestos-containing materials, polychlorinated biphenyl (PCB) constituents of construction materials, lead and mercury, and other hazardous materials in the Boiler 1-12 & Boiler 13/14 portions of English Station.

The Scope of Study for Boiler 1-12 will require 350 samples to be collected of bulk building material products to properly characterize in regards to PCB concentrations. The Scope of Study for Boiler 13/14 will require 560 samples to be collected to properly characterize in regards to PCB concentrations. Therefore, in total there will be approximately 910 bulk material samples collected throughout the Boiler 1-12 and Boiler 13/14 areas. That translates to approximately one sample per every 64 square feet of building footprint.

The breakdown by the two areas is as follows:

Boiler #1 thru #12 = 28,000 SF / 350 Samples = 1 per 80 SF of Building Footprint

Boiler #13/#14 = 30,000 SF / 560 Samples = 1 per 54 SF of Building Footprint

For each material identified by type, color, substrate, floor location, age of the construction and other visual observations, there will be a minimum of three samples collected for each individual material identified. The number of samples will increase for each individual material as the total square footage of the coverage increases. Typically, if the surface coverage for a given material is less than 5,000 SF, then three samples should be adequate. As the square footage increases then more samples are added, at the expected rate of one additional sample per 5,000 SF. Based on this careful analysis, there should be adequate samples to characterize all of the potential bulk materials in the entire building and provide reasonable confidence that materials deemed non-TSCA or Excluded PCB Product can be managed as such for remediation and disposal purposes.

The specific requirements outlined in the PCO with respect to achieving this objective are as follows:

- Identify, document, inventory and assess asbestos and asbestos-containing materials;
- Determine if such materials are friable, damaged, unstable and accessible or may be disturbed by other actions required by the PCO;
- Further, determine how to conduct the abatement of the asbestos in accordance with all applicable laws and develop a plan for doing so;
- Fully characterize PCB constituents of all caulk, paint, flooring, roofing, mastics, fireproofing, soundproofing, waterproofing, sealants, glazing and all other materials;
- Sample PCBs consistent and in compliance with the requirements as set forth in 40 CFR Part 761 for PCBs;
- Investigate the presence of lead and mercury as part of the overall hazardous building materials survey; and
- Identify non-hazardous and hazardous waste and other hazardous materials.

In support of all activities outlined in this SOS, data quality objectives (DQOs) will be specified, as well as the quality assurance/quality control (QA/QC) measures to be implemented to meet those DQOs.

## **2.0 SITE INFORMATION**

### **2.1 Site Location and Description**

The English Station Site is located at 510 Grand Avenue in the City of New Haven, Connecticut and consists of approximately 8.9 acres of land on the southern end of an island (Ball Island) located within the Mill River. Between 2000 when the Site was transferred from UI to Quinnipiac Energy, LLC (QE), and 2006 when QE sold a portion of the property to Evergreen Power, LLC (Evergreen) and another to ASNAT Realty, LLC (ASNAT), the Site was divided into two separate parcels. The portion of the Site identified as “Parcel A” (the northern portion) is approximately 3.58 acres in size. Parcel A is occupied by a portion of a former electrical generating plant, commonly referred to as Station B. Parcel A is not a subject of this SOS, rather the focus is on Parcel B, and more specifically, on the western portion of the English Station building interior.

The remainder of the property, identified as “Parcel B”, encompasses the southern portion of the Site and is approximately 5.32 acres in size. Parcel B is occupied by the English Station power generating plant (“the Plant” or “English Station”) which, again, is the subject of this SOS. The Site as a whole is bounded to the east, west and south by the Mill River (note that the water-facing sides of the Site are bulk-headed) and to the north by Grand Avenue. The parcel boundaries and general Site layout are shown on Figure 1-2.

#### **2.1.1 English Station**

English Station is located on the southern portion of the Site and has an approximate total footprint of 100,000 square feet. English Station is constructed of brick and concrete with steel reinforcement. The northeastern portion of the Plant formerly housed twelve out-of-service low-pressure boilers and a fuel oil pump room. Two large, brick smokestacks are present extending through the roof in the southern portion of the former low-pressure boiler room.

The western portion of the first floor houses various pumps and equipment and also served as the Plant’s main entrance. A second floor adjacent to the low-pressure boiler room formerly housed six turbines that were reportedly part of the older, low-pressure boiler system (Ibid.). Two cooling water intakes which directed water from the Mill River through the low pressure boiler

system are located along the western side of the island, adjacent to the Plant. An outfall for the low-pressure boiler cooling water is located along the eastern side of the island, adjacent to the Plant.

Two separate rooms in the southeastern portion of English Station previously housed two large, high-pressure boilers and two turbines in the southwestern portion associated with the high-pressure system. Two large, steel smokestacks are present and extend through the roof over both high-pressure boiler systems. An oil and pump room and ash silo are located along the eastern side of the two high-pressure boiler rooms and were likely part of the fuel system that fed the high pressure boilers. Two additional cooling water intakes for the high-pressure boiler systems are located along the southwestern portion of the island, adjacent to the Plant. Discharge outfalls for the high-pressure boiler cooling water are located along the southeastern portion of the island, adjacent to the Plant.

As indicated above, the area of focus for this SOS is the Boiler 1-12 & Boiler 13/14 Areas, as shown on Figure 3. The western portion is currently defined as the area to the west of the critical barrier associated with the “make-safe” effort discussed briefly in Section 1.

#### *2.1.1.1 Boiler 1-12 Area*

The northeastern portion of the English Station formerly housed twelve out-of-service low-pressure boilers and a fuel oil pump room. Two large, brick smokestacks are present extending from the roof in the southern portion of the former low-pressure boiler room. Two large, brick smokestacks on the northern portion of the former low-pressure boiler room also appear to have been removed; as only the concrete pedestals remain. The portion of English Station that houses the low-pressure boiler system is approximately five levels. Boiler 1-12 Area has an approximate total footprint of 28,000 square feet.

#### *2.1.1.2 Boiler 13/14 Area*

The southeastern portion of English Station houses the remnants of two large, high-pressure boiler systems. Two large, steel smokestacks are present and extend through the roof over both high-pressure boiler systems. An oil and pump room and ash silo are located along the eastern side of the two high-pressure boiler rooms and were likely part of the fuel system that fed

the high-pressure boilers. Two additional cooling water intakes for the high-pressure boiler systems are located along the southwestern portion of the island, adjacent to the Plant. Discharge outfalls for the high-pressure boiler cooling water are located along the southeastern portion of the island, adjacent to the Plant. The portion of English Station that houses the high-pressure boiler systems is a nine-level building. The various levels are made up of a system of solid floors (concrete), steel grating, platforms, mezzanines and catwalks. The northern Boiler 13 portion was constructed approximately 5 years prior to the southern Boiler 14 portion. Although the construction dates differ, the Boiler 13 & 14 areas are virtually identical on a level by level basis. The main differences between the two structures consist of the connection between Boiler 13 area and the Boiler 1-12 area, and the presence of an elevator on the west end of the north wall in in the Boiler 13 area. Figure 9 is a cross-section of the southern elevation of the building (Boiler #13) that illustrates the complex network of levels found in the high-pressure boiler area of the building. Boiler 13/14 Area has an approximate total footprint of 30,000 square feet.

#### 2.1.2 Current Site Conditions

In February (interior) and September (exterior) of 2018, TRC personnel conducted reconnaissance for the eastern portion (Boiler 1-12 & Boiler 13/14 Areas) of English Station.

- In the Boiler 1-12 portion, “make safe” efforts were still in progress during the reconnaissance in certain areas. The reconnaissance focused on the following general areas:First Floor – comprised of hallways, a fan room, storage room, bathroom areas, offices, former temporary oil storage area, lube oil room, fuel oil pump room #2, BF Pump Hall & Area and the gas cylinder room. This area also includes pits and trenches. This area was under containment as part of the “make safe” effort during reconnaissance.
- Second Floor – which contains the twelve (12) low pressure boiler units. The ceiling in this area is approximately 50 feet high and access to the upper portions is limited to stairwells on the north and south end. Metal grated walkways throughout, and around the boilers, are considered unsafe. There is also a small concrete mezzanine above the west end of this floor. Refer to Figure 2. This area was under containment as part of the “make safe” effort during reconnaissance.

- Coal Conveyor Level & Upper Elevated Areas – which are located above the second floor. These areas are accessible from the stairwell on the North end of the second floor. The coal conveyor level runs the length of the Boiler 1-12 area. Other upper elevated areas (Room 1, Room 2 and West & East Coal Bunker Mechanical Rooms) are all on the north end. Refer to Figure 3. These areas were under containment as part of the “make safe” effort during reconnaissance.
- Exterior Roofs – roofs and other areas only accessible from the roof. There is a surge tank room on the western half of the roof.
- Exterior Building Façade Components (windows, doors, joints, etc.)
- Interior Building Façade Components (windows, doors, vents, etc.)

In the Boiler 13/14 portion, all “make safe” efforts had been completed prior to the reconnaissance and all accessible friable boiler, duct, pipe and breeching insulation had been removed. The reconnaissance was focused on the following general areas:

- First Floor – contains the base of the boilers (which are in the center of each area), two transformer banks and the two-level Fuel Oil Pump Room off the East Side of the building. This area also includes any pits or trenches.
- Second Floor – contains two office control rooms on the west side, an office on the east side, switchgear/electrical rooms, battery rooms, loose turbine components (from the adjacent turbine hall mezzanine), multiple feed pumps and turbines and the boilers in the center.
- Third – Fifth Floors – A large portion of these levels have metal grated flooring. There are four large coal silos on the east end running vertically through all levels. There are two switchgear rooms on the third floor and two motor rooms on the fourth floor. The fifth floor has two large condensate tanks and two large deaerator tanks. The boilers continue in the center.

- Sixth Floor – the four coal silo’s open (onto floor level) on the east side of this floor. The northeast corner has the coal conveyor equipment. At this level, the main body of the boilers begin to branch off into breeching, ducts and associated equipment.
- Seventh – Ninth Floors – The square footage/layout for these floors decreases as you go up with multiple exterior roof areas on each. There are two large, metal smoke stacks, which start on the east roof of the seventh floor, and extend above the building. There are two switchgear/electrical rooms, multiple fans, ducts and breeching on the seventh floor. The eighth and ninth floors for Boiler 13 and Boiler 14 are split. The eighth floor has breeching, two water tanks and twelve precipitator hoppers. The ninth floor has two precipitators on the exterior eastern portion. There are two water tanks on interior and an elevator mechanical room on the northwest end of the boiler 13 portion.

## 2.2 Site History

Construction of the English Station Power Plant commenced in 1924, with construction of the coal-fired, low-pressure boiler and turbine areas completed in 1929. In 1948 and 1952 two additional coal-fired, high-pressure boilers/turbines were added to the southern end of English Station, with additional filling of the river to extend the southern Site boundary (Ibid.). Sometime in the mid-1950s to early 1960s, the Plant ceased using coal as a fuel source and was converted to an oil-fired plant.

English Station continued operation until 1992, when it was placed on deactivated reserve status; two additional gas-fired boilers for maintaining interior building temperatures during colder months were added at that time. In addition to the gas-fired boilers, temperature and humidity controls were installed, reportedly to "preserve" the existing equipment such that it could be reactivated, if needed, with minimal maintenance (Ibid.).

From 2008 to 2011, the Site was unused and no longer maintained as suitable for power generation. In 2011, Grant Mackay Company (Grant Mackay) and Classic Environmental, Inc. (Classic Environmental) were hired by the owners of the Site to commence demolition activities, including the removal of scrap metal and structural steel, with the objective of generating enough money to fund further environmental investigation and remediation, including asbestos abatement. This work appears to have been focused on the English Station building on Parcel B. Mishandling

of PCB-containing oils, including inaccurate characterization and waste disposal led to a CTDEEP inspection of the Site in February 2012. Based on the potential for tracking and spreading PCB contamination from source areas to other, uncontaminated areas of the Site and the off-site recycling of potentially contaminated steel and metals, the State of Connecticut issued to Grant Mackay and the Site owners a Cease and Desist Order (CDOWSUST 12-001) on February 12, 2012 (Partner, 2015).

When the Cease and Desist Order was issued, demolition or asbestos abatement activities were halted, and equipment owned or leased by Grant Mackay and Classic Environmental was left on-site. In the summer of 2017, UI began a project to construct a clean corridor from the east entrance to facilitate decontamination and removal of the Grant Mackay and Classic Environmental equipment, remove and dispose of the Turbine Hall debris and perform the boiler house “make safe” interim measure abatement work.

### **3.0 PREVIOUS ENVIRONMENTAL WORK**

#### **3.1 Previous Environmental Reports**

The Site as a whole has been the subject of numerous investigations, cleanups, and remedial actions to evaluate its potential impacts to human health and the environment. These efforts were summarized in detail in the July 2017 SOS and are not reiterated herein. The investigations conducted interior to the English Station building have not been as numerous as those conducted exterior to the building, however, the results of the previous sampling to the Boiler 1-12 and Boiler 13/14 portions of the building are summarized briefly below.

##### **3.1.1 *1999 Asbestos and Hazardous Materials Survey*, GEI Consultants, Inc. (GEI, 1999)**

In the fall of 1999, GEI was contracted by TLG Services, Inc. (TLG) to conduct an asbestos and hazardous building survey within the English Station building. The purpose of the survey was to identify materials that would require removal from the building and proper disposal in advance of building demolition activities. Based on the available information at the time, GEI also endeavored to estimate the quantities of hazardous building materials for the purposes of developing bid documents for the eventual demolition of the building. As these estimates are not germane to the current tasks taking place at English Station, these estimates will not be summarized herein.

GEI personnel collected asbestos samples in accordance with the EPA's Asbestos Hazard Emergency Response Act (AHERA) protocols and analyzed the suspect asbestos-containing materials (ACM) using polarized light microscopy (PLM) in combination with point counts. Consistent with the EPA's definition of ACM, materials exhibiting asbestos at 1% by weight were identified as ACM by GEI.

A total of 636 types of suspect ACM were analyzed throughout the entire building.

- A total of 164 of these samples were collected in the Boiler 1-12 portion of the English Station building. Thirty-one materials, including floor tiles, floor and other types of panels, pipe coating/wrap, mastics, gaskets, wallboard, glazing, window and door caulks (interior and exterior surfaces), and electric conduit were identified as ACM via laboratory testing.
- A total of 90 samples were collected in the Boiler 13/14 portion of the English Station building. Twenty-three materials, including floor tiles, floor and other types of panels, pipe

and wire insulation, mastics, gaskets, wallboard, glazing, window and door caulks (interior and exterior surfaces), insulation, cloth/canvas/felt, roofing materials and tar, duct putty, transite panels, and various fibrous materials were identified as ACM via laboratory testing.

Further, other materials that were not accessible to sampling personnel were identified as suspect ACM based on reviews of information provided to GEI by UI, institutional knowledge, and other lines of evidence.

The hazardous materials survey portion of GEI's 1999 effort was carried out by inspecting all accessible areas of the building to assess building materials, equipment, and sludges/sediments/oils that were known or suspected to contain hazardous materials, examples of which included oil-filled equipment, mercury switches, stained concrete, ash and oil-filled pipes. Over 130 samples of various materials were collected throughout the entirety of the English Station building as part of this survey. Given the host of various materials sampled, various types of sampling equipment and methodologies were utilized, with care taken to decontaminate tools between the collection of samples in order to prevent cross-contamination. Depending on their suspected constituents of concern, these samples were analyzed for one or more of the following: total petroleum hydrocarbons (TPH) via EPA Method 418.1, polychlorinated biphenyls (PCBs) by EPA Method 8082, toxicity characteristic leaching procedure (TCLP) Resource Conservation and Recovery Act (RCRA) 8 metals, volatile organic compounds (VOCs) by EPA Method 8260 and/or semi-volatile organic compounds (SVOCs) via EPA Method 8270. As was the case for the asbestos survey, GEI personnel reviewed information provided to them by UI to develop a list of additional equipment or features that were not accessible for sampling as a means to identify other potentially impacted materials. This information garnered from this portion of GEI's hazards materials survey will not be discussed further, as it was not utilized for the building materials portion of the building inspection.

Lead testing by GEI was limited to the collection and analysis of painted building materials utilizing the Toxicity Characteristic Leaching Procedure (TCLP) (EPA Method 1311) to determine whether the future building debris with the attached paint would be classified as hazardous waste. These building materials consisted of structural steel, brick, concrete, and wood from wall, ceiling, and/or floor surfaces. Direct testing of paints to determine lead content was not conducted. Given

that the method employed by GEI to evaluate LBP is not consistent with today's standards, the results of that sampling will not be summarized herein.

A copy of the GEI report tables and figures are included as Appendix B.

### 3.1.2 *2011 Interior PCB Equipment Survey Results – Oil/Wipe/Paint Chip Samples; Western Side – English Station* (GeoQuest, 2011)

In August and September 2011, GeoQuest personnel conducted a survey of potential PCB-containing equipment remaining in the English Station building. In October of 2011, sampling of the equipment previously identified on the western side of English Station (not in the area covered by this Scope) commenced.

A letter from GeoQuest to the CTDEEP dated December 6, 2011, discusses the October 2011 PCB sampling event. Although the focus of the letter is primarily to convey PCB sample results from samples collected throughout the western portion of the English Station power plant, an associated table also identifies potential PCB sources identified throughout the eastern portion of the building. The table identifies a total of 45 potential PCB sources within the eastern, low-pressure boiler, portion of the building. To date, no laboratory data reporting PCB concentrations for the eastern locations has been identified. It is believed that although possible PCB locations were identified and inventoried, these areas have yet to be sampled for PCB analysis. The letter indicated that in general, most of the equipment that remained at the time in the western portion of the English Station building was determined to be non-PCB-containing. Further, it was stated in the letter that the equipment that was known to contain PCBs would need to remain at the Site until such time that it could be properly handled and that there was equipment that required to be cut open and tested. A copy of the potential PCB source inventory table prepared by GeoQuest is included as Appendix C

## 3.2 Previously Approved Alternate Work Practices

### 3.2.1 *2017 Application for Approval of Alternate Work Practices*, TRC (TRC, 2017)

In March 2017, TRC submitted an Application for Approval of Alternative Work Practices related to clean-up of asbestos contaminated debris throughout Boiler 1-12 Area, Boiler 13/14 Area, and the Reactor Room Area (located in west portion of the building), as well as Asbestos

Waste Trailer and Asbestos Personnel Decon Trailer exterior to the building. The application requested the use of critical barriers only in lieu of covering wall and floor surfaces throughout the building with polyethylene sheeting. This application received approval from CT DPH on May 5, 2017. Abatement activities described in this Application for Approval of Alternative Work Practices were conducted in the Reactor Room Area, and Asbestos Waste Trailer and Asbestos Personnel Decon Trailer exterior to the building in 2017.

### 3.2.2 *2018 Application for Approval of Alternative Work Practices, TRC (TRC, 2018)*

In April 2018, TRC submitted an Application for Approval of Alternative Work Practices related to clean-up of asbestos contaminated debris throughout Boiler 1-12 Area and Boiler 13/14 Area. The application extended the 2017 application beyond the 2017 calendar year, and requested the use of critical barriers only in lieu of covering wall and floor surfaces throughout the building with polyethylene sheeting. This application received approval from CT DPH on April 13, 2018. Abatement activities described in this Application for Approval of Alternative Work Practices in the Boiler 1-12 Area and Boiler 13/14 Area are in progress.

## **4.0 FIELD INVESTIGATION PLAN FOR BUILDING MATERIALS**

### **4.1 Approach**

The following sections provide a description of the approach that will be used to conduct the inspections and investigations of the Boiler 1-12 & Boiler 13/14 portions of the English Station building, including a discussion of objectives, current conditions, the inspection process, proposed sampling locations, and sampling methodologies.

The Scope of Study for Boiler 1-12 will require 350 samples to be collected of bulk building material products to properly characterize in regards to PCB concentrations. The Scope of Study for Boiler 13/14 will require 560 samples to be collected to properly characterize in regards to PCB concentrations. Therefore, in total there will be approximately 910 bulk material samples collected throughout the Boiler 1-12 and Boiler 13/14 areas. That translates to approximately one sample per every 64 square feet of building footprint.

The breakdown by the two areas is as follows:

Boiler #1 thru #12 = 28,000 SF / 350 Samples = 1 per 80 SF of Building Footprint

Boiler #13/#14 = 30,000 SF / 560 Samples = 1 per 54 SF of Building Footprint

For each material identified by type, color, substrate, floor location, age of the construction and other visual observations, there will be a minimum of three samples collected for each individual material identified. The number of samples will increase for each individual material as the total square footage of the coverage increases. Typically, if the surface coverage for a given material is less than 5,000 SF, then three samples should be adequate. As the square footage increases then more samples are added, at the expected rate of one additional sample per 5,000 SF. Based on this careful analysis, there should be adequate samples to characterize all of the potential bulk materials in the entire building and provide reasonable confidence that materials deemed non-TSCA or Excluded PCB Product can be managed as such for remediation and disposal purposes.

## 4.2 Asbestos Investigation

### 4.2.1 Objectives for Asbestos Investigation

The objective of the asbestos investigation is to identify, document, and assess asbestos and asbestos-containing materials; determine if such materials are friable, damaged, unstable and accessible or may be disturbed by other actions required by the PCO; and determine how to conduct the abatement of the asbestos in accordance with all applicable laws (including EPA 40 CFR 61, OSHA Asbestos 29 CFR 1926.1101, and CT DPH Standards for Asbestos Abatement 19a-332a-1 to 19a-332a-16) and develop a plan for doing so.

Although previous inspection efforts (GEI, 1999) identified the presence of asbestos-containing materials in the building section, subsequent events have caused significant changes to the findings contained in the previous inspection report. These events included asbestos abatement / demolition projects (Grant Mackay/Classic Environmental), water intrusions, and site vandalism/scavenging.

Asbestos abatement projects have been conducted in various locations of the building, eliminating a portion of the previously identified materials. Most recently, the “make-safe” effort completed in August of 2018, eliminated the majority of any friable, damaged, unstable and accessible asbestos-containing materials.

Investigation of the Boiler 1-12 & Boiler 13/14 portions of the English Station building must be conducted to document current conditions, locations, and quantities of remaining asbestos-containing materials, asbestos-containing debris and wastes, and to determine potential asbestos content of previously unidentified materials. TRC estimates this will require the collection and analysis of approximately twenty-five (25) samples in the Boiler 1-12 Area and approximately thirty-five (35) samples in the Boiler 13/14 Area. Inspection results will be used to determine specific methods of abatement that will be utilized for individual components or materials found friable and defective.

A general breakdown of Photos of current conditions in the Boiler 1-12 & Boiler 13/14 areas can be found in Appendix D of this report.

#### 4.2.2 Investigation Process

Investigation of the Boiler 1-12 & Boiler 13/14 portions is to be conducted as a walk-through visual survey of each room and/or area of the building. The investigation must be conducted by State of Connecticut licensed asbestos inspectors.

The investigation is to begin with a systematic visual assessment of all accessible interior and exterior areas of the project area in order to identify asbestos-containing material and note its specific location and condition. All asbestos-containing material, including intact materials, damaged materials, debris, and suspect materials, must be identified and assessed. The inspectors will assess the current conditions of identified asbestos-containing materials, document locations and quantities of damaged asbestos-containing materials, document locations and quantities of asbestos-containing debris, and identify suspect asbestos-containing materials that were not previously identified.

#### 4.2.3 Asbestos Sampling Methodology

Suspect asbestos-containing materials not previously identified will be sampled to determine asbestos content prior to any activities that may disturb them, in compliance with EPA Asbestos National Emissions Standard for Hazardous Air Pollutants (NESHAP) regulations. The state of the art methodology, and industry standard, for surveying and evaluating buildings and structures to determine the presence of asbestos-containing material will be performed in accordance with current EPA Asbestos Hazard Emergency Response Act (AHERA) (40 CFR Part 763 Subpart E) sampling guidelines.

Inspection and sample collection will be conducted by State of Connecticut licensed asbestos inspectors following the AHERA protocols.

When previously unidentified suspect material is encountered, the inspector(s) will collect representative bulk samples of suspect homogenous asbestos-containing material identified in accordance with AHERA sampling protocols (2-3-5-7 AHERA sampling scheme). Destructive sampling and wall coring techniques will not be utilized to gain access to suspect ACM covered or concealed by other building materials.

Bulk samples, supported by proper chain-of-custody procedures, will be analyzed by polarized light microscopy (PLM), EPA 600/R93/116 with visual area estimation (vae) quantification in order to determine asbestos content.

The laboratory performing sample analysis will be approved to perform PLM analysis by the CT DPH and an active participant in the National Voluntary Laboratory Accreditation Program (NVLAP).

#### 4.3 Hazardous Materials Investigation

##### 4.3.1 Objectives for Hazardous Materials Investigation

The objectives of the hazardous material investigation are to investigate the presence of lead and mercury as part of the overall hazardous building materials survey and identify non-hazardous and hazardous waste and other hazardous materials. Identification of these materials is required to determine which materials will need to be removed to meet the requirements of the PCO.

##### 4.3.2 Hazardous Materials Sampling Methodology

###### 4.3.2.1 *Other Hazardous/Regulated Materials Inventory (e.g., PCBs, Mercury, CFCs)*

A visual inspection of the Boiler 1-12 & Boiler 13/14 portions of the English Station building will be performed to identify and quantify any suspect PCB-containing transformers, fluorescent light ballasts, suspect mercury-containing fluorescent light lamps or thermostat switches. Additional hazardous/regulated items identified will also be inventoried, and may include: chlorofluorocarbon (CFC)-containing devices, universal waste, used electronics, batteries, on-site oils, drums, chemicals, storage tanks, staining, biological hazards, tires, etc. Hazardous materials identified at the site by the inspectors will be reviewed by a Certified Hazardous Materials Manager (CHMM) to determine and classify the potential hazards of each material identified and the handling/disposal methods that are required.

At the time of the reconnaissance effort, various hazardous or regulated materials (those items which were considered “loose”, “damaged” or impacted as part of the “make-safe” effort) had already been collected, and/or disposed of, as part of the “make-safe” effort.

#### 4.3.2.2 *Lead Paint*

A lead paint inspection of all building structures will be performed using EPA-trained and State of Connecticut-licensed lead inspectors. The method used for the lead paint inspection will be X-ray fluorescence (XRF) utilizing an on-site spectrum analyzer. The XRF detector is a portable unit designed to make fast, accurate, non-destructive measurements of lead concentrations in dry painted surfaces with a detection limit of 0.1 milligrams per square centimeter (mg/cm<sup>2</sup>). Representative measurements of the painted building components will be conducted throughout the project area to determine the general presence of any detectable levels of lead paint. In addition, areas of defective lead paint will also be noted during the inspection.

At the time of the reconnaissance effort, all paints in the Boiler 1-12 & Boiler 13/14 areas were observed to be intact as part of the “make-safe” effort completed in August of 2018.

#### 4.4 PCB Characterization

The goal of the PCB characterization portion of the Boiler 1-12 & Boiler 13/14 areas is to characterize PCB-contaminated areas associated with building materials, under EPA (40 CFR Part 761) PCB regulations, within the boundaries of the project area. This includes:

- Verification of PCB concentrations in building structures identified during previous environmental investigations;
- Characterization of oily wastes and impacted building surfaces (from spills, releases or tracking);
- Characterization of PCB constituents in suspect bulk building material products (caulk, paint, flooring, roofing, mastics, fireproofing, soundproofing, waterproofing, sealants, etc.) and impacted porous building material substrates and soil/groundcover immediately adjacent to these bulk building material products.

##### 4.4.1 Objectives for PCB Characterization

The objectives for meeting the goals of the PCB characterization effort outlined above are discussed in more detail below for the various potentially impacted building materials at the Site.

#### 4.4.1.1 *PCB Releases to Building Materials*

The objective of the building surfaces investigation is the characterization of oily wastes and impacted building surfaces (from spills, releases or tracking) in accordance with EPA (40 CFR Part 761) PCB regulations within the building structures in the project area. This includes verifying PCB concentrations in building structures identified from previous environmental reports. ***This portion of the PCB Characterization is addressed in the Scope of Study – Eastern Portion of English Station Interior (Partial): Boiler 1-12 Area, Prepared August 2018, Revised September 2018 (environmental media only) for the Boiler 1-12 portion and the Boiler 13/14 area will be addressed in the Scope of Study –English Station Interior (Partial): High Pressure Boilers #13 & #14, Prepared October 2018 (environmental media only). PCB releases from spills, releases or tracking will not be discussed further in this document.***

#### 4.4.1.2 *Bulk Building Material Products*

Bulk building material products, including caulk, paint, flooring, roofing, mastics, fireproofing, soundproofing, waterproofing, sealants and other suspect materials, have been identified by the EPA as potentially containing PCBs, particularly those installed from ~1950 to 1979. As part of the site inspection, bulk building material products will be located and properly characterized in regards to PCB concentrations. Careful visual inspection will be performed to identify and sample all separate types/generations of caulk at window surrounds. Should caulk at window surrounds be sampled and identified as containing PCB content at levels >1 ppm, <50 ppm, further investigation will be conducted to determine potential presence of an earlier generation of caulk. If earlier generation of caulk is identified, material will be sampled to determine PCB content. .

#### 4.4.2 Proposed Sampling Locations and Analyses

##### 4.4.2.1 *Bulk Building Material Products*

A limited survey/walkthrough was performed in order to estimate the number of samples that will be required in order to fully characterize the suspect bulk building material products in the Boiler 1-12 & Boiler 13/14 portions of English Station. During the walkthrough, suspect bulk building material products (such as paints, caulks, tar coatings, roofing materials, etc.) were

observed on the interior/exterior of the building/structure in these building sections. Estimated sample quantities for bulk building material products are summarized in Table 1.

#### 4.4.3 PCB Sampling Methodology

##### 4.4.3.1 Bulk Building Material Products

The building investigation for Bulk Building Material Products will be performed following techniques generally employed in the Building Sciences industry to identify, locate and sample homogeneous building materials (i.e., AHERA asbestos sampling guidelines). Sampling methodology will generally involve collecting a minimum of three grab samples per homogenous material type to refute PCB presence, per EPA protocols. Since PCBs were banned from production and use by the EPA in 1979, any buildings or structures that can be shown to have been constructed post-1979 will be excluded from the bulk building material products PCB inspection program. PCB bulk building material product samples will be analyzed at a laboratory approved by the CT DPH utilizing EPA Method 8082 (PCB) with EPA Method 3540C (Soxhlet extraction) as required by EPA Region 1.

##### 4.4.3.2 Adjacent Porous Substrates & Groundcover/Soils

If the results of the bulk building material products sampling program indicate the presence of EPA PCB Bulk Product Waste, then a sampling program will be implemented to identify the PCB migration impact into both the surrounding porous material substrates (brick, concrete, wood, etc.) and adjacent ground cover (soils, concrete, asphalt, etc.) to determine if such materials would also be classified as PCB bulk product waste and/or PCB remediation waste (>1 ppm). Sampling will be conducted in accordance with EPA regulations 40 CFR 761 Subpart N for PCB Remediation Waste characterization (a minimum of 3 samples per bulk material/substrate/soil combination), modified to reduce the maximum sampling efforts from the prescribed 1 sample per 10 lineal feet (LF) while obtaining reliable representative data. All samples of porous material substrates will be collected following the EPA Region 1 *Standard Operating Procedure for Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs)* (EPA, 2011). PCB substrate and ground cover samples will be analyzed at a laboratory approved by the CTDPH, utilizing EPA Method 8082 (PCB) with EPA Method 3540C (Soxhlet extraction) as required by EPA Region 1.

## 5.0 INVESTIGATION SUMMARY REPORT

Following the completion of the studies described herein, an Investigation Summary Report will be prepared. The report will include the following:

- A detailed description of the investigation performed;
- Identification of the type, quantity and location of asbestos, non-hazardous and hazardous wastes or other hazardous materials on the Site;
- A definition of the extent and degree of contamination;
- An evaluation of remedial action alternatives that address the impacts relative to future industrial/commercial Site use, considering the following:
  - For PCBs, for direct exposure outside the buildings, compliance with 40 CFR Part 761 and with the inaccessible soil provisions of §22a-133k-2(b)(3) of the RSRs;
  - For PCBs, for direct exposure inside the buildings, compliance with the high occupancy standards in 40 CFR Part 761; and
  - For PCBs, for direct exposure under the buildings, compliance with the more stringent of the high occupancy standards in 40 CFR Part 761 and the inaccessible soil provisions of §22a-133k-2(b)(3) of the RSRs; and
- A schedule for performing each alternative;
- A list of permits and approvals required for each alternative; and
- A preferred alternative from among those evaluated and justification for its selection.

The remedial action alternatives presented in the report will reflect abatement of asbestos only for that asbestos that is friable, damaged, unstable, and accessible or that may be disturbed by other remedial actions and the manner in which that abatement can be accomplished while complying with all applicable laws. Finally, the report will include a detailed program and schedule to perform the preferred remedial actions, including the preparation of required permit applications and obtaining the associated permits and approvals needed to implement the actions.

## 6.0 REFERENCES

CTDEEP, 2007. Guidance for the Management and Disposal of Lead-Contaminated Materials Generated in the Lead Abatement, Renovation, and Demolition Industries, Prepared by the State of Connecticut, Department of Energy and Environmental Protection, November 4, 1994, Revised November 21, 2005, updated May 18, 2007.

CTDEEP, 2010a. Site Characterization Guidance Document, Prepared by the State of Connecticut, Department of Energy and Environmental Protection, effective date: September, 2007; Revised: December 2010.

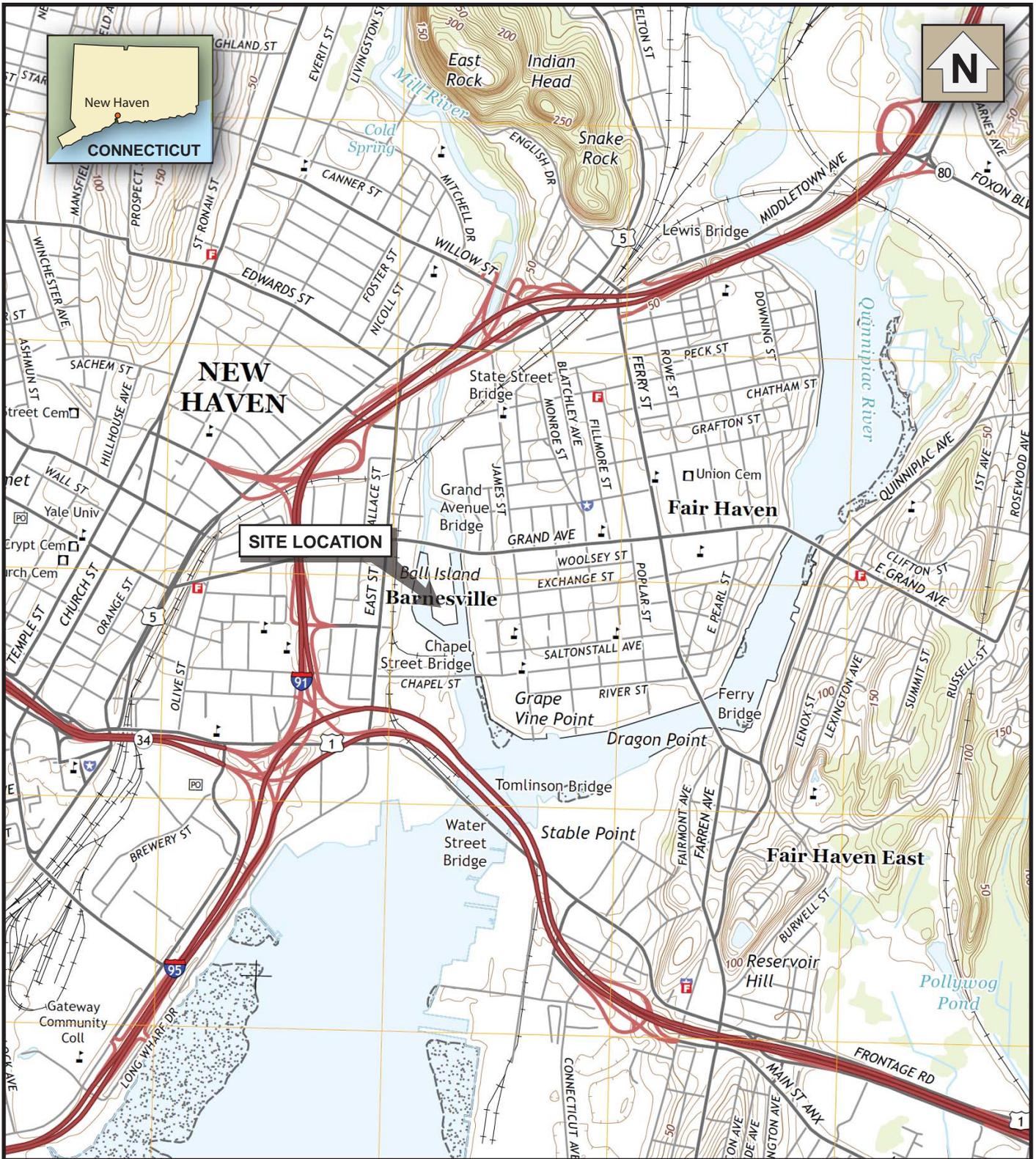
EPA, 2011. Standard Operating Procedure for Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs), Prepared by U.S. Environmental Protection Agency, Region 1, May 2011.

GEI, 1999. Asbestos and Hazardous Materials Survey, English Station, 510 Grand Avenue, New Haven, CT; Prepared by: GEI Consultants, Inc.; Prepared for TLG Services, Inc.; dated December 21, 1999.

GeoQuest, 2011. Interior PCB Equipment Survey Results – Oil/Wipe/Paint Chip Samples; Western Side – English Station. Letter report transmitted to CTDEEP by GeoQuest dated December 6, 2011.

Partner, 2015. Revised Equipment Decontamination Work Plan-Former English Station Site, 510 Grand Avenue, New Haven, CT; Prepared by: Partner Engineering and Science, Inc.; Prepared for: Grant Mackay Company, Inc.; dated March 10, 2015.

## **FIGURES**



1:24000

BASE CREATED WITH 7.5' USGS TOPOGRAPHIC MAP  
NEW HAVEN, CT 2015



21 Griffin Road North  
Windsor, CT 06095  
Phone: 860.298.9692

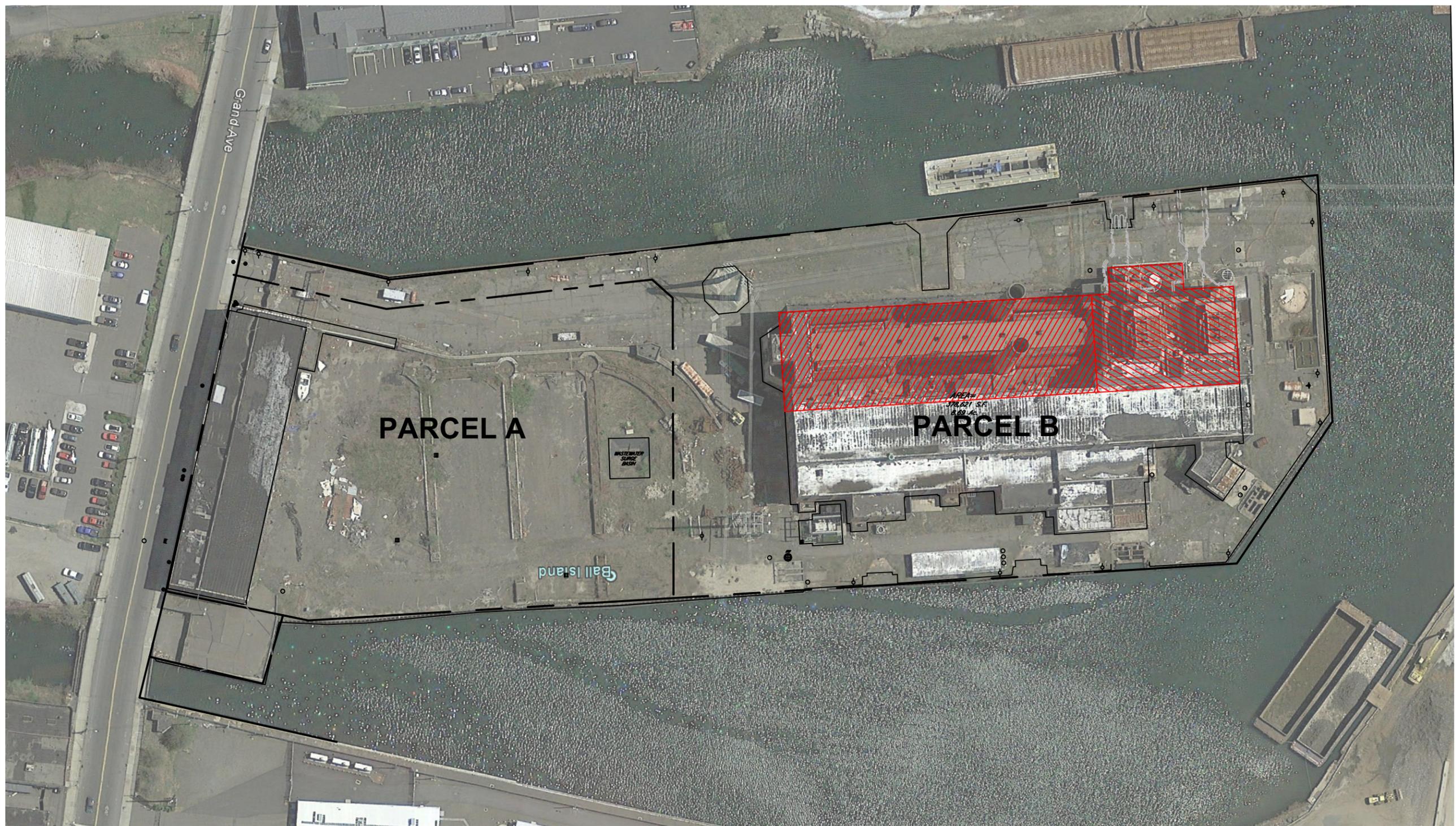
**ENGLISH STATION**  
510 GRAND AVENUE, NEW HAVEN, CT

**FIGURE 1**  
**SITE LOCATION MAP**

DATE: 10/2016

PROJECT NO. 263951.0000.000000

11x17 -- ATTACHED REFERENCE: -- ATTACHED IMAGES: Google 4/20/2016, Google 4/20/2016, Google 4/20/2016, Project English, Figures, 20160628, Page, 1, Project English, Figures, 20160628, Page, 2, DRAWING NAME: J:\CAD\United Illuminating\English Station\263951\Building Interior PCBs\ASB\_Scope Of Study\Boilers 13-14 Area-000002\0000001\Figures 2 & 3.dwg --- PLOT DATE: October 30, 2018 - 11:51 AM --- LAYOUT: Figure 2



**LEGEND**



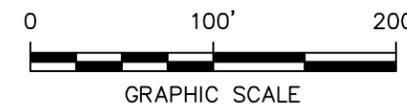
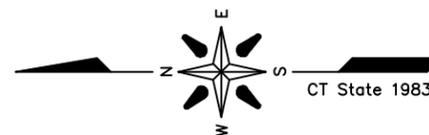
SCOPE OF STUDY SUBJECT  
BOILER #1 - #12 AREA



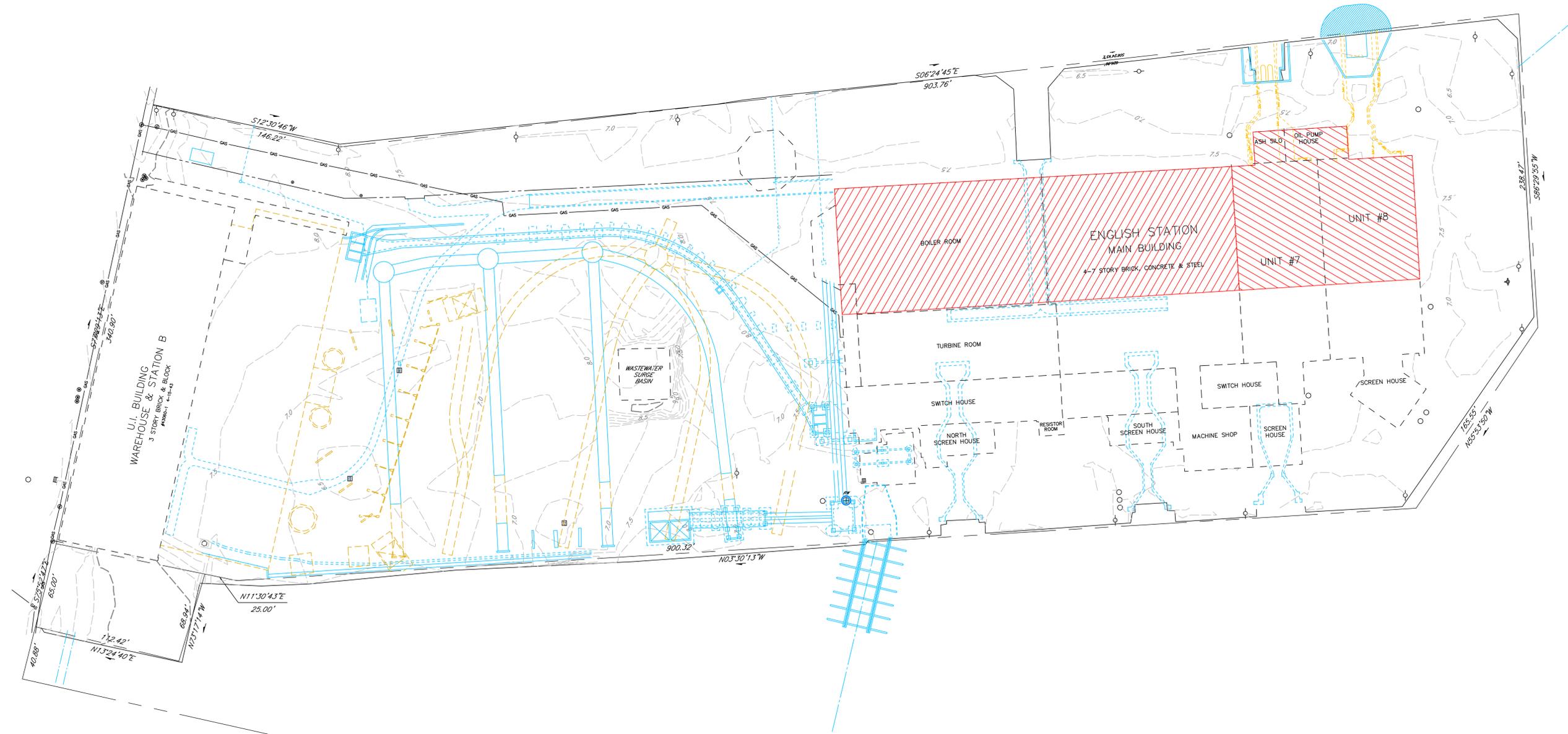
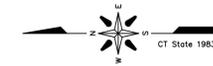
SCOPE OF STUDY SUBJECT  
BOILER #13/14 AREA

**SOURCE:**

- MAP TITLED "FIGURE 3N, MASS ANALYSIS PCB SAMPLE POINT LOCATIONS-NORTH, PREPARED FOR QUINNIPIAC ENERGY, LLC., ENGLISH STATION, 510 GRAND AVENUE, NEW HAVEN, CT." DATED: 3/1/10, SCALE: 1"=20', BY ADVANCED ENVIRONMENTAL INTERFACE, INC.
- AERIAL IMAGE FROM GOOGLE EARTH PRO, DATE OF IMAGE: 04/20/2016



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TITLE:		<b>SITE PLAN AND APPROXIMATE PARCEL BOUNDARIES</b>	
DRAWN BY:	K. Hollenbeck	PROJ NO.:	263951-000020-000000
CHECKED BY:	G. Kaczynski	<b>FIGURE 2</b>	
APPROVED BY:	M. Kearney		
DATE:	10/29/2018		
		21 Griffin Road North Windsor, CT 06095 Phone: 860.298.9692 www.trcsolutions.com	
FILE NO.:	Figures 2 & 3.dwg		



EXISTING LEGEND			
	PROPERTY / STREET LINE		BRASS DISC
	WIRE / CHAIN LINK FENCE		TEST BORING
	GUARDRAIL		MONITORING WELL
	BULKHEAD		SURFACE SOIL SAMPLE
	GAS LINE		NOW OR FORMERLY
	OVERHEAD WIRE		ROUND CATCH BASIN
	"H" DITCH		TYPE "C-L" CATCH BASIN
	WATER GATE		UTILITY POLE
	GAS GATE		FIRE HYDRANT
	EXISTING STRUCTURE		LIGHT POLE
	HISTORIC FEATURES		MANHOLE
	HISTORIC DEMOLISHED FEATURES		ELEVATION
			INULT

LEGEND	
	SCOPE OF STUDY SUBJECT BOILER #1 - #12 AREA
	SCOPE OF STUDY SUBJECT BOILER #13/14 AREA

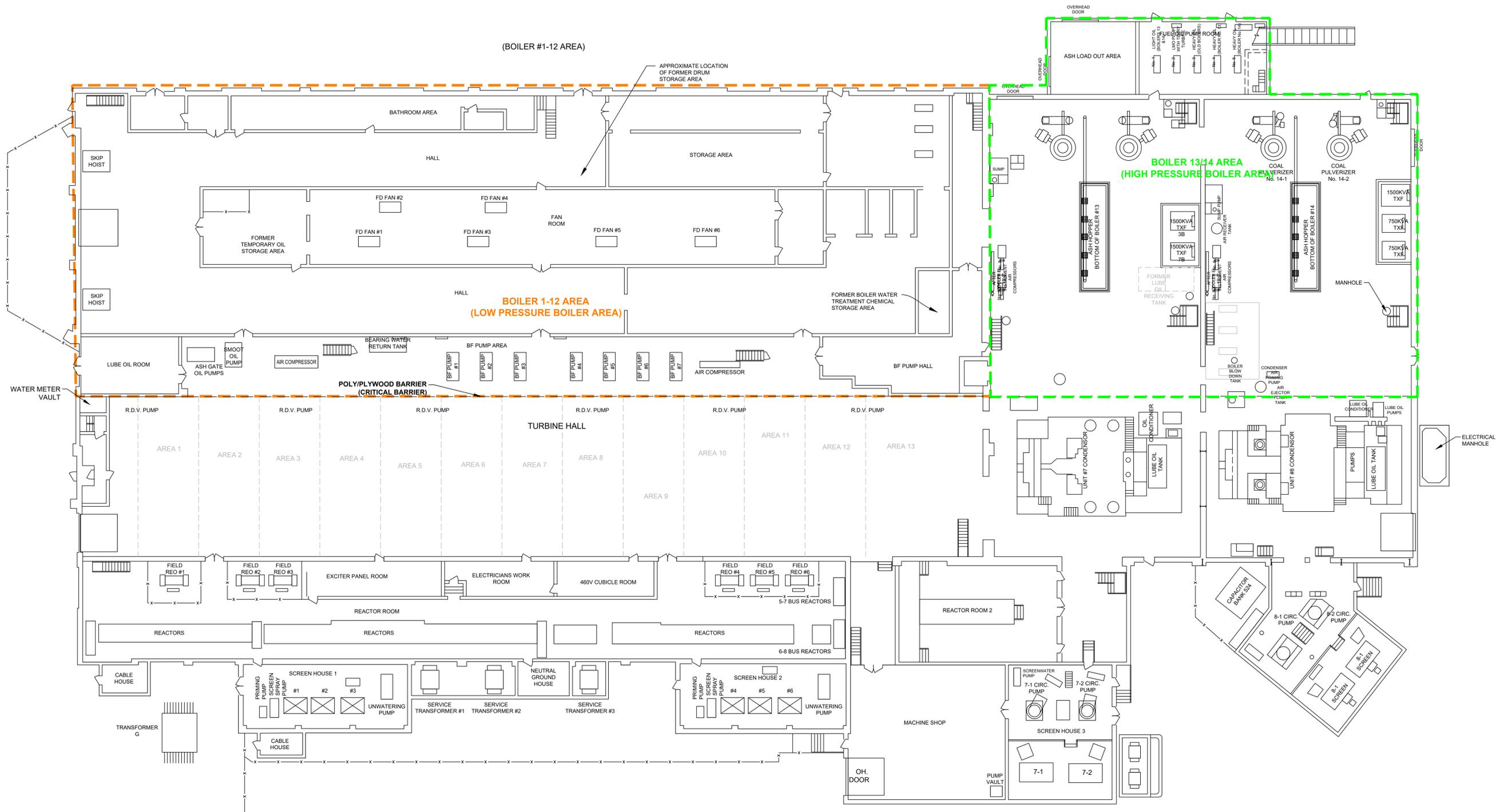
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TITLE: SCOPE OF STUDY FOCUS AREA	
DRAWN BY: K. Hollenbeck	PROJ. NO.: 263951-000020-000000
CHECKED BY: G. Kaczynski	
APPROVED BY: M. Kerney	FIGURE 3
DATE: 10/29/2018	
21 Griffin Road North Windsor, CT 06095 Phone: 860.298.9692 www.trcsolutions.com	
FILE NO.:	Figures 2 & 3.dwg

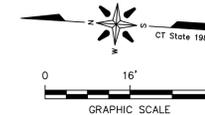
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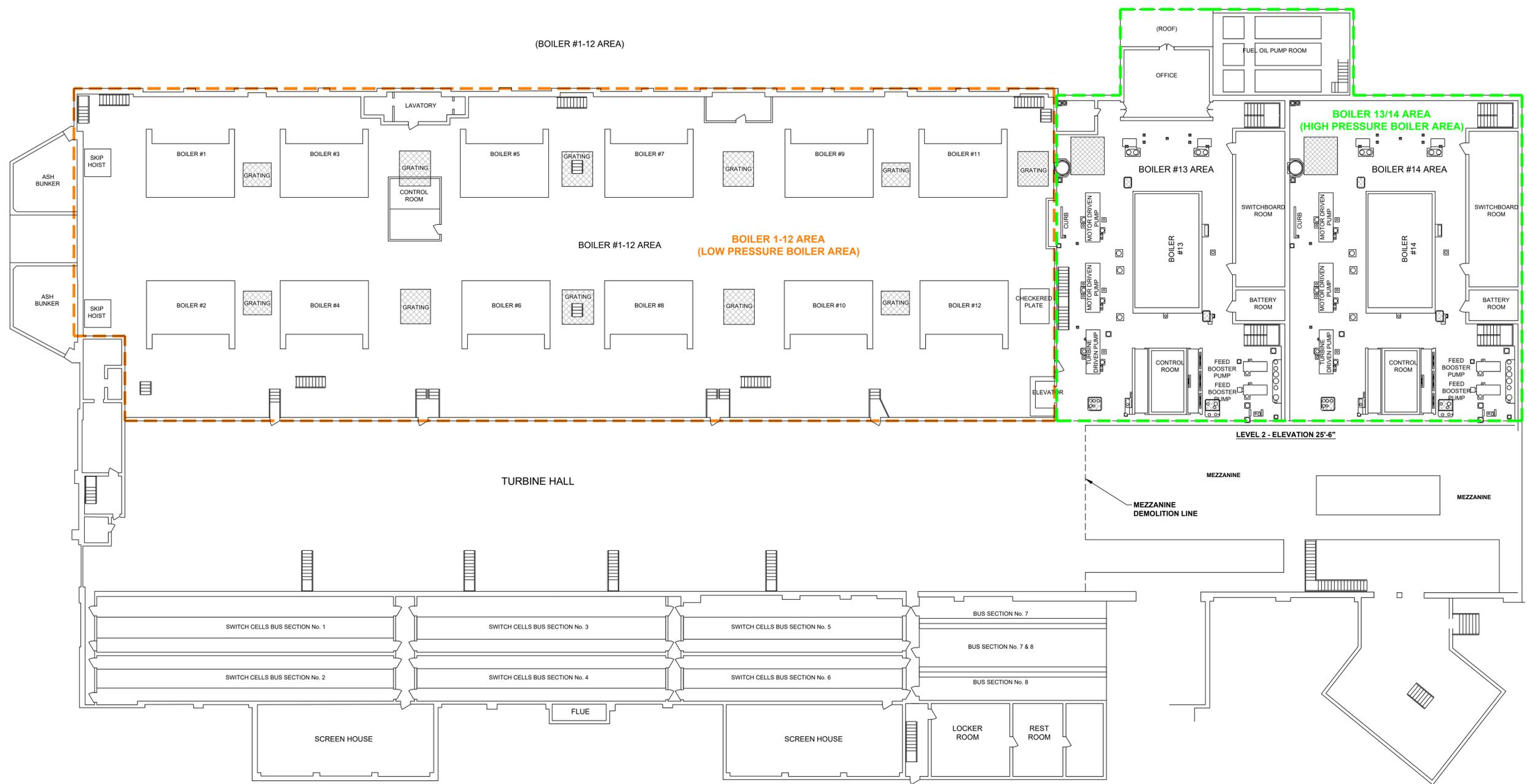
LEVEL 1 - ELEVATION 5'-6"

SOURCE:  
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PROJECT:		UNITED ILLUMINATING ENGLISH STATION POWER PLANT 510 Grand Avenue New Haven, Connecticut	
TITLE:		1ST FLOOR - BOILER #1-12 AND BOILER #13/14 SCOPE OF STUDY AREAS	
DRAWN BY:	K. Hollenbeck	PROJ. NO.:	263951-000020-000000
CHECKED BY:	G. Kaczynski	<b>Figure 4</b>	
APPROVED BY:	M. Kearney		
DATE:	10/29/2018		
		21 Griffin Road North Windsor, CT 06095 Phone: 860.298.9692 www.trcsolutions.com	
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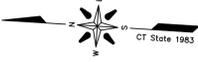
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**LEGEND**

	METAL GRATING
	PIPE PENETRATION

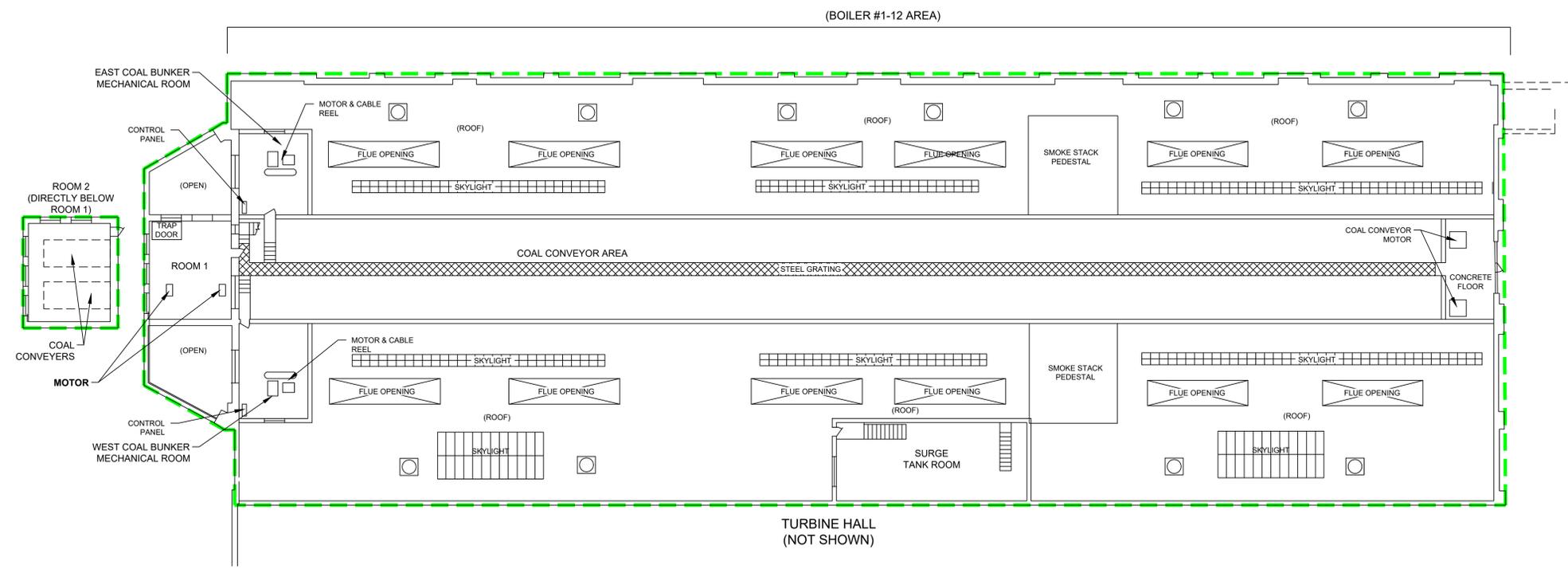
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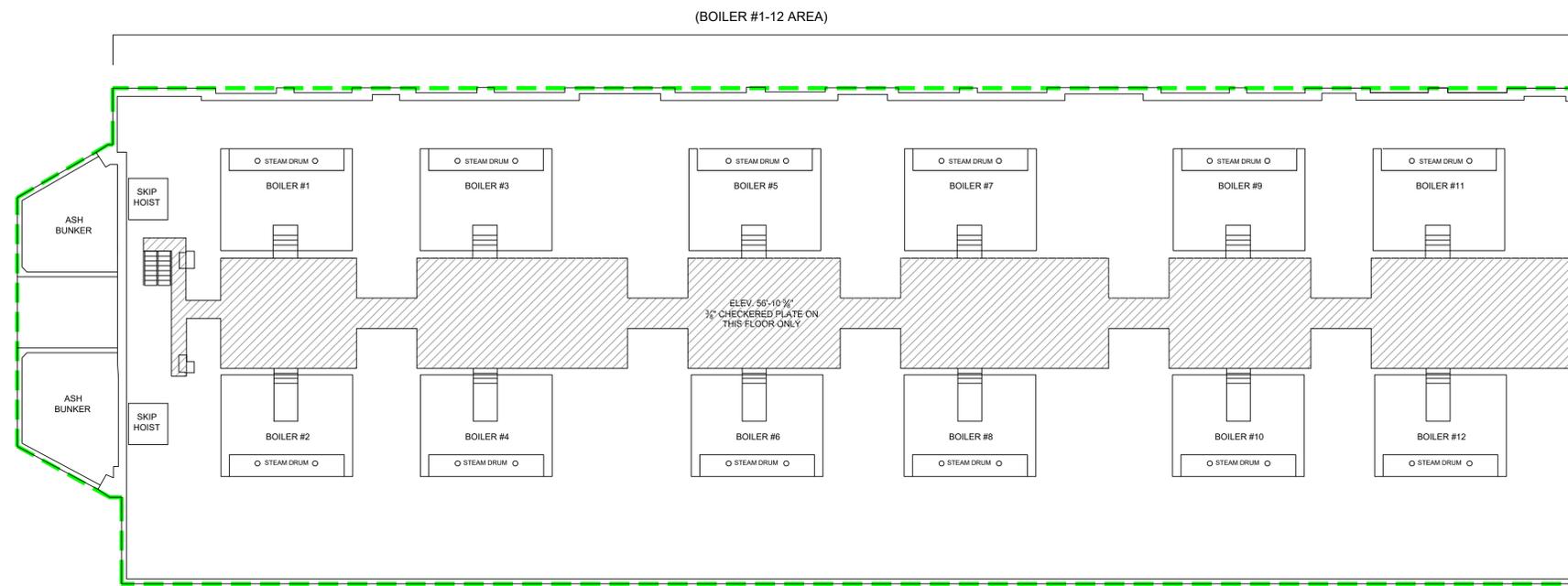

GRAPHIC SCALE

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<b>DRAWN BY:</b> K. Hollenbeck	<b>PROJ. NO.:</b> 263951-000020-000000
<b>CHECKED BY:</b> G. Kaczynski	<b>Figure 5</b>
<b>APPROVED BY:</b> M. Kearney	
<b>DATE:</b> 10/29/2018	
	
21 Griffin Road North Windsor, CT 06095 Phone: 860.298.9692 www.trcsolutions.com	
<b>FILE NO.:</b>	Plate-1.dwg

DRAWING NAME: J:\CAD\United Illuminating\English Station-2633951\Building Interior PCB-ASB Scope Of Study-Boilers 13-14 Area-000020000001\Plate-1.dwg --- PLOT DATE: October 30, 2018 - 11:24AM --- LAYOUT: Figure 6

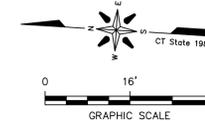


COAL CONVEYOR LEVEL AND UPPER ELEVATED AREAS



MEZZANINE

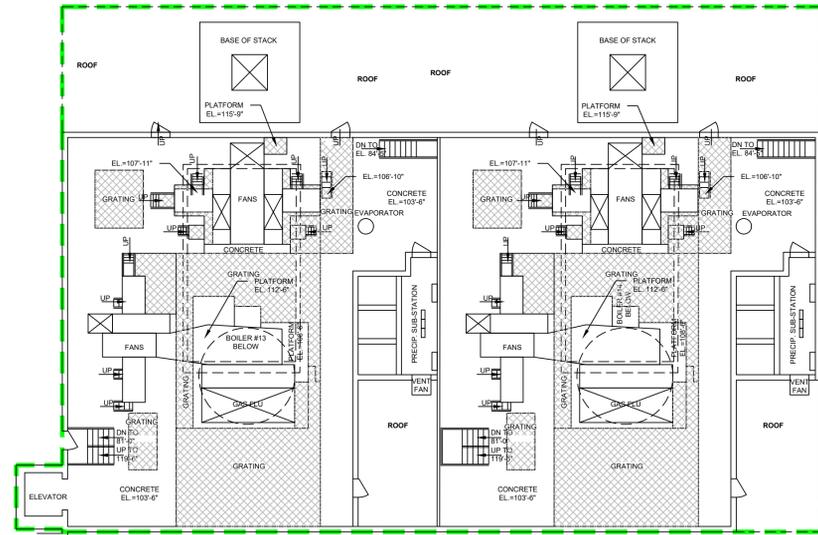
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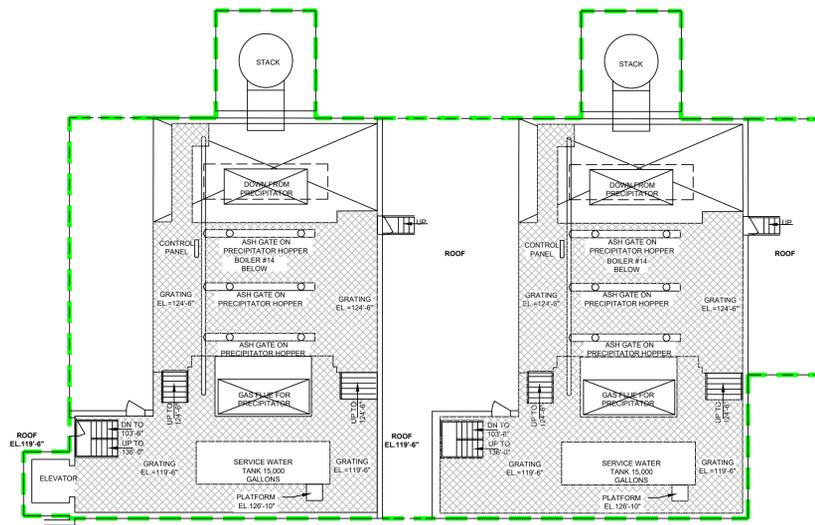
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DRAWN BY:	K. Hollenbeck	PROJ. NO.:	263951-000020-000000
CHECKED BY:	G. Kaczynski	<b>Figure 6</b>	
APPROVED BY:	M. Kearney		
DATE:	10/29/2018		
		21 Griffin Road North Windsor, CT 06095 Phone: 860.298.9692 www.trcsolutions.com	
FILE NO.:		Plate-1.dwg	



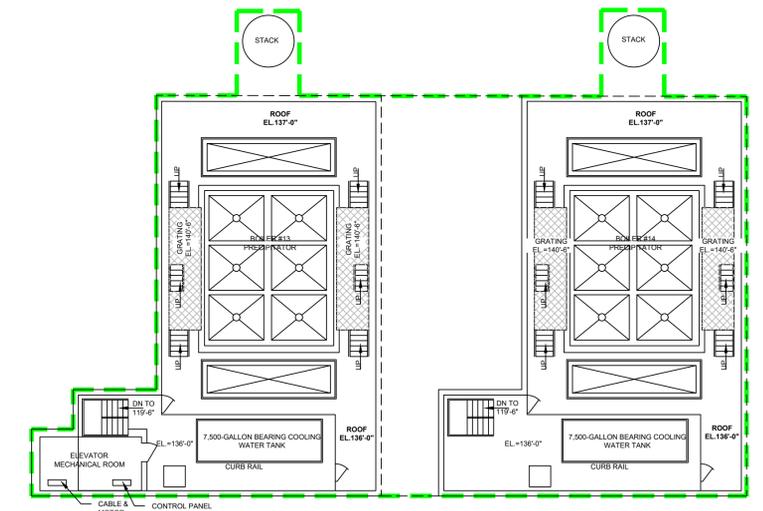
DRAWING NAME: J:\CAD\United Illuminating\English Station-2633951\Building Interior-PCB-ASB Scope Of Study-Boilers 13-14 Area-000020000000\Plate-1.dwg --- PLOT DATE: October 30, 2018 - 1:04PM --- LAYOUT: Figure 8



**BOILER 13/14 AREA  
(HIGH PRESSURE BOILER AREA)  
LEVEL 7 - ELEVATION 103'-6"**



**BOILER 13/14 AREA  
(HIGH PRESSURE BOILER AREA)  
LEVEL 8 - ELEVATION 119'-6" & 124'-6"**



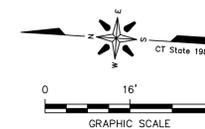
**BOILER 13/14 AREA  
(HIGH PRESSURE BOILER AREA)  
LEVEL 9 - ELEVATION 136'-0" & 137'-0"**

**LEGEND**

- METAL GRATING
- PIPE PENETRATION

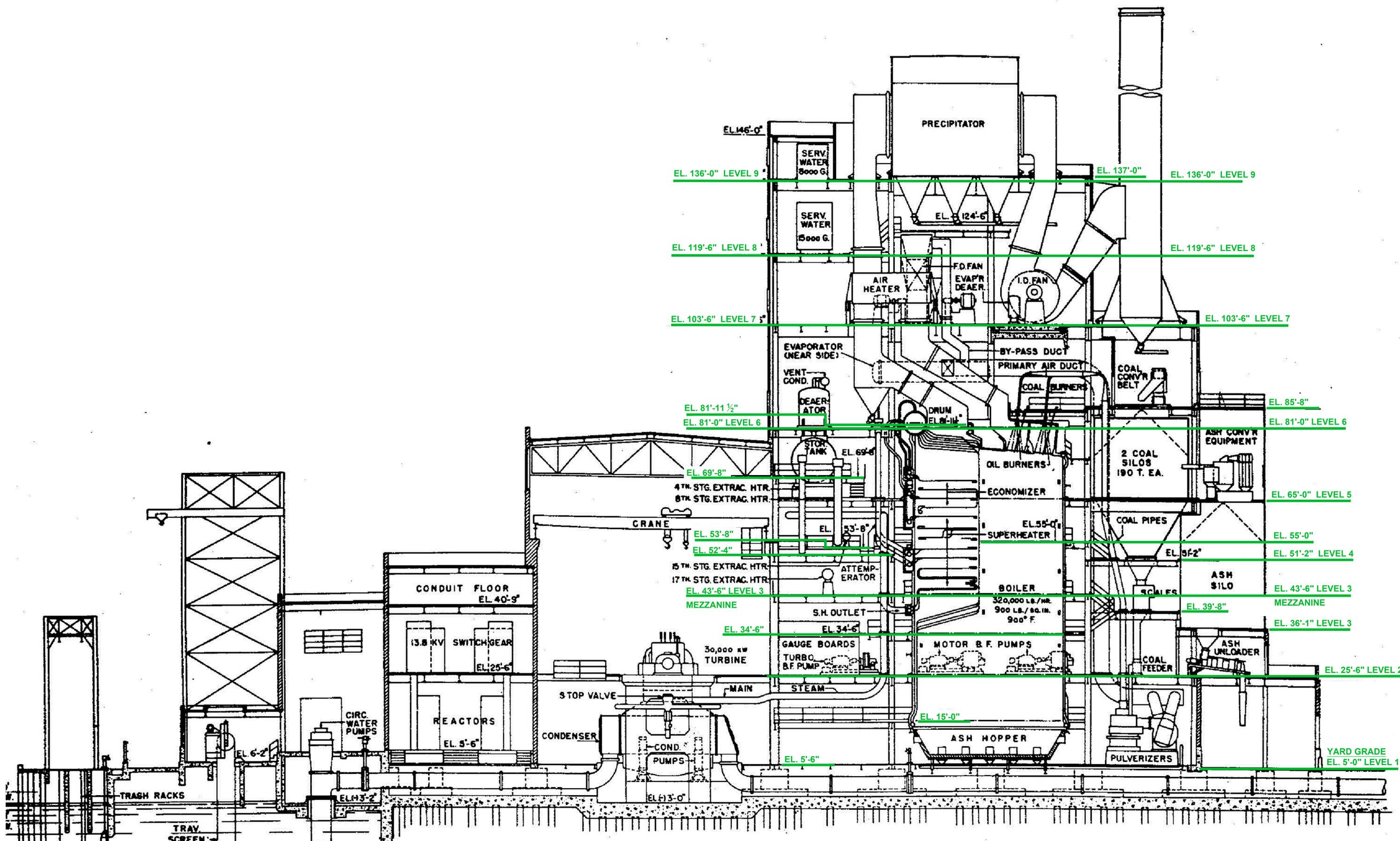
**SOURCES:**

- MAP TITLED "30,000 KW TURBINE INSTALLATION, UNIT NUMBER EIGHT, UNITED ILLUMINATING CO., ENGLISH STATION, NEW HAVEN, CONN., PLANS OF BOILER ROOM AT ALL ELEVATIONS 77'-6" & ABOVE", DRAWING 51060-1404, SCALE: 1/8"=1'-0", DATED: 12/22/52, BY WESTCOTT & MAPES, INC.
- MAP TITLED "PLAN PREPARED FOR UNITED ILLUMINATING CO., ENGLISH STATION, NEW HAVEN, CONN., EQUIPMENT LOCATION PLANS, PLANS AT ELEVATIONS 103'-6" & ABOVE", PROJ. No. 45060, DWG. No. 215, SCALE: 1/8"=1'-0", DATED: 02/25/48, BY WESTCOTT & MAPES, INC.

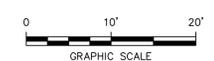


<b>PROJECT:</b>		<b>UNITED ILLUMINATING ENGLISH STATION POWER PLANT 510 Grand Avenue New Haven, Connecticut</b>	
<b>TITLE:</b>		<b>7th - 9th FLOORS - BOILER #13/14 SCOPE OF STUDY AREA</b>	
<b>DRAWN BY:</b>	K. Hollenbeck	<b>PROJ. NO.:</b>	263951-000020-000000
<b>CHECKED BY:</b>	G. Kaczynski	<b>Figure 8</b>	
<b>APPROVED BY:</b>	M. Kearney		
<b>DATE:</b>	10/29/2018		
		21 Griffin Road North Windsor, CT 06095 Phone: 860.298.9692 www.trcsolutions.com	
<b>FILE NO.:</b>		Plate-1.dwg	

DRAWING NAME: J:\CAD\United Illuminating\English Station\PCB-ASB Scope of Study\Boilers 13-14 Area\000020000001.Plate-1.dwg --- PLOT DATE: October 30, 2018 - 11:45AM --- LAYOUT: Figure 9



SOURCE:  
 MAP TITLED "ENGLISH STATION EXTENSION, UNIT  
 No. 7, THE UNITED ILLUMINATING COMPANY, NEW  
 HAVEN, CONNECTICUT, FIG. 1-3", BY WESTCOTT &  
 MAPES, INC.



PROJECT:		UNITED ILLUMINATING ENGLISH STATION POWER PLANT 510 Grand Avenue New Haven, Connecticut	
TITLE:		CROSS-SECTION VIEW OF BOILER #13/14 SCOPE OF STUDY AREA	
DRAWN BY:	K. Hollenbeck	PROJ. NO.:	263951-000020-000000
CHECKED BY:	G. Kaczynski	Figure 9	
APPROVED BY:	M. Kearney		
DATE:	10/29/2018		
		21 Griffin Road North Windsor, CT 06095 Phone: 860.298.9692 www.trcsolutions.com	
FILE NO.:	Plate-1.dwg		

## **TABLES**

**TABLE 1**  
**ESTIMATED PCB BULK SAMPLE QUANTITIES**  
**ENGLISH STATION – BOILER 1-12 & BOILER 13/14 AREAS**

English Station  
510 Grand Avenue  
New Haven, Connecticut

<b>General Location</b>	<b>Estimated Quantity of Homogeneous Bulk Building Materials Identified</b>	<b>Estimated Quantity of Bulk Building Material Samples</b>
<b>Boiler 1-12 Area</b>		
1 <sup>st</sup> Floor	55	157
2 <sup>nd</sup> Floor including Mezzanine, Coal Conveyor, and Upper Elevated Areas	24	79
Exterior (Roof, Façade, Windows)	40	120
<b>TOTAL</b>	<b>119</b>	<b>356</b>
<b>Boiler 13/14 Area</b>		
Boiler 13 Interior	55	165
Boiler 13 Exterior	33	99
Boiler 14 Interior	60	180
Boiler 14 Exterior	33	99
<b>TOTAL</b>	<b>181</b>	<b>543</b>

# **APPENDIX A**

**PARTIAL CONSENT ORDER COWSPCB 15-001**

V.

THE UNITED ILLUMINATING COMPANY

PARTIAL CONSENT ORDER NUMBER COWSPCB 15-001<sup>1</sup>

Date Issued: \_\_\_\_\_

A. The Commissioner of Energy and Environmental Protection (the “Commissioner”) finds:

1. Respondent The United Illuminating Company (“UI”) is a regional electric distribution company, established in New Haven, Connecticut in 1899, currently engaged in the purchase, transmission, distribution and sale of electricity and related services to residential, commercial and industrial customers.
2. Respondent has a business address of 180 Marsh Hill Road, Orange, Connecticut.
3. From 1914 until December of 2000, Respondent owned an approximately 8.9 acre parcel of land located at 510 Grand Avenue in New Haven, Connecticut, as set forth in Sections A.5. through A.10. below, said site is presently described in two deeds recorded at page 14 of volume 7814, and page 195 volume 7817 of the City of New Haven land records (the “Site”). The Site, part of an island in the Mill River, is depicted on the map included as Exhibit A to this Consent Order. For purposes of Respondent’s obligations under this Consent Order, any reference to the Site includes all soil, surface water, groundwater and sediment located within the perimeter of the Site as shown on Exhibit A, but shall not include offsite soil, groundwater and sediment in the Mill River, including the East and West branches of said River or any areas that are offsite from the Site.
4. The Site is referred to and known as “English Station.”
5. On or about August 16, 2000, Respondent transferred the Site to Quinnipiac Energy, LLC (“Quinnipiac Energy”) as described in a deed which is recorded at page 72 of volume 5716 of the City of New Haven land records.

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<sup>1</sup> This Consent Order is referred to herein as “Partial Consent Order”, “Consent Order” or “order.”

6. At some point prior to December 9, 2006, the Site was divided into two parcels, Parcel A and Parcel B.
7. Parcel A is located on the northern portion of the Site adjacent to Grand Avenue and includes, among other structures, a building known as Station B.
8. Parcel B is located on the southern portion of the Site and includes, among other structures, a former power generation building.
9. On December 9, 2006, Quinnipiac Energy sold Parcel A to Evergreen Power, LLC (“Evergreen”), as described in a deed which is recorded at page 14 of volume 7814 of the City of New Haven land records.
10. On December 13, 2006, Quinnipiac Energy sold Parcel B to ASNAT Realty, LLC (“ASNAT”), as described in a deed which is recorded at page 195 of volume 7817 of the City of New Haven land records.

#### **SITE HISTORY AND ENVIRONMENTAL SETTING**

11. Groundwater below and near the Site is classified as a GB groundwater area.
12. The surface water of the adjacent Mill River is classified as SD/SB.
13. From 1929 through 1992 Respondent operated an electrical power plant (“the Plant”) at the Site.
14. The Plant was constructed on a man-made island in the middle of the Mill River located south of Grand Avenue in New Haven, CT. The island is constructed of historically placed fill and comprised of ash, dredge spoils, and other miscellaneous debris.
15. In 1992 the Plant was placed on deactivated status.
16. Respondent’s activities on the Site involved the use and storage of equipment and oil, both containing polychlorinated biphenyls (“PCBs”).
17. PCBs are a class of human-made chemicals whose manufacture, along with many of its uses, was banned by the United States Environmental Protection Agency (“EPA”) in 1979. PCBs have been shown to cause cancer in animals. PCBs have been shown to cause other non-cancer health effects in animals and humans including, but not limited to, effects on the immune system, reproductive system, endocrine system, and

nervous system. Studies in humans provide supportive evidence for the potential impact of PCBs on humans.

18. Respondent's activities on the Site also involved the use and/or management of other equipment and/or materials that contained various pollutants including but not limited to metals, volatile organic compounds, semivolatile organic compounds, and total petroleum hydrocarbons.
19. Respondent operated five (5) PCB transformers ("PCB Transformers"), seventy (70) large high voltage capacitors, and eight (8) pieces of PCB containing electrical equipment including additional transformers and circuit breakers.
20. Respondent also operated two (2) PCB storage areas at the Site.
21. Respondent's employees routinely sprayed waste oil, including transformer oil contaminated with PCBs, for dust control, on coal piles, transit areas and handling areas.
22. Between 1975 and 1997, Respondent filed a number of spill reports with the Commissioner in connection with spills at the Site.
23. On or about December 8, 1997, while excavating on the Site, Respondent's employees discovered an oily material on the groundwater table at the Site, which later broke out through a rotted bulkhead and spilled into the Mill River. Analysis of the oily material indicated the presence of PCBs at levels near 350 parts per million ("ppm").
24. The Site has been the subject of a number of plans, reports and investigations that, among other things, have confirmed the presence of PCBs and other hazardous contaminants at the Site at levels exceeding Connecticut's Remediation Standards Regulations ("RSRs"), Regulations of Connecticut State Agencies ("R.C.S.A.") §§22a-133k-1 through 22a-133k-3. Notwithstanding that not all of the these plans, reports or investigations, may have been reviewed and approved by the Commissioner, these plans, reports and investigations shall be taken into account by Respondent in connection with its investigation and remedial actions hereunder, including the following:
  - A 1999 Draft Asbestos and Hazardous Materials Survey for English Station, prepared by GEI Consultants, Inc.;
  - A May 2000 Draft Remedial Action Report prepared by GEI Consultants, Inc.;
  - A 2000 Dismantling Cost Study prepared by TLG Services, Inc.;

- A 2002 Site-Wide PCB Characterization and Clean-Up Plan, prepared by Advanced Environmental Interface;
  - A 2012 Conceptual Remediation Action Plan for PCB Impacted soil, prepared by Stantec Consulting Services;
  - A 2015 Subsurface Investigation Report for the Former English Station, prepared by HRP Associates; and
  - A Revised Equipment Decontamination Work Plan, prepared by Partner Engineering and Science, Inc.
25. The RSRs apply to any action taken to remediate polluted soil or other environmental media, surface water or a groundwater plume at or emanating from a release area which action is required pursuant to Chapter 445 or 446k of the General Statutes.
  26. On March 27, 2003 the Commissioner granted a Widespread Polluted Fill Variance for the Site in accordance with R.C.S.A. § 22a-133k-2(f)(1) (“Fill Variance”).
  27. On or about March 1, 2005, Quinnipiac Energy submitted a Significant Environmental Hazard Report to the Commissioner reporting that PCBs, at concentrations greater than thirty (30) times the industrial/commercial direct exposure criteria established by the RSRs, were present in surface soils at the Site, posing a potential risk to human health through contact and exposure as required by Connecticut General Statutes (“C.G.S.”) § 22a-6u.
  28. On or about May 22, 2007, EPA Region 1 conditionally approved a PCB cleanup plan for Parcel A of the Site proposed by Quinnipiac Energy, although the clean-up was not completed.
  29. To date, five (5) PCB Transformers, which contained PCB transformer oil, remain at the Site in the Plant on Parcel B.

**ESTABLISHING A FACILITY, CREATING A CONDITION, AND/OR MAINTAINING A FACILITY OR CONDITION WHICH CAN REASONABLY BE EXPECTED TO CREATE A SOURCE OF POLLUTION TO THE WATERS OF STATE**

30. By virtue of the above, prior to the transfer of the Site to Quinnipiac Energy on August 16, 2000, Respondent established a facility or created a condition and/or maintained a facility or condition which reasonably can be expected to create a source of pollution to the waters of the State; maintained a discharge of waste in violation of Conn. Gen. Stat. §22a-427; initiated, created, or originated or maintained an unpermitted discharge in

violation of Conn. Gen. Stat. §22a-430; and/or disposed of PCBs or PCB-containing items, products or materials in violation of Conn. Gen. Stat. §22a-467. Respondent denies each such allegation and admits no liability hereunder.

31. Proper disposal of PCBs and the prevention of pollution are within the jurisdiction of the Commissioner under the provisions of Chapters 439, 445 and 446k of the Connecticut General Statutes, including but not limited to, §§ 22a-5, 22a-6, 22a-427, 22a-430, 22a-432, 22a-464, 22a-465, and §22a-467.
32. On April 8, 2013, the Commissioner issued Administrative Order # AOWSPCB 13-001 to Respondent and several other respondents, including ASNATand Evergreen (collectively, the “Current Owner”), Uri Kaufman, Ira Schwartz, and Mehboob Shah, as well as Quinnipiac Energy, and Grant MacKay Company Inc.
33. By agreement to the issuance of this Consent Order Respondent makes no admission of fact or law with respect to the matters addressed herein, including the allegations set forth above, other than the facts asserted in Sections A.1 through 5, A.13, A.15 and A.34 and Respondent shall not be deemed to have made any such admissions by the fact that the Respondent has agreed to perform work pursuant to this Consent Order.
34. The Commissioner and Respondent acknowledge and agree that the current zoning for the Site is heavy industrial and further acknowledge and agree that the remedial actions shall be consistent with this current zoned use.

B. Now, therefore, with the agreement of Respondent, the Commissioner, acting under §22a-6, §22a-424, §22a-425, §22a-427, §22a-430, §22a-431, §22a-432, §22a-449, §22a-465, and §22a-467 of the Connecticut General Statutes, orders Respondent as follows:

1. On-Site Remediation: Respondent shall conduct the investigation and cleanup of the Site in accordance with this Consent Order. Such investigation and cleanup shall be completed pursuant to a schedule acceptable to the Commissioner, provided however that the cleanup, not including any confirmatory monitoring performed by Respondent after the completion of such cleanup activities, shall be completed within 3 years of the Access Date defined in Section B.5 below, unless a later completion date is specified in writing by the Commissioner. Whenever this Consent Order refers to the RSRs, the standards shall be those in effect at the time of the Effective Date unless the Commissioner and the Respondent otherwise agree. The Commissioner and Respondent further agree as follows:
  - a. On or before thirty (30) days from the Effective Date of this order, Respondent shall retain one or more Licensed Environmental Professional(s) (“LEP”(s)) acceptable to the Commissioner to prepare the documents and

implement or oversee the actions required by this order and shall, by that date, notify the Commissioner in writing of the identity of such LEP(s). Respondent shall retain one or more LEP(s) acceptable to the Commissioner until this order is fully complied with, and, within ten (10) days after retaining any LEP(s) other than the one(s) originally identified under this section, Respondent shall notify the Commissioner in writing of the identity of such other LEP(s). The consultants (LEP(s)) retained to perform PCB investigation, remediation, disposal, and confirmatory sampling must be familiar with the PCB requirements of both the applicable state and federal regulations, including but not limited to, those found at 40 CFR Part 761. Respondent shall submit to the Commissioner a description of the LEP's education, experience and training which is relevant to the work required by this order within ten (10) days after a request for such a description. Nothing in this section shall preclude the Commissioner from finding a previously acceptable LEP unacceptable; the Commissioner has determined that the LEPs listed on Exhibit B hereto are acceptable.

- b. On or before sixty (60) days from the Access Date of this order, Respondent shall submit for the Commissioner's review and written approval a scope of study for an investigation of the Site and its potential impact on human health and the environment, including, but not limited to, the existing and potential extent and degree of contamination of soil and ground water, surface water, and sediment within the Site boundary (i.e., within the tunnel on the Site), as well as contamination of the Plant and any other building structures on the Site and any content therein (the "Scope of Study"). The Scope of Study shall:
- be consistent with and comply with the sampling requirements in 40 CFR Part 761 for PCBs, including but not limited to the Standard Operating Procedure for sampling on, into and through concrete;
  - identify, document, inventory and assess asbestos and asbestos-containing materials to determine if such materials are friable, damaged, unstable, and accessible or may be disturbed by other actions required by this Consent Order, and to determine how to conduct asbestos abatement in a manner that is necessary to comply with all applicable laws in connection with a plan of abatement for such materials in accordance with Section B.1.e.8. below.
  - other than with respect to asbestos characterization as addressed above, fully characterize PCB constituents of all caulk, paint, flooring, roofing, mastics, fireproofing, soundproofing, waterproofing, sealants and all other materials. Notwithstanding the above, Respondent shall investigate the presence of lead and mercury.

- identify non-hazardous and hazardous waste and other hazardous materials at the Site; and
- comply with all prevailing standards and guidelines, including, but not limited to, the Connecticut Department of Energy and Environmental Protection's (the "Department" or "DEEP") Site Characterization Guidance Document; and
- include:
  - the proposed location and depths of any additional ground water monitoring wells;
  - a proposed sampling and analytical program including at least the parameters to be tested, proposed sampling and analytical methods, for sediments within the boundary of the Site and soils, surface water, groundwater, the Plant and other structures at the Site and any contents therein as set forth above;
  - quality assurance and quality control procedures; and
  - a schedule for conducting the investigation.

The proposed Scope of Study for the Commissioner's review and approval may reference and evaluate existing data to support the proposed investigation.

- c. If the Commissioner determines that the investigation carried out under the approved Scope of Study, in addition to previous studies and investigations of the Site, does not fully characterize the extent and degree of soil, sediment (within the boundaries of the Site), ground water, and surface water pollution at the Site as well as contamination of the Plant or other structures on the Site and any contents therein, to the satisfaction of the Commissioner, Respondent shall perform additional investigation in accordance with a supplemental plan and schedule approved in writing by the Commissioner. Unless otherwise specified in writing by the Commissioner, the supplemental plan and schedule shall be submitted by Respondent for the Commissioner's review and written approval on or before thirty (30) days after notice from the Commissioner that such supplemental plan is required.
- d. Respondent shall implement the approved Scope of Study and, if same are required, any approved supplemental plan(s), in accordance with the approved schedule(s). Respondent shall notify the Commissioner of the date and time of installation of monitoring wells and of each soil, on-site

sediment, building material and water sampling event at least five (5) full business days prior to such installation or sampling.

- e. Except as may be provided in the investigation schedule approved by the Commissioner, on or before thirty (30) days after the approved date for completion of the investigation, Respondent shall submit for the Commissioner's review and written approval a comprehensive and thorough report which:
- 1) describes in detail the investigation performed;
  - 2) identifies the type, quantity and location of all asbestos, non-hazardous and hazardous wastes or other hazardous materials on the Site;
  - 3) defines the existing and potential extent and degree of soil, sediment within the boundary of the Site, ground water, and surface water pollution as well as all contamination of the Plant and any other structures on the Site and contents therein;
  - 4) evaluates the alternatives for remedial actions to abate on-site pollution and impacts for industrial/commercial use of the Site, including but not limited to any alternative specified by the Commissioner, which alternatives are in compliance with all applicable state and federal statutes and regulations, provided that
    - to address the direct exposure and volatilization requirements under the RSRs for all contaminants (other than PCBs which are addressed below), Respondent will not be obligated to evaluate alternatives for remedial actions other than those required to comply with the commercial/industrial provisions in the RSRs;
    - for PCBs, for direct exposure, a) outside the buildings, Respondent will not be obligated to evaluate alternatives for remedial actions other than those required to comply with 40 CFR Part 761 and with the inaccessible soil provisions of §22a-133k-2(b)(3) of the RSRs, b) inside the buildings, the Respondent shall only be obligated to evaluate alternatives for remedial actions associated with the high occupancy standards in 40 CFR Part 761, and c) under the buildings, the Respondent shall only be obligated to evaluate alternatives for remedial actions associated with the more stringent of the high occupancy standards in 40 CFR Part 761 and the inaccessible soil provisions of §22a-133k-2(b)(3) of the RSRs; and
    - The RSR Pollutant Mobility provisions, for both PCBs and for releases into fill, apply in full to all alternatives; the Fill Variance exempts the Pollutant Mobility provisions with respect to the fill itself. The alternatives for remedial actions evaluated by Respondent must also include those alternatives for remedial actions required to comply with this Consent Order as set forth in this subsection B.1. and any approval

issued to Respondent by the Connecticut Department of Public Health requiring Respondent to abate asbestos containing materials that are friable, damaged, unstable, and accessible or may be disturbed by other actions required by this Consent Order.

- 5) states in detail the most expeditious schedule for performing each alternative;
  - 6) lists all permits and approvals required for each alternative, including but not limited to any permits required under Sections 22a-32, 22a-42a, 22a-342, 22a-361, 22a-368, 22a-430, 22a-465 or 22a-467 of the Connecticut General Statutes;
  - 7) proposes a preferred alternative from among those evaluated pursuant to and consistent with the provisions identified in Section B.1.e.4., with supporting justification therefor;
  - 8) provides that Respondent shall only be required to abate asbestos that is friable, damaged, unstable, and accessible or may be disturbed by other actions required by this Consent Order, and to determine how to conduct asbestos abatement in a manner that is necessary to comply with all applicable laws; and
  - 9) proposes a detailed program and schedule to perform the preferred on-site remedial actions, including but not limited to a schedule for applying for and obtaining all permits and approvals required for such remedial actions.
- f. Unless otherwise specified in writing by the Commissioner, on or before thirty (30) days after approval of the report described in the preceding section, Respondent shall submit, for the Commissioner's review and written approval, contract plans and specifications for the approved remedial actions, a revised list of all permits and approvals required for such on-site actions, and a revised schedule for applying for and obtaining such permits and approvals, consistent with all applicable state and federal statutes and regulations and this Consent Order. Respondent shall use best efforts to obtain all required permits and approvals.
- g. Respondent shall implement the approved remedial actions in accordance with the approved schedule. Respondent shall notify the Commissioner at least five (5) full business days prior to conducting remedial actions at the Site. Any such notice may include multiple dates that Respondent expects to be undertaking remediation at the Site. Within fifteen (15) days after completing such actions, Respondent shall certify to the Commissioner in writing that the actions have been completed as approved.
- h. Except as may be provided in the approved remedial action schedule, on or before thirty (30) days after the approved date for completion of the remediation, Respondent shall submit for the Commissioner's review and written approval a comprehensive and thorough report which describes all remedial actions performed at the Site. Such report shall also include a soil,

on-site sediment, ground water and surface water post-remediation monitoring program to determine the degree to which the approved on-site remedial actions have been effective, and a schedule for performing the post-remediation monitoring program. Respondent shall implement the approved monitoring program to determine the effectiveness of the remedial actions in accordance with the approved schedule.

- i. If the approved remedial actions do not result in the prevention and abatement of soil, on-site sediment, ground water, and surface water pollution and contamination of the Plant, other structures on the Site or items contained therein, in a manner that complies with all applicable state and federal statutes and regulations, to the satisfaction of the Commissioner, additional remedial actions and measures for monitoring and reporting on the effectiveness of those actions shall be performed in accordance with a supplemental plan and schedule approved in writing by the Commissioner, provided Respondent shall not be required to take actions more stringent than as provided in section B.1.e.4. and section B.1.k. Unless otherwise specified in writing by the Commissioner, the supplemental plan and schedule shall be submitted for the Commissioner's review and written approval on or before thirty (30) days after notice from the Commissioner that such supplemental plan is required.
  - j. On a schedule established by the Commissioner or, if no such schedule is established, on a quarterly basis beginning no later than ninety (90) days after completion of the approved remedial actions or, as applicable, supplemental remedial actions, Respondent shall submit for the Commissioner's review and written approval a report describing the results to date of the approved monitoring program to determine the effectiveness of the on-site remedial actions.
  - k. The current zoning of the Site is heavy industrial. The remedial actions shall be consistent with the current zoned use and be no more stringent than those alternatives referenced in Section B.1.e.4. and Section B.1.e.7., and, if approved therein, may make use of environmental land use restrictions ("ELURs") and/or existing or constructed features that render soil inaccessible or environmentally isolated in accordance with the RSRs. Nothing herein prevents Respondent from agreeing to a more stringent standard of remediation.
2. Revisions. Respondent may, by written request, ask that the Commissioner approve, in writing, revisions to any document approved hereunder in order to make such document consistent with law or for any other appropriate reason.
  3. Site Security. Subject to Section B.18. concerning Site Access, upon the Access Date of this Consent Order and until Respondent is in full compliance with the requirements of Section B.1. hereto (as provided in Section B.7.), Respondent shall maintain security at the Site. Respondent shall maintain security at the Site to, at a

minimum, the current level of security maintained at the Site by the Current Owner and approved by the Commissioner.

4. Effective Date. Respondent's parent company has made application to the Public Utilities Regulatory Authority ("PURA") and Massachusetts Department of Public Utilities ("MDPU") for approval of a merger transaction ("Transaction") with a subsidiary of Iberdrola USA, Inc. (the "PURA Application"). Respondent shall promptly notify the Commissioner when the Transaction closes. The "Effective Date" of this order shall be the later of the Closing of the Transaction or when this Consent Order becomes a final order of the Commissioner; provided, however, that if the Transaction does not close within ninety (90) days following the receipt of PURA approval and approval of the MDPU, then the Commissioner has the discretion to terminate this agreement. If PURA does not approve the PURA Application then this agreement is null and void. Respondent shall have no obligations under this Consent Order until the Effective Date.
5. Access Date. The "Access Date" is the date that the Commissioner provides written notification to Respondent that the Commissioner has secured "Required Access" as defined in Section B.18. and that such Required Access is in effect after the Effective Date. For purposes of this Consent Order, Respondent shall have no obligations under this Consent Order prior to the Effective Date.
6. Progress Reports. On or before the last day of each month following the Effective Date and continuing until all actions required by this order have been completed as approved and to the Commissioner's satisfaction, Respondent shall submit a progress report to the Commissioner describing the actions which Respondent has taken to date to comply with this order including the amounts incurred regarding such compliance; provided, however, that for any period in which actions required by this order consist solely of groundwater monitoring, Respondent shall submit a progress report on or before the last day of each month in which a groundwater monitoring event takes place.
7. Full Compliance. Respondent shall not be considered in full compliance with this Consent Order until all actions required by this order have been completed as approved and to the Commissioner's satisfaction. Subject to Section B.15., upon such full compliance or in the event of payment by Respondent as provided in Section B.18. or Section B.24., the Commissioner will issue to Respondent a certificate of compliance, which shall fully and finally conclude Respondent's obligations with respect to the Site, and Respondent shall have no further obligation or liability for any matter within the jurisdiction of the Commissioner relating thereto, except in the event of Respondent's unlawful behavior or gross negligence.
8. Sampling. All sampling shall be performed in accordance with procedures specified or approved in writing by the Commissioner, or, if no such procedures have been specified or approved, in accordance with the most recent final version of EPA publication SW-846, entitled "Test Methods for Evaluating Solid Waste,

Physical/Chemical Methods,” Standard Operating Procedures for Sampling Porous Surfaces For Polychlorinated Biphenyls, the most recent final version of the Department’s “Site Characterization Guidance Document,” and relevant policies and guidelines issued by the Commissioner.

9. Sample Analyses. All sample analyses which are required by this order and all reporting of such sample analyses shall be conducted by a laboratory certified by the Connecticut Department of Public Health and approved to conduct such analyses. In addition,
  - The Reasonable Confidence Protocols shall be used when there is a method published by Department. In all cases where the Reasonable Confidence Protocol method is used, a properly completed laboratory QA/QC certification form, certified by the laboratory shall be provided to the Commissioner with the analytical data.
  - In cases where a Reasonable Confidence Protocol method has not been published, the analytical data shall be generated using a method approved by the Commissioner, such method shall include and report a level of quality control and documentation equivalent to the Reasonable Confidence Protocols.
  - The reporting limit shall be established consistent with the Reasonable Confidence Protocols and standard industrial and laboratory practices. The Reporting Limit shall not be set at levels greater than those used in such standard practices, as determined by the Commissioner, in consultation with the Commissioner of Public Health and in no case shall be greater than the Applicable Criteria or Background Concentration established in §22a-133k-1 through §22a-133k-3 of the Regulations of Connecticut State Agencies. The Reporting Limit for a given sample shall be corrected for specific sample weight or volume, and dilutions, and, for soil and sediment samples moisture content (reported as dry weight).
  
10. Approvals. Respondent shall use best efforts to submit to the Commissioner all documents required by this order in a complete and approvable form. If the Commissioner notifies Respondent that any document or other action is deficient, and does not approve it with conditions or modifications, it is deemed disapproved, and Respondent shall correct the deficiencies and resubmit it within the time specified by the Commissioner or, if no time is specified by the Commissioner, within thirty (30) days of the Commissioner's notice of deficiencies. In approving any document or other action under this order, the Commissioner may approve the document or other action as submitted or performed or with such conditions or modifications as the Commissioner deems necessary to carry out the purposes of this order. Nothing in this section shall excuse noncompliance or delay. Any reference in this Consent Order to an approved document such as a scope of work or a schedule shall mean approved by the Commissioner.

11. Definitions. As used in this order, “Commissioner” means the Commissioner or a representative of the Commissioner.
12. Dates. The date of submission to the Commissioner of any document required by this order shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this order, including but not limited to, notice of approval or disapproval of any document or other action, shall be the date such notice is deposited in the U.S. mail or is personally delivered, whichever is earlier. Except as otherwise specified in this order, the word “day” as used in this order means calendar day. Any document or action which is required by this order to be submitted or performed by a date which falls on a Saturday, Sunday or a Connecticut or federal holiday shall be submitted or performed by the next day which is not a Saturday, Sunday or Connecticut or federal holiday.
13. Certification of Documents. Any document, including but not limited to any notice, which is required to be submitted to the Commissioner under this order shall be signed by Respondent or, if a Respondent is not an individual, by such Respondent's chief executive officer or a duly authorized representative of such officer, or by a “responsible corporate officer” of Respondent as that term is defined in §22a-430-3(b)(2) of the Regulations of Connecticut State Agencies, and by the LEP(s) or other individual(s) responsible for actually preparing such document, and Respondent or Respondent’s chief executive officer and each such individual shall certify in writing as follows:

“I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information is punishable as a criminal offense under §53a-157b of the Connecticut General Statutes and any other applicable law.”
14. False Statements. Any false statement in any information submitted pursuant to this order is punishable as a criminal offense under §53a-157b of the Connecticut General Statutes and any other applicable law.
15. Commissioner's Powers. Subject to provisions of Section B.23., nothing in this order shall affect the Commissioner's authority to institute any proceeding or take any other action to prevent or abate violations of law, prevent or abate pollution, recover costs and natural resource damages, and to impose penalties for past, present, or future violations of law. If at any time the Commissioner determines that the actions taken by Respondent pursuant to this order have not successfully corrected all violations, fully characterized the extent and degree of any pollution or successfully abated or prevented pollution, the Commissioner may institute any

proceeding to require Respondent to undertake further investigation or further action to prevent or abate violations or pollution; provided, however, that in the event the Commissioner issues a certificate of compliance pursuant to Section B.7., the Commissioner may only institute any proceeding to require Respondent to undertake further investigation or further action to prevent or abate violations or pollution after issuing a certificate of compliance if the Commissioner determines that a certificate of compliance was obtained through the submittal of materially inaccurate or erroneous information, or otherwise materially misleading information or that material misrepresentations were made in connection with the obtaining of the certificate of compliance. In accordance with Conn. Gen. Stat. Sec. 22a-6dd, the requirements and standards for remediation required of Respondent pursuant to this Consent Order shall not be modified by the Department unless both the Department and Respondent agree to such modification.

16. Respondent's Obligations Under Law. Nothing in this order shall relieve Respondent of other obligations under applicable federal, state and local law.
17. No Assurance by Commissioner. No provision of this order and no action or inaction by the Commissioner shall be construed to constitute an assurance by the Commissioner that the actions taken by Respondent pursuant to this order will result in compliance or prevent or abate pollution.
18. Access to Site. The Commissioner and Respondent acknowledge that Respondent does not currently own, or control access to, the Site, and that Respondent requires access, without interference from the Current Owner or the property owner, necessary to be able to comply with its obligations under this Consent Order to investigate, remediate, monitor and secure the Site and shall not be obligated to proceed with such obligations that require Site access unless and until it has such access and only for so long as it continues to have access pursuant to the terms of this Section B.18. The Commissioner will endeavor, using all reasonable efforts, to obtain and, if so obtained, will use all reasonable efforts to maintain, access to, or control of, the Site, pursuant to a written access agreement, on terms that enable Respondent to comply with the terms and conditions of this Consent Order requiring Respondent to investigate, remediate, monitor and secure the Site, and that require the Current Owner (or, as applicable, any subsequent owners) to (i) refrain from engaging in actions that adversely, substantially and materially affect Respondent's ability to comply with the obligations under this Consent Order or otherwise engaging in activities that cause environmental conditions or exacerbate or contribute to existing environmental conditions at the Site that cause a significant increase in costs, (ii) agree to the recordation and implementation of ELURs pursuant to 40 CFR Part 761 and the RSRs, as applicable, and (iii) include notice of such ELURs in any sale or lease agreement regarding the Site and terms that expressly condition any such sale or lease agreement on the purchaser's or lessee's (as applicable) agreement to assume all liabilities arising from the failure by such purchaser or lessee to comply with the ELUR(s) ("Required Access"). Respondent shall make all reasonable efforts to

support any effort by the Commissioner to obtain the Required Access and shall not take any actions to impede or prevent the Required Access. Reasonable efforts by Respondent shall include, but not be limited to, providing a release, indemnification and hold harmless to the Current Owner from liability as the Current Owner arising solely out of the activities of Respondent or its contractors on the Site in the course of performing work under this Consent Order, and shall further include, if requested by the Commissioner, a release by Respondent of contribution claims against the Current Owner in respect of onsite conditions at the Site as long as the Current Owner, on behalf of itself and its owners, agents, officers, directors, shareholders, partners and members, also agrees to provide a reciprocal general release reasonably acceptable to Respondent. Reasonable efforts by Respondent shall not include paying the Current Owner or its owners, agents, officers, directors, shareholders, partners and members or reimbursing or funding, directly or indirectly, all or any part of any payment to the Current Owner or its owners, agents, officers, directors, shareholders, partners and members by others or remediating to standards that are more stringent than required by this Consent Order. In the event that the Commissioner after the Effective Date, in his sole discretion, determines (following consultation with Respondent) that the Commissioner is unable to secure the Required Access, the Commissioner may direct Respondent to make payment to the Commissioner in accordance with this section in lieu of completing performance of work otherwise required in this Consent Order. In the event that the Commissioner, after the Effective Date, is unable to maintain Required Access to the Site, then the three year period for completion in Section B.1. is tolled until either the Commissioner obtains access or until the Commissioner, following consultation with Respondent, but in his sole discretion, directs Respondent to make payment to the Commissioner in accordance with this section in lieu of completing performance of work otherwise required by this Consent Order. The Commissioner shall give notice of such direction to Respondent together with a draft certificate of compliance. Within one hundred twenty (120) days of receipt of such notice, Respondent shall pay, by cashier or certified check, \$30 million minus any costs incurred or accrued for remediation and investigation (not including attorney's fees and any direct time charges of Respondent's employees, managers or officers) after the Effective Date of this order for compliance with this order, to the account designated by the Commissioner, and such payment shall fully resolve Respondent's obligations herein and the Commissioner shall provide a certificate of compliance as provided for in Section B.7. herein. The Commissioner shall use the funds for the investigation and remediation of the Site, and any funds remaining after the completion of the investigation and remediation of the Site shall, with the concurrence of the Governor and the Attorney General, be used for a public purpose. Within thirty (30) days of the Commissioner's issuance of such notice and certificate of compliance, Respondent shall provide a detailed accounting of any remedial costs incurred. Payment of the funds required by this section shall satisfy Respondent's obligations under this Consent Order.

19. No Effect on Rights of Other Persons. This order neither creates nor affects any rights of persons, entities (of any form or nature) or municipalities that are not parties to this order. Without limiting the generality of the foregoing, the parties expressly disclaim any intent to create any rights enforceable by any non-parties as third-party beneficiaries hereunder.
20. Notice to Commissioner of Changes. Within fifteen (15) days of the date Respondent becomes aware of a change in any information submitted to the Commissioner under this order, or that any such information was inaccurate or misleading or that any relevant information was omitted, Respondent shall submit the correct or omitted information to the Commissioner.
21. Notification of Noncompliance. In the event that Respondent becomes aware that it did not or may not comply, or did not or may not comply on time, with any requirement of this order or of any document required hereunder, Respondent shall immediately notify by telephone the individuals identified in the next section and shall take all reasonable steps to ensure that any noncompliance or delay is avoided or, if unavoidable, is minimized to the greatest extent possible. Within five (5) days of the initial notice, Respondent shall submit in writing the date, time, and duration of the noncompliance and the reasons for the noncompliance or delay and propose, for the review and written approval of the Commissioner, dates by which compliance will be achieved, and Respondent shall comply with any dates which may be approved in writing by the Commissioner. Notification by Respondent shall not excuse noncompliance or delay, and the Commissioner's approval of any compliance dates proposed shall not excuse noncompliance or delay unless specifically so stated by the Commissioner in writing.
22. Submission of Documents. Any document required to be submitted to the Commissioner under this order shall, unless otherwise specified in this order or in writing by the Commissioner, be directed to:

Gary Trombly, Jr.  
Department of Energy and Environmental Protection  
Storage Tank & PCB Enforcement Unit  
79 Elm Street  
Hartford, Connecticut 06106

And

Craig Bobrowiecki  
Department of Energy and Environmental Protection  
Remediation Division  
79 Elm Street  
Hartford, Connecticut 06106

23. Effect of Order. Except as provided herein, as of the Effective Date, other than as may be necessary to compel Respondent's compliance with this Consent Order (i) this Consent Order fully resolves all matters alleged in Administrative Order No. AOWSPCB 13-001 against Respondent at the Site, and all known claims of the Commissioner against Respondent related to environmental conditions at the Site, (ii) subject to Section B.15., upon such full compliance or in the event of payment by Respondent as provided for in Section B.18. and Section B.24., the Commissioner will issue to Respondent a certificate of compliance, which shall fully and finally conclude Respondent's obligations with respect to the Site and Respondent shall have no further obligation or liability for any matter within the jurisdiction of the Commissioner relating thereto, except in the event of Respondent's unlawful behavior or gross negligence, (iii) the Commissioner agrees to dismiss all claims, orders, demands, and allegations raised in Administrative Order No. AOWSPCB 13-001 against Respondent in connection with environmental conditions at the Site. Nothing in this Consent Order shall prevent the Commissioner from maintaining Administrative Order No. AOWSPCB 13-001 and proceedings relating thereto, or initiating new proceedings or actions, with respect to environmental impacts at off-site locations, including, but not limited to, sediments, soil, groundwater or any contaminants that have emanated offsite from the Site.

24. Provisions Relating to the Cost of Compliance with this Order. If the total costs to Respondent of performing the obligations after the Effective Date of this Consent Order exceed \$30 million, the State, at Respondent's request, will discuss options for recovering or funding any costs above that amount, for example, through public funding or recovery from third parties, but is not bound to agree to or support any means of recovery or funding. Nothing in this section shall alter Respondent's obligation to fully comply with this Consent Order, including but not limited to, the time for compliance during any time that there are discussions about recovery of costs exceeding \$30 million. Respondent shall comply with this Consent Order even if the costs of such compliance exceed \$30 million, except in the event of payment by Respondent as provided for in Section B.18.

Respondent shall maintain an accounting of all of the costs incurred or accrued regarding compliance with this Consent Order. Upon issuance of a certificate of compliance pursuant to Section B.7. herein, to the extent that the costs incurred by Respondent under this Consent Order for the investigation and remediation of the Site after the Effective Date are less than \$30 million, then Respondent shall remit to the State the difference between such costs and \$30 million for a public purpose as determined in the discretion of the Governor, the Attorney General, and the Commissioner .. Within thirty (30) days of a written demand by the Commissioner for the accounting of the costs incurred by Respondent regarding compliance with this Consent Order, Respondent shall provide a detailed accounting of such costs. Within thirty (30) days following a written demand by the Commissioner and the issuance by the Commissioner of a certificate of compliance resolving Respondent's liabilities regarding matters addressed in this

Consent Order, Respondent shall make payment of the difference between such costs (which shall include any costs incurred or accrued in relation to the cessation of activities) and \$30 million to the recipient identified by the Commissioner.

Respondent consents to the issuance of this Partial Consent Order without further notice. The undersigned certifies that JAMES P. TORGERSON is fully authorized to enter into this Partial Consent Order and to legally bind Respondent The United Illuminating Company to the terms and conditions of the Consent Order.

Respondent The United Illuminating Company

BY: J. P. Torgerson

DATE: 9/16/15

ORDER NO. \_\_\_\_\_

Issued as a final order of the Commissioner of Energy and Environmental Protection.

BY: \_\_\_\_\_

Commissioner

DATE: \_\_\_\_\_

# Exhibit A - English Station, 510 Grand Avenue, New Haven



EXHIBIT B TO PARTIAL CONSENT ORDER NUMBER COWSPCB 15-001

**Project Management Consultant:**

TRC Environmental Corporation  
21 Griffin Road North  
Windsor, Connecticut 06095  
860-298-9692

**Project Licensed Environmental Professional (LEP):**

**Sarah Trombetta, CPG, LEP, CHMM**

**TRC Windsor, Connecticut Office**

Licensed Environmental Professional, Connecticut (#294, 1998)  
Certified Professional Geologist, American Institute of Professional Geologist, (#8899, 1993)  
Certified Hazardous Materials Manager (#15404, 2010)

**Project Support LEP:**

**Marya Mahoney, LEP**

**TRC Windsor, Connecticut Office**

Licensed Environmental Professional, Connecticut, (#478, 2007)

**TRC Project Resources:**

**Ed Doubleday, Project Management and Project Performance**

**TRC Windsor, Connecticut Office**

Certified Project Management Professional (2011)  
FEMA Incident Command Station Certification (2008)  
U.S. Naval Academy

**Carl Stopper, P.E., Connecticut Professional Engineer, TRC PCB and Site Remediation Expert**

**TRC Windsor, Connecticut Office**

Professional Engineer, Connecticut (#13255, 1984)

**Eric Plimpton, P.E., Connecticut Professional Engineer, TRC Asbestos Materials Expert**

**TRC Windsor Connecticut Office**

Professional Engineer, Connecticut (#20593) 1998  
Certified Hazardous Materials Manager, Master Level (#11384) 2002  
Certified Safety Management Practitioner (#14197) 2013  
Asbestos Analyst, AIHA (#4554) 1992  
Asbestos Project Monitor, Connecticut (#000082) 1993  
Asbestos Management Planner, Connecticut (#000219) 2002  
Asbestos Inspector, Connecticut (#000074/000219) 1993  
Asbestos Project Designer, Connecticut (#000152) 1999  
Lead Inspector/Risk Assessor, Connecticut (#001206) 1996  
Lead Planner Project Designer, Connecticut (#001866) 1998

**David Sullivan, TRC Indoor TSCA/PCB Expert**

**TRC Lowell, Massachusetts Office**

Massachusetts Licensed Site Professional (#1488, 2004)

Extensive experience with USEPA Region I TSCA Office and Managers

**Stacy McAnulty, P.E., TRC Site Remediation and PCB Sediment Expert**

**TRC Madison, Wisconsin, Office**

Professional Engineer in Wisconsin, Maine, Colorado, and North Carolina

## **APPENDIX B**

**1999 GEI ASBESTOS AND HAZARDOUS MATERIALS REPORT**



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# TABLES

**Table 1  
English Station  
Asbestos Survey Analytical Results Summary**

Sample ID	Sample Location	Sample Material Description	Asbestos Analytical Results
<i>Low Pressure Boiler/Turbine Areas</i>			
10-5-ASB-01 A, B, C	1 <sup>st</sup> floor, Northeast Locker Room	Brown 9" x 9" floor tile	6.75% Chrysotile
10-5-ASB-02 A, B	1 <sup>st</sup> floor, Northeast Locker Room	Mastic from sample above	6.25% Chrysotile
10-5-ASB-03	1 <sup>st</sup> floor, Northeast Locker Room	Interior window glazing	10% Chrysotile
10-5-ASB-04	1 <sup>st</sup> floor, Northeast Locker Room	Red 9" x 9" floor tile	ND
10-ASB-05 A, B, C	1 <sup>st</sup> floor, West Ash Hopper Piping	Canvas pipe wrap insulation	75% Chrysotile
10-5-ASB-06	1 <sup>st</sup> floor, East Coal Ash Alley	Electrical wire wrap	ND
10-5-ASB-07 A, B	1 <sup>st</sup> floor, Northeast Side, City Water Line	Pipe coating/ weatherproofing	10% Chrysotile
10-5-ASB-08	1 <sup>st</sup> floor, Condenser Plate (No. 5 Unit)	Gasket	ND
10-5-ASB-09 A, B, C	1 <sup>st</sup> floor, Machine Shop Office	Green 9" x 9" floor tile	3.75% Chrysotile
10-5-ASB-10 A, B	1 <sup>st</sup> floor, Machine Shop Office	Mastic from sample above	ND
10-6-ASB-11 A, B	1 <sup>st</sup> floor, Lube Oil Room	Door coating	ND
10-6-ASB-12 A, B, C	1 <sup>st</sup> floor, Condenser Unit Foundation (No. 1, 3, & 5 Units)	Concrete	ND
10-6-ASB-13 A, B, C	1 <sup>st</sup> floor, Condenser Unit (No. 2, 4, & 6 Units)	Interior red boiler brick	ND
10-6-ASB-14 A, B, C	1 <sup>st</sup> floor, Condenser Unit (No. 2, 4, & 6 Units)	Interior white mortar	ND
10-6-ASB-15 A, B, C	1 <sup>st</sup> floor, Flood Control Panel (No. 19, 18, & 15)	White canvas joint/seam	ND
10-6-ASB-16	1 <sup>st</sup> floor, Flood Control Panel (No. 13)	Black canvas	ND
10-6-ASB-17B	1 <sup>st</sup> floor, Reactor Room; Window	Interior glazing	ND
10-6-ASB-18 A, B, C	1 <sup>st</sup> floor, Reactor Room	Reactor cover panels	20% Chrysotile
10-6-ASB-19	1 <sup>st</sup> floor, Reactor Room; Structural/ Insulator Panel Between Reactor Stands	Gray transite panel	20% Chrysotile
10-6-ASB-20 A, B, C	1 <sup>st</sup> floor, Reactor Room Bridge Floor Panels/Plates	Brown floor paneling	20% Chrysotile
10-7-ASB-21 A, B, C	1 <sup>st</sup> floor, Dismantled Circuit Breaker in Cubicle Room	Black insulated backer board	ND
10-7-ASB-22 A, B, C	1 <sup>st</sup> floor, Dismantled Circuit Breaker in Cubicle Room	Arc diffusing panel	75% Chrysotile
10-7-ASB-23	1 <sup>st</sup> floor, Reactor Room	Canvas cable wrap	ND
10-7-ASB-24 A, B	1 <sup>st</sup> floor, Reactor Room	Black electrical wire insulation	ND
10-7-ASB-25 A, B, C	1 <sup>st</sup> floor, Reactor Room; Reactor Stand	Concrete	ND
10-7-ASB-26 A, B, C	1 <sup>st</sup> floor, Entry Room Doors (Reactor Room, Auxiliary Switchboard Room, and Neutral Ground Room)	Door coating	ND
10-7-ASB-27 A, B, C, D, E, F, G, H	1 <sup>st</sup> floor, Various Locations	Structural brick mortar	ND
10-7-ASB-28 A, B, C	1 <sup>st</sup> floor, Various Locations	Off white 2" x 7/4" brick	ND

**Notes:** Asbestos content equal to or greater than 1% requires abatement prior to demolition.  
 Shaded concentrations indicate material is asbestos-containing ( $\geq 1$  asbestos).  
 \* = indicates trace levels of asbestos were detected, but at concentrations of less than 1%  
 ND = none detected

**Table 1  
English Station  
Asbestos Survey Analytical Results Summary**

Sample ID	Sample Location	Sample Material Description	Asbestos Analytical Results
10-7-ASB-29 A, B, C	1 <sup>st</sup> floor, Various Locations	Red 5" x 12" block	ND
10-7-ASB-30 A, B, C	1 <sup>st</sup> floor, Various Locations	Red 2" x 7½" brick	ND
10-7-ASB-31 A, B, C	1 <sup>st</sup> floor, Various Locations	Red/brown 12" x 12" blocks	ND
10-7-ASB-32 A, B, C	1 <sup>st</sup> floor, Various Locations	White 7½" x 15½" cinder blocks	ND
10-7-ASB-33 A, B, C	1 <sup>st</sup> floor, Various Locations	Dark gray 7½" x 15½" cinder block	ND
10-7-ASB-34 A, B, C	1 <sup>st</sup> floor, Various Locations	Red 5" x 6" hollow blocks	ND
10-7-ASB-35 A, B, C	2 <sup>nd</sup> floor, Turbine/Generator Monitor Panels	Black panels	ND
10-7-ASB-36 A, B, C	2 <sup>nd</sup> floor, Turbine Room, Turbine Anodes	Electric tape insulation	ND
10-7-ASB-37 A, B, C	2 <sup>nd</sup> floor, Adjacent to Turbine/ Generator No. 5; Intercom Boxes (HEAR-HERE)	Inner material	ND
10-7-ASB-38 A, B	2 <sup>nd</sup> floor, Turbine No. 1 & 5; Main Flange	Gasket material	ND
10-7-ASB-39	2 <sup>nd</sup> floor, North Locker Rooms/Showers	Plaster	ND
10-7-ASB-40 A, B, C	2 <sup>nd</sup> floor, North Office Area, Bathroom	Gray 12" x 12" floor tile	ND
10-7-ASB-41 A, B, C	2 <sup>nd</sup> floor, North Office Area, Bathroom	Mastic from sample above	ND
10-8-ASB-42 A, B, C	2 <sup>nd</sup> floor, North Office Area	White 2' x 4' acoustical ceiling tile	ND
10-8-ASB-43 A, B, C	2 <sup>nd</sup> floor, North Office Area	Vinyl baseboard mastic	ND
10-8-ASB-44 A, B, C	2 <sup>nd</sup> floor, North Office Area	Gypsum board	ND
10-8-ASB-45 A, B, C	2 <sup>nd</sup> floor, North Office Area	Linoleum	ND
10-8-ASB-46 A, B, C	2 <sup>nd</sup> floor, North Office Area	Linoleum vapor barrier	ND
10-8-ASB-47 A, B, C	2 <sup>nd</sup> floor, North Office Area	Linoleum mastic	ND
10-8-ASB-48 A, B, C	2 <sup>nd</sup> floor, Boiler Room (No. 4, 7, & 10 Units)	Silver boiler paint	ND
10-8-ASB-49 A, B, C	2 <sup>nd</sup> floor, Boiler Room (No. 12 Unit)	Gasket rope	75% Chrysotile
10-8-ASB-50 A, B, C	2 <sup>nd</sup> floor, Boiler Room (No. 12 Unit)	Jacket packing	50% Chrysotile
10-8-ASB-51 A, B, C	2 <sup>nd</sup> floor, Boiler Room (No. 12 Unit)	Inner boiler cement packing material	ND
10-8-ASB-52 A, B, C	2 <sup>nd</sup> floor, Boiler Room (No. 12 Unit)	Exterior steel boiler panel gasket	80% Chrysotile
10-8-ASB-53 A, B, C	2 <sup>nd</sup> floor, Boilers Firing Mechanism (No. 1, 5, & 10 Boilers)	Canvas pipe/hose wrap insulation	90% Chrysotile
10-8-ASB-54 A, B, C	2 <sup>nd</sup> floor, Boiler Room (No. 2, 6, & 9 Units)	Red brick (exterior)	ND
10-8-ASB-55 A, B, C	2 <sup>nd</sup> floor, Boiler Room (No. 2, 6, & 9 Units)	Tan brick (interior)	ND
10-8-ASB-56 A, B, C	No Sample Collected	No Sample Collected	No Sample Analyzed
10-8-ASB-57 A, B, C	2 <sup>nd</sup> floor, Various Locations	Green 9" x 9" floor tile	5.75% Chrysotile

**Notes:** Asbestos content equal to or greater than 1% requires abatement prior to demolition.  
 Shaded concentrations indicate material is asbestos-containing (>1 asbestos).  
 \* = indicates trace levels of asbestos were detected, but at concentrations of less than 1%  
 ND = none detected

**Table 1  
English Station  
Asbestos Survey Analytical Results Summary**

Sample ID	Sample Location	Sample Material Description	Asbestos Analytical Results
10-8-ASB-58 A, B, C	2 <sup>nd</sup> floor, various areas	Mastic from sample above	ND
10-8-ASB-59 A, B, C	2 <sup>nd</sup> floor, Boiler Room, East Office Area	Gray 12" x 12" floor tile	ND
10-8-ASB-60 A, B, C	2 <sup>nd</sup> floor, Boiler Room, East Office Area	Mastic from sample above	1.75% Chrysotile
10-8-ASB-61	2 <sup>nd</sup> floor, North Office Entry Door	Inner door insulation	ND
10-8-ASB-62	2 <sup>nd</sup> floor, Bus Room Entry Door	Inner door insulation	ND
10-12-ASB-63	1 <sup>st</sup> floor, Lube Oil Room Entry Door	Inner door insulation	ND
10-12-ASB-64	1 <sup>st</sup> floor, Stairwell Door Adjacent to Machine Shop	Inner door insulation	ND
10-12-ASB-65	1 <sup>st</sup> floor, Machine Shop Northerly Entry Door	Inner door insulation	ND
10-12-ASB-66	1 <sup>st</sup> floor, Machine Shop Southerly Entry Door	Inner door insulation	ND
10-12-ASB-67	1 <sup>st</sup> floor, Machine Shop	Inner door insulation	ND
10-12-ASB-68	1 <sup>st</sup> floor, Machine Shop	Inner door insulation	ND
10-12-ASB-69	1 <sup>st</sup> floor, Heavy Oil Room Entry Door	Inner door insulation	ND
10-12-ASB-70	1 <sup>st</sup> floor, Reactor Room Entry Door	Inner door insulation	ND
10-12-ASB-71 A, B, C	2 <sup>nd</sup> floor, Boiler Room (No. 1 Unit)	Corrugated paper insulation; "Asbestocell"	65% Chrysotile
10-12-ASB-72 A, B, C	2 <sup>nd</sup> floor, Boiler Room (No. 1 Unit)	Inner gunnite layer	ND
10-12-ASB-73 A, B, C	2 <sup>nd</sup> floor, Boiler Room (No. 1 Unit)	Outer gunnite layer	ND
10-12-ASB-74 A, B, C	2 <sup>nd</sup> floor, Boiler Room (No. 1 Unit)	Mortar	ND
10-12-ASB-75 A, B, C	2 <sup>nd</sup> floor, Boiler Room (No. 1 Unit)	Gasket material	ND
10-12-ASB-76 A, B, C	2 <sup>nd</sup> floor, Boiler Room, Inspection Port Door (Various Boiler Units)	Gasket material	90% Chrysotile
10-12-ASB-77 A, B, C	2 <sup>nd</sup> floor, Boiler Room; Middle stairwell wall to ground; Southern bathroom; Northern stairwell to electrical repair shop/laboratory	Concrete wall coating	ND
10-12-ASB-78	3 <sup>rd</sup> floor, Electrical Repair Shop/Laboratory	Rolled canvas mat	80% Chrysotile
10-12-ASB-79 A, B, C	3 <sup>rd</sup> floor, Laboratory Bathroom; HVAC Unit	HVAC gasket	40% Chrysotile
10-13-ASB-80 A, B, C	3 <sup>rd</sup> floor, Laboratory	Lab counter top	ND
10-13-ASB-81 A, B, C	3 <sup>rd</sup> floor, Electric Repair Shop and stairwell landing	Brown 9" x 9" floor tile	4.50% Chrysotile
10-13-ASB-82 A, B, C	3 <sup>rd</sup> floor, Electric Repair Shop and stairwell landing	Mastic from sample above	2.75% Chrysotile
10-13-ASB-83 A, B, C	2 <sup>nd</sup> floor, Boiler Room (No. 9 Unit); Vacuum Pump	Filter material	ND
10-13-ASB-84 A, B, C	2 <sup>nd</sup> floor, Boiler Room (No. 12 Unit); Tube Packing	Tube packing material	Trace*
10-13-ASB-85 A, B, C	2 <sup>nd</sup> floor, Boiler Room (No. 10 Unit); Mezzanine I-Beam Level	Tan boiler blocks	ND

**Notes:** Asbestos content equal to or greater than 1% requires abatement prior to demolition.  
 Shaded concentrations indicate material is asbestos-containing ( $\geq 1$  asbestos).  
 \* = indicates trace levels of asbestos were detected, but at concentrations of less than 1%  
 ND = none detected

**Table 1  
English Station  
Asbestos Survey Analytical Results Summary**

Sample ID	Sample Location	Sample Material Description	Asbestos Analytical Results
10-13-ASB-86 A, B, C	2 <sup>nd</sup> floor, Boiler Room (No. 7 & 3 Units)	Boiler pipe filler (cementitious)	ND
10-13-ASB-87 A, B, C	2 <sup>nd</sup> floor, Boiler Room (No. 11 & 4 Units)	Boiler pipe filler (mud-pack)	1.2% Chrysotile
10-13-ASB-88 A, B, C	4 <sup>th</sup> floor, Turbine Room, Overhead Crane Cab	Floor mat	ND
10-13-ASB-89 A, B, C	4 <sup>th</sup> floor, Boiler Room (No. 2 Unit)	Boiler top insulation (cement panels)	ND
10-13-ASB-90 A, B, C	4 <sup>th</sup> floor, Boiler Room (No. 2 Unit)	Gasket material	50% Chrysotile
10-13-ASB-91 A, B, C	4 <sup>th</sup> floor, Boiler Room (No. 1 Unit)	Boiler top insulation (mud-pack filler)	45% Chrysotile
10-13-ASB-92 A, B, C	4 <sup>th</sup> floor, Boiler Room (No. 1 Unit)	Boiler top insulation (pipe channeled brick)	ND
10-13-ASB-93 A, B, C	5 <sup>th</sup> floor, Coal Conveyor Belt	Conveyor belt	ND
10-13-ASB-94 A, B, C	2 <sup>nd</sup> floor, Boiler Room; South Mezzanine Level	"8" shaped boiler bricks	ND
10-14-ASB-95 A, B, C	4 <sup>th</sup> floor, Locker Room	Beige 12" x 12" floor tile	ND
10-14-ASB-96 A, B, C	4 <sup>th</sup> floor, Locker Room	Mastic from sample above	ND
10-14-ASB-97	3 <sup>rd</sup> floor, Conduit Room; Exhaust Fan	Vibration dampener (black rubber)	ND
10-14-ASB-98	3 <sup>rd</sup> floor, Conduit Room; Exhaust Fan	Vibration dampener (tan canvas)	ND
10-14-ASB-99	3 <sup>rd</sup> floor, Conduit Room; Fan Room	Black rubber hose	ND
10-14-ASB-100 A, B, C	4 <sup>th</sup> floor, Locker Room	4" brown vinyl baseboard	ND
10-14-ASB-101 A, B, C	4 <sup>th</sup> floor, Locker Room	Mastic from sample above	ND
10-14-ASB-102 A, B, C	2 <sup>nd</sup> floor, Northern Office Area	4" brown baseboard	ND
10-14-ASB-103 A, B, C	3 <sup>rd</sup> floor, Electric Repair Shop/Laboratory	6" dark gray baseboard	ND
10-14-ASB-104 A, B, C	3 <sup>rd</sup> floor, Electric Repair Shop/Laboratory	Mastic from sample above	ND
10-14-ASB-105 A, B, C	2 <sup>nd</sup> floor, North Office Area	4" gray baseboard	ND
10-14-ASB-106 A, B, C	2 <sup>nd</sup> floor, Turbine Room; Main Steam Pipe	Residue insulation	15% Chrysotile 10% Amosite
10-14-ASB-107 A, B, C	4 <sup>th</sup> floor, Switchgear Room; North Offices	Beige 5" x 12" building block	ND
10-15-ASB-108 A, B, C	4 <sup>th</sup> floor, Switchgear Room	2' x 4' acoustical ceiling tiles (type II)	ND
10-15-ASB-109 A, B, C	4 <sup>th</sup> floor, Switchgear Room; South Offices & Common Hall	Black 9" x 9" floor tile	10% Chrysotile
10-15-ASB-110 A, B, C	4 <sup>th</sup> floor, Switchgear Room; South Offices & Common Hall	Mastic from sample above	ND
10-15-ASB-111 A, B, C	4 <sup>th</sup> floor, Switchgear Room; North Office Area	Gray 9" x 9" floor tile	6.25% Chrysotile
10-15-ASB-112 A, B, C	4 <sup>th</sup> floor, Switchgear Room; North Office Area	Mastic from sample above	ND
10-15-ASB-113 A, B, C	4 <sup>th</sup> floor, Switchgear Room; Storage Closet	Pyrobar block	ND

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**Table 1  
English Station  
Asbestos Survey Analytical Results Summary**

Sample ID	Sample Location	Sample Material Description	Asbestos Analytical Results
10-15-ASB-114 A, B, C	4 <sup>th</sup> floor, Switchgear Room; Storage Closet	Mortar associated with Pyrobar block	ND
10-15-ASB-115 A, B, C	4 <sup>th</sup> floor, Switchgear Room; South Offices & Common Hall	Ceiling tile glue daubs	ND
10-15-ASB-116 A, B, C	4 <sup>th</sup> floor, Switchgear Room	6" black baseboard - Type A	ND
10-15-ASB-117 A, B, C	4 <sup>th</sup> floor, Switchgear Room	Mastic from sample above	ND
10-15-ASB-118 A, B, C	4 <sup>th</sup> floor, Switchgear Room; South Offices & Common Hall	6" black baseboard - Type B	ND
10-15-ASB-119 A, B, C	4 <sup>th</sup> floor, Switchgear Room; South Offices & Common Hall	Mastic from sample above	ND
10-15-ASB-120 A, B, C	4 <sup>th</sup> floor, Switchgear Room; South Offices & Common Hall	Transite-like 6" black baseboard - Type C	20% Chrysotile
10-15-ASB-121 A, B, C	4 <sup>th</sup> floor, Switchgear Room; South Offices & Common Hall	Wallboard	70% Chrysotile
10-15-ASB-122 A, B, C, D	4 <sup>th</sup> floor, Locker Room	Plaster skim coat	ND
10-15-ASB-123 A, B, C, D	4 <sup>th</sup> floor, Locker Room	Plaster rough coat	ND
10-15-ASB-124 A, B, C	3 <sup>rd</sup> floor Conduit Room, Circular Fan	Air filter material	ND
10-19-ASB-125 A, B, C	Boiler Room; Roof B; Decking	Layer A; Tar and gravel	3.75% Chrysotile
10-19-ASB-126 A, B, C	Boiler Room; Roof B; Decking	Layer B; Tar paper	ND
10-19-ASB-127 A, B, C	Boiler Room; Roof B; Decking	Layer C; Tar paper	ND
10-19-ASB-128 A, B, C	Boiler Room; Roof B; Decking	Layer D; Tar paper	ND
10-19-ASB-129 A, B, C	Boiler Room; Roof B; Decking	Layer E; Tar paper	ND
10-19-ASB-130 A, B, C	Boiler Room; Roof B; Flashing	Layer A; Tar and gravel	ND
10-19-ASB-131 A, B, C	Boiler Room; Roof B; Flashing	Layer B; Tar paper	ND
10-19-ASB-132 A, B, C	Boiler Room; Roof B; Flashing	Layer C; Tar paper	ND
10-19-ASB-133 A, B	Boiler Room; Roof B; West Boiler Stack Pedestal	Layer A; Tar and gravel	10% Chrysotile
10-19-ASB-134 A, B	Boiler Room; Roof B; West Boiler Stack Pedestal	Layer B; Tar paper	15% Chrysotile
10-19-ASB-135 A, B	Boiler Room; Roof B; West Boiler Stack Pedestal	Layer C; Tar paper	10% Chrysotile
10-19-ASB-136 A, B	Boiler Room; Roof B; West Boiler Stack Pedestal	Layer D; Tar paper	10% Chrysotile
10-19-ASB-137	Boiler Room; Roof B; East Boiler Stack Pedestal	Layer A; Tar paper	10% Chrysotile
10-19-ASB-138	Boiler Room; Roof B; East Boiler Stack Pedestal	Layer B; Tar paper	35% Chrysotile
10-19-ASB-139	Boiler Room; Roof B; East Boiler Stack Pedestal	Layer C; Tar paper	35% Chrysotile
10-19-ASB-140 A, B, C	Boiler Room; Roof A; Decking	Layer A; Tar and gravel	5.5% Chrysotile

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English Station  
Asbestos Survey Analytical Results Summary**

<b>Sample ID</b>	<b>Sample Location</b>	<b>Sample Material Description</b>	<b>Asbestos Analytical Results</b>
10-19-ASB-141 A, B, C	Boiler Room; Roof A; Decking	Layer B; Tar paper	ND
10-19-ASB-142 A, B, C	Boiler Room; Roof B; Parapet Wall Covering	Layer A; Tar	30% Chrysotile
10-19-ASB-143 A, B, C	Boiler Room; Roof B; Parapet Wall Covering	Layer B; Tar and tar paper	3.5% Chrysotile
10-19-ASB-144 A, B, C	Boiler Room; Roof A; Parapet Wall Covering	Layer A; Tar and tar paper	20% Chrysotile
10-19-ASB-145 A, B, C	Boiler Room; Roof A; Parapet Wall Covering	Layer B; Tar	25% Chrysotile
10-19-ASB-146 A, B	Smoke Stack	Black caulk	35% Chrysotile
10-19-ASB-147 A, B, C	Boiler Room; Roof A; Parapet Flashing	Layer A; Tar and felt	30% Chrysotile
10-19-ASB-148 A, B, C	Boiler Room; Roof A; Parapet Flashing	Layer B; Tar and paper (multiple layers; homogeneous)	20% Chrysotile
10-19-ASB-149 A, B, C	Boiler Room; Roof B; Parapet Flashing	Layer A; Tar and felt	30% Chrysotile
10-19-ASB-150 A, B, C	Boiler Room; Roof B; Parapet Flashing	Layer B; Tar and felt	30% Chrysotile
10-19-ASB-151 A, B, C	Boiler Room; Roof B; Parapet Flashing	Layer C; Tar and felt	15% Chrysotile
10-19-ASB-152 A, B, C	Boiler Room; Roof B; Parapet Flashing	Layer D; Tar and felt	15% Chrysotile
10-19-ASB-153 A, B	Boiler Room; Roof Vent Covering (36-inch)	Tar and felt	30% Chrysotile
10-19-ASB-154 A, B, C	Boiler Room; Roof Exhaust Flue Pedestals	Tar and felt (multiple layers; homogeneous)	15% Chrysotile
10-19-ASB-155 A, B	Boiler Room; Roof A; Stack Pedestal	Layer A; Rubber and canvas	8.0% Chrysotile
10-19-ASB-156 A, B	Boiler Room; Roof A; Stack Pedestal	Layer B; Tar and tar paper	20% Chrysotile
10-19-ASB-157 A, B, C	Boiler Room; Roof A; Sash Skylight; Wall Covering	Layer A; Tar and canvas	2.25% Chrysotile
10-19-ASB-158 A, B, C	Boiler Room; Roof A; Sash Skylight; Wall Covering	Layer B; Tar and gravel and tar paper	30% Chrysotile
10-19-ASB-159 A, B	Boiler Room; Roof A; Sash Skylight; Decking	Layer A; Rubber mat and tar	2.5% Chrysotile
10-19-ASB-160 A, B	Boiler Room; Roof A; Sash Skylight; Decking	Layer B; Tar, gravel and tar paper	1.75% Chrysotile
10-19-ASB-161 A, B	Boiler Room; Roof A; Sash Skylight; Flashing	Layer A; Tar and paper (multiple layers; homogeneous)	15% Chrysotile
10-19-ASB-162 A, B	Boiler Room; Roof A; Sash Skylight; Flashing	Layer B; Tar and paper (multiple layers; homogeneous)	10% Chrysotile
10-19-ASB-163 A, B	Boiler Room; Roof B; Sash Skylight; Flashing	Layer A; Tar and paper (multiple layers; homogeneous)	3.25% Chrysotile
10-19-ASB-164 A, B	Boiler Room; Roof B; Sash Skylight; Flashing	Layer B; Tar and paper (multiple layers; homogeneous)	10% Chrysotile

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English Station  
Asbestos Survey Analytical Results Summary**

<b>Sample ID</b>	<b>Sample Location</b>	<b>Sample Material Description</b>	<b>Asbestos Analytical Results</b>
10-21-ASB-165 A, B	Turbine Room; Roof A (Turbines 1, 2, and 3); Decking	Layer A; Rubber and tar	1.5% Chrysotile
10-21-ASB-166 A, B	Turbine Room; Roof A (Turbines 1, 2, and 3); Decking	Layer B; Tar and cloth material	6.5% Chrysotile
10-21-ASB-167 A, B	Turbine Room; Roof A (Turbines 1, 2, and 3); Decking	Layer C; Tar, felt, and tar gravel (multiple layers; homogeneous)	10% Chrysotile
10-21-ASB-168 A, B	Turbine Room; Roof A (Turbines 1, 2, and 3); Decking	Layer D; Tar adhesive	ND
10-21-ASB-169 A, B	Turbine Room; Roof B (Turbines 4, 5, and 6); Decking	Layer A; Rubber and tar	ND
10-21-ASB-170 A, B	Turbine Room; Roof B (Turbines 4, 5, and 6); Decking	Layer B; Tar, felt, and tar gravel (multiple layers; homogeneous)	10% Chrysotile
10-21-ASB-171 A, B	Turbine Room; Roof B (Turbines 4, 5, and 6); Decking	Layer C; Tar adhesive	ND
10-21-ASB-182	Turbine Room; Roof B (Turbines 4, 5, and 6); Flashing	Layer A; Rubber and tar	10% Chrysotile
10-21-ASB-183	Turbine Room; Roof B (Turbines 4, 5, and 6); Flashing	Layer B; Thick cloth/tar backing	3.0% Chrysotile
10-21-ASB-184	Turbine Room; Roof B (Turbines 4, 5, and 6); Flashing	Layer A; Rubber and tar	1.8% Chrysotile
10-21-ASB-185	Turbine Room; Roof B (Turbines 4, 5, and 6); Flashing	Layer B; Tar/cloth backing	1.5% Chrysotile
10-21-ASB-186	Turbine Room; Roof B (Turbines 4, 5, and 6); Flashing	Layer C; Tar/cloth backing with assumed hard rubber on back Copper layer	10% Chrysotile
10-21-ASB-187 A, B	Turbine Room; Roof A (Turbines 1, 2, and 3); Flashing	Layer A; Rubber and tar	Trace*
10-21-ASB-188 A, B	Turbine Room; Roof A (Turbines 1, 2, and 3); Flashing	Layer B; Tar and cloth	3.8% Chrysotile
10-21-ASB-189 A, B	Turbine Room; Roof A (Turbines 1, 2, and 3); Parapet Wall Covering	Layer A; Rubber and tar	Trace*
10-21-ASB-190 A, B	Turbine Room; Roof A (Turbines 1, 2, and 3); Parapet Wall Covering	Layer B; Tar and cloth	3.3% Chrysotile 0.5% Anthophyllite
10-21-ASB-191 A, B	Turbine Room; Roof B (Turbines 4, 5, and 6); Parapet Wall Covering	Layer A; Rubber and tar	3.5% Chrysotile Trace Anthophyllite
10-21-ASB-192 A, B	Turbine Room; Roof B (Turbines 4, 5, and 6); Parapet Wall Covering	Layer B; Tar and cloth	4.8% Chrysotile
10-21-ASB-193 A, B	Switch House Roof, Decking	Layer A; Rubber and tar material	0.25% Chrysotile
10-21-ASB-194 A, B	Switch House Roof, Decking	Layer B; Tar and felt	6.5% Chrysotile

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English Station  
Asbestos Survey Analytical Results Summary**

Sample ID	Sample Location	Sample Material Description	Asbestos Analytical Results
10-21-ASB-195 A, B	Switch House Roof, Decking	Layer C; Tar and cloth, (multiple layers; homogeneous)	4.0% Chrysotile
10-21-ASB-196 A, B	Switch House Roof, Decking	Layer D; Gravelly/tar concrete backing	1.3% Chrysotile
10-21-ASB-197 A, B	Switch House Roof, Flashing	Layer A; Tar and rubber	3.0% Chrysotile
10-21-ASB-198 A, B	Switch House Roof, Flashing	Layer B; Fibrous material and tar	2.3% Chrysotile
10-21-ASB-199 A, B	Switch House roof, Parapet Wall Covering	Cloth and tar	5.8% Chrysotile
10-21-ASB-200 A, B	Conduit Roof, Decking	Rubber and tar	0.25% Chrysotile
10-21-ASB-201 A, B	Conduit Roof, Flashing	Layer A; Rubber and tar Copper layer (east wall only)	0.25% Chrysotile
10-21-ASB-202 A, B	Conduit Roof, Flashing	Layer B; Tar and paper	2.8% Chrysotile
10-21-ASB-203 A, B	Conduit Roof, Parapet Wall	Rubber and tar	10% Chrysotile
10-22-ASB-223 A, B	Screen House 2; Decking	Layer A; Tar and gravel	2.0% Chrysotile
10-22-ASB-224 A, B	Screen House 2, Decking	Layer B; Tar and felt (multiple layers; homogeneous)	ND
10-22-ASB-225 A, B	Screen House 2; Flashing	Layer A; Tar and gravel	3.5% Chrysotile
10-22-ASB-226 A, B	Screen House 2; Flashing	Layer B; Tar and felt	10% Chrysotile
10-22-ASB-227 A, B	Screen House 2; Parapet Wall Covering	Tar and felt	20% Chrysotile
10-22-ASB-228 A, B	Screen House 1; Decking	Layer A; Tar and gravel	ND
10-22-ASB-229 A, B	Screen House 1; Decking	Layer B; Tar and felt (multiple layers; homogeneous)	ND
10-22-ASB-230 A, B	Screen House 1; Flashing	Layer A; Tar and cloth paper	15% Chrysotile
10-22-ASB-231 A, B	Screen House 1; Flashing	Layer B; Tar and felt	10% Chrysotile
10-22-ASB-232 A, B	Screen House 1; Parapet Wall Covering	Fibrous material with tar and felt backing	15% Chrysotile
10-22-ASB-233 A, B	Surge Tank Roof (north); Decking	Layer A; Rubber and tar	ND
10-22-ASB-234 A, B	Surge Tank Roof (north); Decking	Layer B; Tar and field (multiple layers; homogeneous)	ND
10-22-ASB-235 A, B	Surge Tank Roof (north); Flashing	Layer A; Rubber and tar	20% Chrysotile
10-22-ASB-236 A, B	Surge Tank Roof (north); Flashing	Layer B; Tar and felt	25% Chrysotile
10-22-ASB-237 A, B	Surge Tank Roof (north); Parapet Wall Covering	Layer A; Gravel and tar	30% Chrysotile
10-22-ASB-238 A, B	Conveyor Equipment Roof, Decking	Layer A; Gravel and tar	1.8% Chrysotile
10-22-ASB-239 A, B	Conveyor Equipment Roof, Decking	Layer B; Tar and felt	ND
10-22-ASB-240 A, B	Conveyor Equipment Roof, Flashing	Tar/cloth/fibrous material	1.5% Chrysotile
10-22-ASB-241 A, B	Conveyor Equipment Roof, Parapet Wall Covering	Tar/cloth/fibrous material	4.3% Chrysotile

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Sample ID	Sample Location	Sample Material Description	Asbestos Analytical Results
10-22-ASB-242 A, B, C	Vent into High Pressure Boilers; Exhaust Flue	Breeching cement	5.8% Chrysotile
10-22-ASB-243 A, B, C	Vent into High Pressure Boilers; Vent exterior	Porthole gasket	85% Chrysotile
10-22-ASB-244 A, B, C	Boiler Room; Roof B; Smokestack; Exterior	Red brick	ND
10-22-ASB-245 A, B, C	Boiler Room; Roof B; Smokestack; Exterior	Tan brick	ND
10-22-ASB-246 A, B, C	Boiler Room; Roof B; Smokestack; Exterior	Mortar	ND
10-22-ASB-247 A, B, C	Boiler Room; Roof B; Smokestack; Interior	Gunnite	ND
10-22-ASB-248 A, B, C	Turbine Room; Roof B; Windows; East Side	Exterior caulking	3.8% Chrysotile
10-22-ASB-249 A, B, C	Turbine Room; Roof B; Windows; East Side	Exterior glazing	ND
10-22-ASB-250 A, B, C	Turbine Room; Roof B; Windows; East Side	Exterior fibrous material around the perimeter of windows	ND
10-22-ASB-251 A, B, C	Boiler Room; Roof B; Continuous Sash Skylight; Windows	Exterior glazing	Trace
10-22-ASB-252 A, B, C	Turbine Room; Roof A; Windows; East Side	Exterior caulking	3.5% Chrysotile
10-22-ASB-253 A, B, C	Turbine Room; Roof A; Windows; East Side	Exterior fibrous material around the perimeter of windows	ND
10-22-ASB-254 A, B, C	Boiler Room; Roof A; Continuous Sash Skylight; Windows	Exterior glazing	ND
10-22-ASB-255 A	Surge Tank; Exterior Siding	Corrugated Transite	25% Chrysotile
10-22-ASB-256 B, C	Surge Tank; Exterior Expansion Joint Caulk on Transite	Caulking	10% Chrysotile
10-22-ASB-257 A, B, C	Turbine Room; Area A; Windows; West Side	Exterior caulking	3.8% Chrysotile
10-22-ASB-258 A, B, C	Turbine Room; Area A; Windows; West Side	Exterior fibrous material around perimeter of windows	ND
10-22-ASB-259 A, B, C	Turbine Room; Area A; Windows; West Side	Expansion joint caulking and caulking on window sills	4.3% Chrysotile
10-25-ASB-264 A, B, C	Screen House 2; Roof Duct	Caulking around ventilation exhaust hatch	4.0% Chrysotile
10-25-ASB-265 A, B, C	Screen House 2; Roof Duct	Coating around grates of ventilation exhaust hatch	6.0% Chrysotile
10-25-ASB-268 A, B, C	Boiler Room; Roof A; Mini Sash Pitched Roof Skylight	Exterior glazing	ND
10-25-ASB-269 A, B, C	Boiler Room; Roof B; Coal Bunker Windows	Exterior glazing	ND

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English Station  
Asbestos Survey Analytical Results Summary**

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10-25-ASB-270 A, B, C	Ash Hopper Housing; Roof A; Window, East Side	Exterior caulking	4.8% Chrysotile
10-25-ASB-271 A, B, C	Surge Tank Room; Interior Wall	Transite paneling	25% Chrysotile
10-25-ASB-272 A, B	Surge Tank Roof (south); Decking	Fibrous material/tar and felt (single layer)	1.8% Chrysotile
10-25-ASB-273 A, B	Surge Tank Roof (south); Flashing	Layer A; Fibrous material and tar	4.3% Chrysotile
10-25-ASB-274 A, B	Surge Tank Roof (south); Flashing	Layer B; Fibrous material and tar	3.3% Chrysotile
10-25-ASB-275 A, B	Surge Tank Roof (south); Parapet Wall Covering	Cloth material, tar, and felt paper	5.8% Chrysotile
10-29-ASB-351 A, B	2 <sup>nd</sup> floor; Turbine Room; Office Area & Locker Room; Windows	Interior glazing	1.0% Chrysotile
10-29-ASB-352	2 <sup>nd</sup> floor; Turbine Room; Window looking out on turbine floor from offices	Interior caulking	ND
10-29-ASB-354 A, B, C	Low Pressure Turbine & Boiler Rooms; North Side of Building; Smaller Multi-Paned windows	Interior glazing	0.50% Chrysotile
10-29-ASB-355 A, B	Boiler Room; Area A; Large Multi-Paned Windows	Interior glazing	ND
10-29-ASB-356 A, B	Boiler Room; Area B; Large Multi-Paned Windows	Interior glazing	Trace*
10-29-ASB-357 A, B	Boiler Room; Area A; Large Multi-Paned Windows	Interior caulking	ND
10-29-ASB-358 A, B	Boiler Room; Area B; Large Multi-Paned Windows	Interior caulking	ND
10-29-ASB-362 A, B	1 <sup>st</sup> floor; Fuel Oil Pump/Heater Room	Interior glazing	Trace*
10-29-ASB-363	1 <sup>st</sup> /2 <sup>nd</sup> floor stairwell; Single Pane Windows	Interior glazing	Trace*
10-29-ASB-364	2 <sup>nd</sup> floor; Offices between No. 7 & 9 Units; Window	Interior glazing	ND
10-29-ASB-365	2 <sup>nd</sup> floor; Offices between No. 7 & 9 Units; Window	Interior caulking	ND
10-29-ASB-380	2 <sup>nd</sup> floor; Northern Side of Overhead Door; Windows	Interior glazing	ND
10-29-ASB-381	5 <sup>th</sup> floor; Coal Chute/Conveyor Area; Window	Exterior caulking	3.5% Chrysotile
10-29-ASB-382	5 <sup>th</sup> floor; Coal Chute/Conveyor Area; Window (Replaced)	Interior/Exterior glazing	ND
10-29-ASB-383	6 <sup>th</sup> floor; Skiff Hoist Motor and Pulley Room; Window	Interior glazing	ND
10-29-ASB-384	6 <sup>th</sup> floor; Skiff Hoist Motor and Pulley Room; Window	Interior glazing	ND
11-3-ASB-385 A, B, C	Surge Tank Room; Window	Exterior caulking	1.8% Chrysotile
11-3-ASB-386 A, B, C	Surge Tank Room; Window	Interior caulking	ND

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Asbestos Survey Analytical Results Summary**

Sample ID	Sample Location	Sample Material Description	Asbestos Analytical Results
11-3-ASB-392 A, B, C	2 <sup>nd</sup> floor, Bus Structures and Oil Circuit Breaker Compartments; Side Panels	Concrete	ND
11-3-ASB-393 A, B, C	2 <sup>nd</sup> floor, Bus Structures and Oil Circuit Breaker Compartments; Top and Bottom Panels	Alberene slabs	ND
11-4-ASB-433 A, B	1 <sup>st</sup> floor, Boiler Room; Area A; Window	Exterior caulking	15% Chrysotile
11-5-ASB-434 A, B	1 <sup>st</sup> floor, Boiler Room; Area B; Window	Exterior caulking	20% Chrysotile
11-5-ASB-435 A	1 <sup>st</sup> floor, Boiler Room; Area A; Window	Exterior Asphalt caulking	20% Chrysotile
11-5-ASB-436	1 <sup>st</sup> floor, Boiler Room; Area B; Window	Exterior Asphalt caulking	10% Chrysotile
11-5-ASB-457 A, B	Screen House 2; Window, On Floor	Interior glazing	0.25% Chrysotile
11-5-ASB-458 A, B	Screen House 2; Window, Type A	Exterior caulking	2.0% Chrysotile
11-5-ASB-459 A, B	Screen House 2; Window, Type B	Exterior caulking	0.5% Chrysotile
11-5-ASB-460 A, B	Screen House 1; Window	Interior glazing	0.8% Chrysotile
11-5-ASB-461 A, B	Screen House 1; Window, Type A	Exterior caulking	4.2% Chrysotile
11-5-ASB-462 A, B	Screen House 1; Window, Type B	Exterior caulking	1.2% Chrysotile
11-5-ASB-468 A, B	Screen House 2; Door	Exterior caulking	4.0% Chrysotile
11-5-ASB-469 A, B	Screen House 1; Door	Exterior caulking	Not received; assumed positive
11-5-ASB-470	Screen House 1	Canvas wind barrier	ND
11-5-ASB-477 A, B	Coal Ash Hoopers	Interior skimcoat	ND
11-5-ASB-478 A, B	Coal Ash Hoopers	Exterior skimcoat	ND
11-10-ASB-481 A, B, C	4 <sup>th</sup> floor, Switchboard Room	Fibrous wall covering (over Pyrobar block wall)	2.8% Chrysotile
11-10-ASB-482 A, B	4 <sup>th</sup> floor, Switchboard Room; Window	Interior caulking	10% Chrysotile
11-10-ASB-483 A, B	2 <sup>nd</sup> floor, Electrical Repair Shop; Air Heater Blower Unit	Pipe wrap insulation	5.5% Chrysotile
<b>High Pressure Boiler/Turbine Areas</b>			
10-6-ASB-17 A	1 <sup>st</sup> floor, New Boiler Heating Room; Windows	Exterior glazing	ND
10-21-ASB-172 A, B	Turbine Room; Roof C (Turbine 7); Decking	Layer A; Rubber and tar	ND
10-21-ASB-173 A, B	Turbine Room; Roof C (Turbine 7); Decking	Layer B; Tar adhesive	ND
10-21-ASB-174 A, B	Turbine Room; Roof D (Turbine 8); Decking	Layer A; Tar and rubber	ND
10-21-ASB-175 A, B	Turbine Room; Roof D (Turbine 8); Decking	Layer B; Tar and felt (multiple layers; homogeneous)	ND
10-21-ASB-176 A, B	Turbine Room; Roof C (Turbine 7); Decking	Layer C; Tar with fibrous	ND
10-21-ASB-177 A, B	Turbine Room; Roof D (Turbine 8); Flashing	Layer A; Rubber and tar	20% Chrysotile

**Notes:** Asbestos content equal to or greater than 1% requires abatement prior to demolition.  
 Shaded concentrations indicate material is asbestos-containing ( $\geq 1$  asbestos).  
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 ND = none detected

**Table 1  
English Station  
Asbestos Survey Analytical Results Summary**

Sample ID	Sample Location	Sample Material Description	Asbestos Analytical Results
10-21-ASB-178 A, B	Turbine Room; Roof D (Turbine 8); Flashing	Layer B; Thick felt paper and tar	ND
10-21-ASB-179 A, B	Turbine Room; Roof D (Turbine 8); Flashing	Layer C; Tar felt with tar granules in between layers (multiple layers, homogeneous)	ND
10-21-ASB-180 A, B	Turbine Room; Roof C (Turbine 7); Flashing	Layer A; Rubber and tar	Trace*
10-21-ASB-181 A, B	Turbine Room; Roof C (Turbine 7); Flashing	Layer B; Felt backing	15% Chrysotile
10-21-ASB-204 A, B	Reactor Roof, Decking	Layer A; Rubber and tar	Trace*
10-21-ASB-205 A, B	Reactor Roof, Decking	Layer B; Gravel and tar	ND
10-21-ASB-206 A, B	Reactor Roof, Decking	Layer C; Tar and felt	ND
10-21-ASB-207 A, B	Reactor Roof, Flashing	Rubber and tar	15% Chrysotile
10-21-ASB-208	Reactor Roof, Ventilator Siding	Layer A; Tar/cloth wrapping	35% Chrysotile
10-21-ASB-209	Reactor Roof, Ventilator Siding	Layer B; Rubber, tar and felt	25% Chrysotile
10-21-ASB-210 A, B	Screen House 3, Decking	Layer A; Heavy tar and gravel	ND
10-21-ASB-211 A, B	Screen House 3, Decking	Layer B; Tar and felt (multiple layers, homogenous)	ND
10-21-ASB-212 A, B	Screen House 3, Decking	Layer C; Gravelly tar/ tarred gravel	ND
10-21-ASB-213 A, B	New Boiler Room; Roof A; Decking	Layer A; Rubber and tar	0.5% Chrysotile
10-21-ASB-214 A, B	New Boiler Room; Roof A; Decking	Layer B; Gravelly tar/ tarred gravel	0.75% Chrysotile
10-21-ASB-215 A, B	New Boiler Room; Roof A; Decking	Layer C; Felt and tar	ND
10-21-ASB-216 A, B	New Boiler Room; Roof A; Flashing	Layer A; Rubber and tar Copper layer	15% Chrysotile
10-21-ASB-217 A, B	New Boiler Room; Roof A; Flashing	Layer B; Rubber, felt, & tar material	8.8% Chrysotile
10-22-ASB-218 A, B	New Boiler Room; Roof B; Decking	Layer A; Rubber and tar	0.25% Chrysotile
10-22-ASB-219 A, B	New Boiler Room; Roof B; Decking	Layer B; Gravelly tar/ tarred gravel	ND
10-22-ASB-220 A, B	New Boiler Room; Roof B; Decking	Layer C; Tar and felt (multiple layers, homogeneous)	ND
10-22-ASB-221 A, B	New Boiler Room; Roof B; Flashing	Layer A; Rubber and tar	15% Chrysotile
10-22-ASB-222 A, B	New Boiler Room; Roof B; Flashing	Layer B; Tar and felt	10% Chrysotile
10-22-ASB-255 B, C	Exterior Siding	Corrugated Transite	25% Chrysotile
10-22-ASB-256 C	Exterior Expansion Joint Caulk on Transite	Caulking	10% Chrysotile
10-25-ASB-260 A, B, C	Reactor Room, Bricked in 1/2-Round Windows	Expansion joint caulking	3.8% Chrysotile
10-25-ASB-261 A	Reactor Room, Windows	Exterior caulking	4.8% Chrysotile

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**Table 1  
English Station  
Asbestos Survey Analytical Results Summary**

Sample ID	Sample Location	Sample Material Description	Asbestos Analytical Results
10-25-ASB-262 A	Reactor Room; Windows	Exterior glazing	Trace*
10-25-ASB-263	New Boiler Room; Roof B; Partition Wall	Asphalt Caulking	5.3% Chrysotile
10-25-ASB-266 A, B, C	New Boiler Room; Roof A; Window	Exterior caulking	2.8% Chrysotile
10-25-ASB-267 A, B, C	New Boiler Room; Roof A; Windows	Exterior glazing	0.75% Chrysotile
10-26-ASB-276 A, B	Boiler No. 13 Roof; Elevation 119 feet; Decking	Layer A; Gravelly tar/tarred gravel	Trace*
10-26-ASB-277 A, B	Boiler No. 13 Roof; Elevation 119 feet; Decking	Layer B; Gravelly tar/tarred gravel	ND
10-26-ASB-278 A, B	Boiler No. 13 Roof; Elevation 119 feet; Flashing	Layer A; Rubber, tar, cloth	6.3% Chrysotile
10-26-ASB-279 A, B	Boiler No. 13 Roof; Elevation 119 feet; Flashing	Layer B; Tar and felt (multiple layers; homogeneous)	ND
10-26-ASB-280 A, B	Boiler No. 14 Roof; Elevation 119 feet; Decking	Layer A; Rubber and tar	Trace*
10-26-ASB-281 A, B	Boiler No. 14 Roof; Elevation 119 feet; Decking	Layer B; Gravelly tar/tarred gravel	ND
10-26-ASB-282 A, B	Boiler No. 14 Roof; Elevation 119 feet; Decking	Layer C; Felt and tar (multiple layers homogeneous)	ND
10-26-ASB-283 A, B	Boiler No. 14 Roof; Elevation 119 feet; Flashing	Layer A; Rubber and tar	8.5% Chrysotile
10-26-ASB-284 A, B	Boiler No. 14 Roof; Elevation 119 feet; Flashing	Layer B; Felt, paper and tar (multiple layers homogeneous)	7.0% Chrysotile
10-26-ASB-285 A, B, C	Boiler No. 14 Roof; Elevation 119 feet; Parapet Wall	Felt and tar	ND
10-26-ASB-285 A	Boiler No. 14 Roof; Elevation 119 feet; Parapet Wall	Black tar from above	18% Chrysotile
10-26-ASB-285 A	Boiler No. 14 Roof; Elevation 119 feet; Parapet Wall	Tan fibrous material from above	45% Chrysotile
10-26-ASB-286 A, B	Boiler No. 13 Roof; Elevation 136 feet; Decking	Tar and gravel	ND
10-26-ASB-287 A, B	Boiler No. 13 Roof; Elevation 136 feet; Flashing	Layer A; Tar and felt (multiple layers; homogeneous); copper covering tar and felt	2.5% Chrysotile
10-26-ASB-288 A, B, C	Boiler No. 13 Roof; Elevation 136 feet; Parapet Wall	Felt and tar	1.8% Chrysotile
10-26-ASB-289 A, B	Boiler No. 13; Elevation 146 feet; Decking	Layer A; Rubber and tar	Trace*
10-26-ASB-290 A, B	Boiler No. 13; Elevation 146 feet; Decking	Layer B; Gravelly tar	ND
10-26-ASB-291 A, B	Boiler No. 13; Elevation 146 feet; Decking	Layer C; Tar, felt and paper (multiple layers; homogeneous)	ND
10-26-ASB-292 A, B	Boiler 13; Elevation 146 feet; Flashing	Layer A; Tar, cloth, rubber Copper layer	4.5% Chrysotile
10-26-ASB-293 A, B	Boiler 13; Elevation 146 feet; Flashing	Layer B; Tar, felt, and paper (multiple layers; homogeneous)	ND

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**Table 1  
English Station  
Asbestos Survey Analytical Results Summary**

Sample ID	Sample Location	Sample Material Description	Asbestos Analytical Results
10-26-ASB-294 A, B	Boiler 13; Elevation 103 feet; Decking	Layer A; Tar and rubber	Trace*
10-26-ASB-295 A, B	Boiler 13; Elevation 103 feet; Decking	Layer B; Gravelly tar	ND
10-26-ASB-296 A, B	Boiler 13; Elevation 103 feet; Decking	Layer C; Tar, felt paper	ND
10-26-ASB-297 A, B	Boiler 13; Elevation 103 feet; Flashing	Layer A; Tar, cloth, rubber	5.0% Chrysotile
10-26-ASB-298 A, B	Boiler 13; Elevation 103 feet; Flashing	Layer B; Felt and tar	ND
10-26-ASB-299 A, B	Boiler 14; Elevation 103 feet; Decking	Layer A; Tar and rubber	Trace*
10-26-ASB-300 A, B	Boiler 14; Elevation 103 feet; Decking	Layer B; Gravelly tar/tarred gravel	ND
10-26-ASB-301 A, B	Boiler 14; Elevation 103 feet; Flashing	Layer A; Tar and cloth	3.8% Chrysotile
10-26-ASB-302 A, B	Boiler 14; Elevation 103 feet; Flashing	Layer B; Tar and felt (multiple layers, homogeneous)	ND
10-26-ASB-303 A, B	Boiler 13; North End; Pitched Roof; Elevation 103 feet; Decking	Layer A; Gravel, tar, and felt paper	ND
10-26-ASB-304 A, B	Boiler 13; North End; Pitched Roof; Elevation 103 feet; Decking	Layer B; Pumus like insulation	ND
10-26-ASB-305 A, B	Boiler 13; North End; Pitched Roof; Elevation 103 feet; Flashing	Felt, paper, tar	ND
10-26-ASB-306 A, B	Boiler 14; Elevation 119 feet; Decking	Tar and gravel	ND
10-26-ASB-307 A, B	Boiler 14; Elevation 119 feet; Flashing	Felt and tar (multiple layers; homogeneous)	ND
10-26-ASB-308 A, B	Boiler 14; Elevation 136 feet; Decking	Tar and gravel	ND
10-26-ASB-309 A, B	Boiler 14; Elevation 136 feet; Flashing	Tar and felt paper	ND
10-26-ASB-310 A, B	Boiler 14; Elevation 146 feet; Decking	Tar and gravel	ND
10-26-ASB-311 A, B	Boiler 14; Elevation 146 feet; Flashing	Tar and felt paper (multiple layers; homogeneous)	ND
10-26-ASB-312 A, B	Boiler 14; Elevation 103 feet; Decking	Layer A; Tar and gravel	ND
10-26-ASB-313 A, B	Boiler 14; Elevation 103 feet; Decking	Layer B; Tar and felt (multiple layer, homogeneous)	ND
10-26-ASB-314 A, B	Boiler 14; Elevation 103 feet; Flashing	Tar and felt (multiple layers; homogeneous)	ND
10-27-ASB-315	1 <sup>st</sup> floor, [New Reactor Room] ✱	Electrical conduit (transite)	28% Chrysotile 4% Crocidolite
10-27-ASB-316 A, B, C	1 <sup>st</sup> floor, New Reactor Room	Floor panels (transite)	25% Chrysotile
10-27-ASB-317 A, B, C	1 <sup>st</sup> floor, New Reactor Room	Plaster	ND
10-27-ASB-318	1 <sup>st</sup> floor, Main Ash Duct Access Port ✱ ✱	Gasket	68% Chrysotile
10-27-ASB-319	1 <sup>st</sup> floor, Primary Ash Pipes ✱ ✱	Cementitious gasket	3.5% Chrysotile
10-28-ASB-320	1 <sup>st</sup> floor, Oil Pump Room; Pipe in Trench	Pipe insulation	ND
10-28-ASB-321	1 <sup>st</sup> floor, Oil Pump Room	Wall panel	20% Chrysotile
10-28-ASB-322 A, B, C	2 <sup>nd</sup> floor, Turbine (No. 7 Unit); Beneath Orange Cover	Turbine conveer insulation	85% Chrysotile

✱ HIGH PRESSURE SWITCHGEAR ROOM

**Notes:** Asbestos content equal to or greater than 1% requires abatement prior to demolition.

Shaded concentrations indicate material is asbestos-containing (≥1 asbestos).

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ND = none detected

✱ ✱ AIR REMOVAL THROUGH PIPE FROM PRIMARY AIR DUCT HEATER

**Table 1  
English Station  
Asbestos Survey Analytical Results Summary**

Sample ID	Sample Location	Sample Material Description	Asbestos Analytical Results
10-28-ASB-323 A, B, C	Turbine room, shrink wrap on door gage room	Shrink wrap barrier	ND
10-28-ASB-324 A, B, C	2 <sup>nd</sup> floor, Ladies room	Brown 12" x 12" floor tile	ND
10-28-ASB-324 A, B, C	2 <sup>nd</sup> floor, Ladies room	Black mastic from above	ND
10-28-ASB-325 A, B, C	2 <sup>nd</sup> floor, Gage Board Room (No. 7 Unit)	Green 9" x 9" floor tile	3.3% Chrysotile
10-28-ASB-325 A	2 <sup>nd</sup> floor, Gage Board Room (No. 7 Unit)	Black mastic from above	ND
10-28-ASB-326 A, B, C	2 <sup>nd</sup> floor, Gage Board Room (No. 7 Unit)	2' x 2' ceiling tile	ND
10-28-ASB-327 A, B, C	2 <sup>nd</sup> floor, Gage Board Room (No. 7 Unit)	6" baseboard and mastic	ND
10-28-ASB-327 A, B, C	2 <sup>nd</sup> floor, Gage Board Room (No. 7 Unit)	Yellow mastic from above	ND
10-28-ASB-328 A, B, C	2 <sup>nd</sup> floor, Gage Board Room (No. 7 Unit)	Wool insulation behind 12" metal panels	ND
10-28-ASB-329 A, B, C	2 <sup>nd</sup> floor, Office No. 1 (Maria's Office)	Tan 9" x 9" floor tile	1.8% Chrysotile
10-28-ASB-329 A, B, C	2 <sup>nd</sup> floor, Office No. 1 (Maria's Office)	Yellow mastic from sample above	ND
10-28-ASB-330 A, B, C	2 <sup>nd</sup> floor, Office No. 1 (Maria's Office)	4" baseboard and mastic	ND
10-28-ASB-330 A, B, C	2 <sup>nd</sup> floor, Office No. 1 (Maria's Office)	Cream mastic from above	ND
10-28-ASB-331 A, B, C	2 <sup>nd</sup> floor, Office No. 1 (Maria's Office)	2' x 2' ceiling panels	ND
10-28-ASB-332 A, B, C	2 <sup>nd</sup> floor, Office No. 1 (Maria's Office)	12" x 12" ceiling tiles	ND
10-28-ASB-333 A, B, C	2 <sup>nd</sup> floor, Office No. 1 (Maria's Office)	Fibrous wall panels	ND
10-29-ASB-334	1 <sup>st</sup> floor, Boiler No. 14; Cooling Water Pipe on Turbine Oil Tank	Pipe gasket	ND
10-29-ASB-335	1 <sup>st</sup> floor, Boiler No. 14; Air Exhaust Control Valve	Pipe gasket	ND
10-29-ASB-336	1 <sup>st</sup> floor, Boiler No. 14; Ash Hoppers	Door gasket	55% Chrysotile
10-29-ASB-337	2 <sup>nd</sup> floor, Gage Board Room (No. 7 Unit); Exterior	Wall board	25% Chrysotile
10-29-ASB-338	2 <sup>nd</sup> floor, Gage Board Room (No. 7 Unit); Wall/Electrical Conduit Fill Material	Tar	18% Chrysotile
10-29-ASB-339	3 <sup>rd</sup> floor, Boiler No. 14; Air Cleaner Room; Intake Fan	Vibration dampener	45% Chrysotile
10-29-ASB-340	3 <sup>rd</sup> floor, Boiler No. 14; Air Cleaner Room; Intake Fan	Door gasket	ND
10-29-ASB-341	3 <sup>rd</sup> floor, Boiler No. 14; Air Cleaner Room; Intake Fan	Air filter	ND
10-29-ASB-342	Boiler No. 14; Coal Scale Mechanism	Door gasket	ND
10-29-ASB-343	Boiler No. 14; Coal Scale Mechanism	Wire insulation	ND
10-29-ASB-344	5 <sup>th</sup> floor, Boiler No. 13; Pipe Breach in Ash Vacuum Tank Room	Canvas mat	50% Chrysotile
10-29-ASB-345	5 <sup>th</sup> floor, Boiler No. 13; Ash Vacuum Tank	Tank vacuum gasket (white)	3.5% Chrysotile
10-29-ASB-346	5 <sup>th</sup> floor, Boiler No. 13; Ash Vacuum Tank	Tank vacuum gasket (grey)	4.3% Chrysotile

**Notes:** Asbestos content equal to or greater than 1% requires abatement prior to demolition.

Shaded concentrations indicate material is asbestos-containing ( $\geq 1$  asbestos).

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ND = none detected

**Table 1  
English Station  
Asbestos Survey Analytical Results Summary**

Sample ID	Sample Location	Sample Material Description	Asbestos Analytical Results
10-29-ASB-347	5 <sup>th</sup> floor, Boiler No. 13; Ash Vacuum Tank	Vacuum duct putty	28% Chrysotile
10-29-ASB-348 A, B, C	5 <sup>th</sup> floor, Boiler No. 13; Ash Vacuum Tank	Vacuum tank gasket (black)	ND
10-29-ASB-349	5 <sup>th</sup> floor, Boiler No. 13; Ash Silo; Vacuum Tank Room	Rounded transite panels	25% Chrysotile
10-29-ASB-350	5 <sup>th</sup> floor, Boiler No. 13; Ash Vacuum Tank	Wall insulation	ND
10-29-ASB-353 A, B, C	6 <sup>th</sup> floor, Boiler No. 13; Hear-Here Phone Box	Glue daubs	ND
10-29-ASB-359 A, B, C	6 <sup>th</sup> floor, Boiler No. 13; Wall Boarding Low Pressure Boilers	Plaster/cement	ND
11-4-ASB-360 A, B, C	1 <sup>st</sup> floor, Ash Silo Area; Boxed Material	Pipe insulation	ND
10-29-ASB-361	6 <sup>th</sup> floor, Boiler No. 14; Southeast Stairwell	Transite wall panel	38% Chrysotile
10-29-ASB-361	6 <sup>th</sup> floor, Boiler No. 14; Southeast Stairwell	Grey caulk from above	4.2% Chrysotile
11-3-ASB-366 A, B, C	9 <sup>th</sup> floor, Boiler No. 13; Precipitator Exterior Wall (beneath tin jacket)	Exterior jacket insulation	10% Chrysotile 10% Amosite
11-3-ASB-367 A, B, C	9 <sup>th</sup> floor, Boiler No. 13; Precipitator Exterior Wall (beneath tin jacket)	Tar outer coating of above	20% Chrysotile
11-3-ASB-368	Boiler No. 13; Elevation 136 feet; Parapet Wall	Flat transite panel	25% Chrysotile
11-3-ASB-369 A, B, C	Screen House 3; Decking	Layer A; Tar	ND
11-3-ASB-370 A, B, C	Screen House 3; Decking	Layer B; Tar paper	ND
11-3-ASB-371 A, B	Former Ash Silo Office Roof; Decking	Layer A; Top roof membrane	Trace*
11-3-ASB-372 A, B	Former Ash Silo Office Roof; Decking	Layer B; Tar roofing below	3.5% Chrysotile
11-3-ASB-373 A, B	Former Ash Silo Office Roof; Flashing	Tar	10% Chrysotile
11-3-ASB-374 A, B, C	Fuel Oil Heater Room; High Pressure Boilers; Flashing	Layer A; Paper barrier	Trace*
11-3-ASB-375 A, B, C	Fuel Oil Heater Room; High Pressure Boilers; Flashing	Layer B; Tar backing	ND
11-3-ASB-376 A, B, C	Fuel Oil Heater Room; High Pressure Boilers; Decking	Layer A; Roofing tar paper	ND
11-3-ASB-377 A, B, C	Fuel Oil Heater Room; High Pressure Boilers; Flashing	Layer B; Roofing insulation below	ND
11-3-ASB-378 A, B, C	Fuel Oil Heater Room; High Pressure Boilers; Air Handling Unit	Tar	20% Chrysotile
11-3-ASB-379 A, B, C, D, E, F	Boiler No. 13; Wall Bordering Low Pressure Boilers (various floors)	Wall cement/plaster	ND
11-3-ASB-387	1 <sup>st</sup> floor, Boiler No. 14; Interior South Wall	Flat transite panel	25% Chrysotile
11-3-ASB-391	4 <sup>th</sup> floor, Ash Silo Vacuum Tank Room; Vacuum Pipe	Cement Gasket	18% Chrysotile
11-4-ASB-409 A, B	Screen House 4; Lower Roof; Decking	Layer A; Tarred gravel/gravelly tar	ND

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**Table 1  
English Station  
Asbestos Survey Analytical Results Summary**

Sample ID	Sample Location	Sample Material Description	Asbestos Analytical Results
11-4-ASB-410 A, B, C	1 <sup>st</sup> floor, Boiler No. 13; Ash Silo Area; Boxed Material	Boxed jacket insulation	ND
11-4-ASB-411 A, B	Screen House 4; Lower Roof, Decking	Layer B; Felt and tar (multiple layers; homogeneous)	ND
11-4-ASB-412 A, B	Screen House 4; Lower Roof, Flashing	Felt and tar	ND
11-4-ASB-413 A, B	1 <sup>st</sup> floor, Screen House, West Windows	Interior caulking	ND
11-4-ASB-414 A, B	Screen House 4; Upper Roof, West Decking	Tar and felt (multiple layers; homogeneous)	7.5% Chrysotile
11-4-ASB-415 A, B	Screen House 4; Upper Roof, East Decking	Layer A; Rubber/tar	25% Chrysotile
11-4-ASB-416 A, B	Screen House 4; Upper Roof, East Decking	Layer B; Felt and tar (multiple layers; homogeneous)	18% Chrysotile
11-4-ASB-417 A, B	Screen House 4; Upper Roof, East decking	Layer C; Brown fibrous filling	ND
11-4-ASB-418 A, B	Screen House 4; Upper Roof, East Decking	Layer D; Tan adhesive	ND
11-4-ASB-419 A, B	Screen House 4; Upper Roof, West Flashing	Tar/felt/cloth	18% Chrysotile
11-4-ASB-420 A, B	Screen House 4; Upper Roof, East Flashing	Tar/felt/coth	15% Chrysotile
11-4-ASB-421 A, B	3 <sup>rd</sup> floor, Boiler No. 13; Multipaned Windows	Interior caulking	4.8% Chrysotile
11-4-ASB-422 A, B	5 <sup>th</sup> floor, Boiler No. 13; North Windows	Exterior glazing	0.5% Chrysotile
11-4-ASB-423 A, B	Screen House 4; Upper Roof, West Parapet Wall	Cloth and tar	3.5% Chrysotile
11-4-ASB-424 A, B	Screen House 4; Upper Roof, West/East Partition Wall; Flashing	Felt/tar (multiple layers; homogeneous)	15% Chrysotile
11-4-ASB-425 A, B	6 <sup>th</sup> floor, Boiler No. 14; Multiple Paned Windows	Exterior glazing	Trace*
11-5-ASB-429 A, B, C	2 <sup>nd</sup> floor, Boiler No. 13; Abandoned Locker Room/Hallway	Tan 12" x 12" floor tile	ND
11-5-ASB-430 A, B, C	2 <sup>nd</sup> floor, Boiler No. 13; Abandoned Locker Room/Hallway	Mastic from sample above	0.50% Chrysotile
11-5-ASB-431 A, B, C	2 <sup>nd</sup> floor, Boiler No. 13; Abandoned Locker Room/Hallway/ Hallway Closet	Red 12" x 12" floor tile	8.0% Chrysotile
11-5-ASB-432 A, B, C	2 <sup>nd</sup> floor, Boiler No. 13; Abandoned Locker Room/Hallway/ Hallway Closet	Mastic from sample above	ND
11-5-ASB-437	2 <sup>nd</sup> floor, Boiler No. 13; Hallway Closet	Black 24" x 6" floor tile	15% Chrysotile
11-5-ASB-438	2 <sup>nd</sup> floor, Boiler No. 13; Hallway Closet	Mastic from sample above	ND
11-5-ASB-439A, B, C	2 <sup>nd</sup> floor, Boiler No. 13; Abandoned Locker Room/Hallway	4 " Black painted, brown-vinyl baseboard	ND
11-5-ASB-440 A, B, C	2 <sup>nd</sup> floor, Boiler No. 13; Abandoned Locker Room/Hallway	Mastic from sample above	ND
11-5-ASB-441	2 <sup>nd</sup> floor, Boiler No. 13; Hallway/ Hallway Closet	Transite paneling	25% Chrysotile

**Notes:** Asbestos content equal to or greater than 1% requires abatement prior to demolition.  
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 ND = none detected

**Table 1  
English Station  
Asbestos Survey Analytical Results Summary**

Sample ID	Sample Location	Sample Material Description	Asbestos Analytical Results
11-5-ASB-442 A, B	1 <sup>st</sup> floor; Boiler No. 14; South Side Windows	Exterior caulking	1.5% Chrysotile
11-5-ASB-445 A, B	Screen House 4; Windows	Exterior glazing	ND
11-5-ASB-446 A, B	Screen House 4; Windows	Exterior caulking	1.5% Chrysotile
11-5-ASB-453 A, B	Screen House 3; Windows	Exterior glazing	ND
11-5-ASB-454 A, B	Screen House 3; Windows	Exterior caulking	3.8% Chrysotile
11-5-ASB-455 A, B	1 <sup>st</sup> floor; New Boiler Heating Room; Windows	Exterior glazing	ND
11-5-ASB-456 A, B	1 <sup>st</sup> floor; New Boiler Heating Room; Windows	Exterior caulking	3.5% Chrysotile
11-5-ASB-479 A, B	3 <sup>rd</sup> floor; Boiler Room Roof Looking at High-Pressure Side; Lead Door Backing	Exterior; Adhesive to transite paneling	2.3% Chrysotile
11-18-ASB-594 A, B	2 <sup>nd</sup> floor Mezzanine; Boiler No. 13; East Wall Block Windows	Interior caulking	3.3% Chrysotile
11-18-ASB-595 A, B	2 <sup>nd</sup> floor Mezzanine; Boiler No. 14; East Wall Block Windows	Interior caulking	5.5% Chrysotile
11-18-ASB-596 A, B	1 <sup>st</sup> floor; Boiler No. 13 & 14; Main Pulverisor 36" Air Duct	Pipe insulation residue	48% Chrysotile 1% Amosite
<b>Station B</b>			
11-12-ASB-484 A, B, C	1 <sup>st</sup> floor; Southwest Office Area	Mastic associated with sample # 643 (brown baseboard)	ND
11-12-ASB-485 A, B, C	1 <sup>st</sup> floor; East Central Office Area	2' x 4' swirl ceiling tile	ND
11-12-ASB-486 A, B, C	1 <sup>st</sup> floor; Kitchen & Northeast Office Area	2' x 4' dotted ceiling tile	ND
11-15-ASB-487 A, B, C	1 <sup>st</sup> floor; Kitchen, Northeast Office, & East Central Office Areas	Dark brown glue daubs associated with ceiling tiles	ND
11-15-ASB-488 A, B, C	1 <sup>st</sup> floor; Kitchen & Northeast Office Area	12" x 12" ceiling tiles	ND
11-15-ASB-489 A, B, C	1 <sup>st</sup> floor; Kitchen & Bathroom; Faux Wall Board	Glue backing	ND
11-15-ASB-490 A, B	1 <sup>st</sup> floor; Kitchen & Bathroom; Faux Wall Board	Fiber board	ND
11-15-ASB-491 A, B	1 <sup>st</sup> floor; Kitchen	Plaster skim coat	2.3% Chrysotile
11-15-ASB-492 A, B	1 <sup>st</sup> floor; Kitchen	Plaster rough coat	ND
11-15-ASB-493 A, B, C	1 <sup>st</sup> floor; Northeast office	Gypsum board	ND
11-15-ASB-494 A, B, C	1 <sup>st</sup> floor; Northeast office	Joint compound	3.8% Chrysotile
11-15-ASB-495 A, B, C	1 <sup>st</sup> floor; Office 4, Office 2, Office 1	White 12" x 12" floor tile	ND
11-15-ASB-496 A, B, C	1 <sup>st</sup> floor; Office 4, Office 2, Office 1	Mastic from sample above	ND
11-15-ASB-497 A, B, C	1 <sup>st</sup> floor; Office 4, Office 2, Office 1	Yellow 12" x 12" floor tile	ND
11-15-ASB-498 A, B, C	1 <sup>st</sup> floor; Office 4, Office 2, Office 1	Mastic from sample above	ND
11-15-ASB-499 A, B, C	1 <sup>st</sup> floor; Office 4, Office 2, Office 1	4" brown baseboard	ND
11-15-ASB-500 A, B, C	1 <sup>st</sup> floor; Office 4, Office 2, Office 1	Mastic from sample above	ND

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**Table 1  
English Station  
Asbestos Survey Analytical Results Summary**

Sample ID	Sample Location	Sample Material Description	Asbestos Analytical Results
11-15-ASB-501 A, B, C	1 <sup>st</sup> floor, Office 2, Office 4, Office 3	2' x 2' ceiling tile	ND
11-15-ASB-502 A, B, C	1 <sup>st</sup> floor, Office 1	2' x 4' ceiling tile	ND
11-15-ASB-503 A, B, C	1 <sup>st</sup> floor, Offices 1- 4	Gypsum board	ND
11-15-ASB-503 A, B, C	1 <sup>st</sup> floor, Offices 1- 4	Joint compound from above	ND
11-15-ASB-504 A, B, C	1 <sup>st</sup> floor, Office 3	6" brown baseboard	ND
11-15-ASB-505 A, B, C	1 <sup>st</sup> floor, Office 3	Mastic from sample above	ND
11-15-ASB-506 A, B, C	1 <sup>st</sup> floor, Ladies Northeast Locker Room ✕	Brown linoleum	10% Crocidolite
11-15-ASB-506 A, B, C	1 <sup>st</sup> floor, Ladies Northeast Locker Room	Mastic from sample above	ND
11-15-ASB-507 A, B, C	1 <sup>st</sup> floor, Ladies Northeast Locker Room	Beige 12" x 12" floor tile	ND
11-15-ASB-507 A, B, C	1 <sup>st</sup> floor, Mens Northeast Locker Room	Tan mastic from sample above	ND
11-15-ASB-508 A, B, C	1 <sup>st</sup> floor, Mens Northeast Locker Room	Light green floor tile	1.8% Crocidolite
11-15-ASB-508 A, B, C	1 <sup>st</sup> floor, Mens Northeast Locker Room	Black mastic from sample above	2.8% Crocidolite
11-15-ASB-509 A, B	1 <sup>st</sup> floor, Mens Northeast Locker Room	Grey floor tile	3.8% Chrysotile
11-15-ASB-509 A, B	1 <sup>st</sup> floor, Mens Northeast Locker Room	Black mastic from sample above	ND
11-15-ASB-510 A, B, C	1 <sup>st</sup> floor, Mens Northeast Locker Room	Black floor tile	4.5% Chrysotile
11-15-ASB-510 A, B, C	1 <sup>st</sup> floor, Mens Northeast Locker Room	Black mastic from sample above	8.3% Chrysotile
11-15-ASB-511 A, B, C	1 <sup>st</sup> floor mezzanine, Above Locker Room	Carpet mastic	ND
11-15-ASB-512 A, B, C	1 <sup>st</sup> floor, 8" Sewer Pipes	Layer A; Paper wrapping	ND
11-15-ASB-513 A, B, C	1 <sup>st</sup> floor, 8" Sewer Pipes	Layer B; Fibrous pipe covering	ND
11-15-ASB-514 A, B, C	1 <sup>st</sup> floor, Ladies Northeast Locker Room ✕	2' x 4' acoustical ceiling panels	ND
11-15-ASB-515 A, B, C	1 <sup>st</sup> floor, Map Storage Area	4" black baseboard w/mastic	ND
11-15-ASB-516 A, B, C	Switchgear Room Roof, Decking	Layer A; Fibrous felt/tar, homogenous	0.50% Chrysotile
11-15-ASB-517 A, B	Switchgear Room Roof, Decking	Layer B; White fibrous insul.	ND
11-15-ASB-518 A, B	Switchgear Room Roof, Decking	Layer C; Pink Red paper	ND
11-15-ASB-519 A, B	Switchgear Room Roof, Decking	Fibrous Felt/tar, (multiple layer, homogeneous)	ND
11-15-ASB-520 A, B	Switchgear Room Roof, Flashing Against Parapet Wall	Layer A; Fibrous felt	10% Chrysotile
11-15-ASB-521 A, B	Switchgear Room Roof, Flashing Against Parapet Wall	Layer B; Brown fibrous felt	ND
11-15-ASB-522 A, B	Switchgear Room Roof, Flashing Against Parapet Wall	Layer C; Tar	15% Chrysotile
11-15-ASB-523 A, B	Switchgear Room Roof, Flashing Against Turbine Room	Layer A; Fibrous felt & tar	6.5% Chrysotile
11-15-ASB-524 A, B	Switchgear Room Roof, Flashing Against Turbine Room	Layer B; Fibrous felt & tar	35% Chrysotile

✕ ALL REFERENCES TO "NORTHEAST" SHOULD BE CHANGED TO "NORTHWEST"

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**Table 1  
English Station  
Asbestos Survey Analytical Results Summary**

Sample ID	Sample Location	Sample Material Description	Asbestos Analytical Results
11-15-ASB-525 A, B	Switchgear Room Roof, Parapet Wall	Tar & felt (multiple layers, homogeneous)	10% Chrysotile
11-15-ASB-526 A, B	Switchgear Room Roof, Parapet Wall	Expansion joint caulk	25% Chrysotile
11-15-ASB-527 A, B	Switchgear Room Roof, Hatch Door Pitched Roof	Roof Tar	15% Chrysotile
11-15-ASB-528 A, B	Turbine Room; Exterior Siding	Corrugated Transite	25% Chrysotile
11-15-ASB-529 A, B	Switchgear Room Roof, Hatch Door Pitched Roof	Layer A; Asphalt shingles	2.5% Chrysotile
11-15-ASB-530 A, B	Switchgear Room Roof, Hatch Door Pitched Roof	Layer B; Tar	15% Chrysotile
11-16-ASB-531 A, B	Turbine Room Roof, Decking	Layer A; Fibrous felt and tar	15% Chrysotile
11-16-ASB-532 A, B	Turbine Room Roof, Decking	Layer B; Felt and tar (multiple layers, homogeneous)	ND
11-16-ASB-533 A, B	Turbine Room Roof, Decking	Layer C; Paper backing and tar adhesive	ND
11-16-ASB-534 A, B	Turbine Room Roof, West Parapet Wall	Layer A; Fibrous felt and tar	3.3% Chrysotile
11-16-ASB-535 A, B	Turbine Room Roof, West Parapet Wall	Layer B; Tar adhesive	6.3% Chrysotile
11-16-ASB-536 A, B	Turbine Room Roof, West/East Parapet Wall	Expansion joint caulking	40% Chrysotile
11-16-ASB-537 A, B	Turbine Room Roof, West/East Flashing	Layer A; Fibrous felt and tar	10% Chrysotile
11-16-ASB-538 A, B	Turbine Room Roof, West/East Flashing	Layer B; Felt and tar (multiple layer, homogeneous)	10% Crocidolite
11-16-ASB-539 A, B	Turbine Room Roof, West/East Flashing	Layer C; Tar adhesive	12% Chrysotile
11-16-ASB-540 A, B	Turbine Room Roof, East Parapet Wall	Felt and tar (multiple layers, homogeneous)	15% Chrysotile
11-16-ASB-541 A, B	1 <sup>st</sup> floor, South-West Office; Windows ✕	Exterior caulking	35% Crocidolite
11-16-ASB-542 A, B	1 <sup>st</sup> floor, South-West Office; Windows	Exterior glazing	ND
11-16-ASB-543 A, B	1 <sup>st</sup> floor, South-East Office; Windows	Exterior caulking	1.3% Chrysotile
11-16-ASB-544 A, B	1 <sup>st</sup> floor, South-East Office; Windows	Exterior glazing	2.3% Chrysotile
11-16-ASB-545 A, B	1 <sup>st</sup> floor, South-East Office; Windows	Exterior caulking	1.5% Chrysotile
11-16-ASB-546 A, B	1 <sup>st</sup> floor, South-West Office; Windows	Interior glazing	1.3% Chrysotile
11-16-ASB-547 A, B	1 <sup>st</sup> floor, South-East Office; Windows	Interior caulking	ND
11-16-ASB-548 A, B	1 <sup>st</sup> floor, East-Central Office; Windows	Interior caulking	25% Chrysotile
11-16-ASB-549 A, B	2 <sup>nd</sup> floor, Turbine Room; Windows	Interior caulking	0.3% Chrysotile
11-16-ASB-550 A, B	2 <sup>nd</sup> floor, Turbine Room; Replacement Windows	Interior glazing	ND
11-16-ASB-551 A, B	2 <sup>nd</sup> floor, Switchgear Room; Windows	Exterior glazing	1.3% Chrysotile
11-16-ASB-552 A, B	2 <sup>nd</sup> floor, Switchgear Room; Windows	Interior glazing	Trace*
11-16-ASB-553 A, B	2 <sup>nd</sup> floor, Turbine Room; East Windows	Exterior glazing	Trace*

✕ RAS OFFICE

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**Table 1  
English Station  
Asbestos Survey Analytical Results Summary**

Sample ID	Sample Location	Sample Material Description	Asbestos Analytical Results
11-16-ASB-554 A, B	2 <sup>nd</sup> floor, Turbine Room; West Windows	Interior glazing	Trace*
11-16-ASB-555 A, B	2 <sup>nd</sup> floor, Turbine Room; West Windows	Exterior caulking	4.5% Chrysotile
11-16-ASB-556 A, B	2 <sup>nd</sup> floor, Turbine Room; West Windows	Exterior glazing	Trace*
11-16-ASB-557 A-E	Basement Level; Electrical Cable Duct	Concrete skim coat	ND
11-16-ASB-558 A, B	Basement Level; Bricked in Windows	Exterior glazing	ND
11-16-ASB-559 A, B	Basement Level; Cable Duct Ceramic Ducts	Ceramic brick block	ND
11-16-ASB-560	Basement Level; Eastside	Shaped boiler brick - Type A	ND
11-16-ASB-561	Basement Level; Eastside	Shaped boiler brick - Type B	ND
11-16-ASB-562	Basement Level; Eastside	Shaped boiler brick - Type C	ND
11-16-ASB-563	Basement Level; Eastside	Shaped boiler brick - Type D	ND
11-16-ASB-564	Basement Level; Eastside	Shaped boiler brick - Type E	ND
11-16-ASB-565	Basement Level; Eastside	Shaped boiler brick - Type F	ND
11-16-ASB-566	Basement Level; Eastside	Shaped boiler brick - Type G	ND
11-16-ASB-567 A, B, C	Basement Level; Water Line; Pipe Insulation	Layer A; Tar & paper	ND
11-16-ASB-568 A, B, C	Basement Level; Water Line; Pipe Insulation	Layer B; Mud pack	65% Chrysotile
11-16-ASB-569 A, B, C	Basement Level; Water Line; Pipe Insulation	Layer C; Paper	Trace*
11-16-ASB-570 A, B	Basement Level; Miscellaneous Gaskets on wall	Gasket material	ND
11-16-ASB-571 A, B, C	Basement Level; Boxed Block Material	Magnesium block	18% Chrysotile 8% Crocidolite 5% Amosite
11-16-ASB-572	1 <sup>st</sup> floor, Spare Panel; South Side	Fibrous panel board	ND
11-17-ASB-587 A, B	Former Boiler Room; Top of Conduit Tunnel; Parapet Wall	Wall caulk (top of stone)	ND
11-17-ASB-588 A, B	Former Boiler Room; Top of Conduit Tunnel; Parapet Wall	Asphalt tar/sealant	10% Chrysotile
11-17-ASB-589 A, B	1 <sup>st</sup> floor, Former North Side; Abandoned Door; Window	Exterior glazing	ND
11-17-ASB-590 A, B	1 <sup>st</sup> floor, Former North Side; Abandoned Door	Door caulking	1.3% Chrysotile
11-17-ASB-591 A, B	1 <sup>st</sup> floor, Northwest Side; Mezzanine Offices Windows	Exterior glazing	2.5% Chrysotile
11-17-ASB-592 A, B	1 <sup>st</sup> floor, Northwest Side; Mezzanine Offices Window	Exterior caulking	7.8% Chrysotile
11-17-ASB-593 A, B	1 <sup>st</sup> floor, Northwest Side; Mezzanine Office Block Windows	Exterior glazing	2.9% Chrysotile
11-15-ASB-597	2 <sup>nd</sup> floor, Switchgear Room; Former Switchgear Ports	Talc panels	ND

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**Table 1  
English Station  
Asbestos Survey Analytical Results Summary**

Sample ID	Sample Location	Sample Material Description	Asbestos Analytical Results
11-15-ASB-598	2 <sup>nd</sup> floor, Switchgear Room; Former Switchgear Ports	Concrete panels	ND
11-12-ASB-637A, B, C	1 <sup>st</sup> floor, Northeast, Southeast, & East Central Office Areas	4" black baseboard	ND
11-12-ASB-637C	1 <sup>st</sup> floor, northeast, southeast, and east central office areas	Brown mastic from sample above	ND
11-12-ASB-638A, B, C	1 <sup>st</sup> floor, Office Areas	Mastic from sample above	ND
11-12-ASB-639A, B, C	1 <sup>st</sup> floor, Office Areas	Tan 12" x 12" floor tile	3.5% Chrysotile
11-12-ASB-640A, B, C	1 <sup>st</sup> floor, Office Areas	Mastic from sample above	4.8% Chrysotile
11-12-ASB-641A, B, C	1 <sup>st</sup> floor, Southwest Office Area	Grey 12" x 12" floor tile	ND
11-12-ASB-642A, B, C	1 <sup>st</sup> floor, Southwest Office Area	Mastic from sample above	8.2% Chrysotile
11-12-ASB-643A, B, C	1 <sup>st</sup> floor, Southwest Office Area	4" brown baseboard	ND
<b>Secondary Buildings</b>			
11-4-ASB-388 A, B	Cable House 724, 725, 730; Decking	Layer A; Gravelly tar/tarred gravel	ND
11-4-ASB-389 A, B	Cable House 724, 725, 730; Decking	Layer B; Tar and felt (multiple layers; homogeneous)	ND
11-4-ASB-390 A, B	Cable House 724, 725, 730; Parapet Wall	Granulated asphaltic surface coating	18% Chrysotile
11-3-ASB-394 A, B, C	Conference/Employee's Building	Black 9" x 9" floor tile and associated mastic	ND
11-3-ASB-395 A, B, C	Conference/Employee's Building; Kitchen	Thin fiberboard panels	ND
11-3-ASB-396 A, B, C	Conference/Employee's Building; Kitchen	Thick fiberboard panels	ND
11-3-ASB-397 A, B, C	Conference/Employee's Building Roof Decking	Layer A; Roofing membrane	Trace*
11-3-ASB-398 A, B, C	Conference/Employee's Building Roof; Decking	Layer B; Roofing membrane	4.5% Chrysotile
11-4-ASB-399 A, B	Cable House 931; Decking	Layer A; Gravelly tar/tarred gravel	ND
11-4-ASB-400 A, B	Cable House 931; Decking	Layer B; Felt and tar (multiple layers; homogeneous)	ND
11-4-ASB-401 A, B	Cable House 931; Flashing	Layer A; Felt and tar (multiple layers; homogeneous)	15% Chrysotile
11-4-ASB-402 A, B	Contractor's Building; Decking	Felt and tar (multiple layers; homogeneous)	1.5% Chrysotile
11-4-ASB-403 A, B	Contractor's Building; Flashing	Felt and tar (multiple layers; homogeneous)	25% Chrysotile
11-4-ASB-404 A, B	Foam House; Decking	Layer A; Rubber/tar	20% Chrysotile
11-4-ASB-405 A, B	Foam House; Decking	Layer B; Tar and felt	25% Chrysotile
11-4-ASB-406 A, B	Foam House; Decking	Layer C; Brown fibrous filling	ND
11-4-ASB-407 A, B	Foam House; Decking	Layer D; Tar adhesive	ND

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**Table 1  
English Station  
Asbestos Survey Analytical Results Summary**

Sample ID	Sample Location	Sample Material Description	Asbestos Analytical Results
11-4-ASB-408 A, B	NaHCL Storage House for No. 1 & 2 Screen House; Pitched Roof	Shingles	ND
11-4-ASB-426 A, B	Cable House 922; Decking	Layer A; Tar and gravel	ND
11-4-ASB-427 A, B	Cable House 922; Decking	Layer B; Ash-like substance	ND
11-4-ASB-428 A, B	Cable House 922 ; Flashing	Copper (top layer); felt and tar (multiple layers; homogeneous)	ND
11-5-ASB-443 A, B, C	Foam House; Windows	Exterior glazing	ND
11-5-ASB-444 A, B	Foam House; Windows	Exterior caulking	ND
11-5-ASB-447 A, B	Foam House; Door	Exterior glazing	ND
11-5-ASB-448 A, B, C	Contractor's Building; Windows	Exterior caulking	2.0% Chrysotile
11-5-ASB-449 A, B, C	Contractor's Building; Windows	Exterior glazing	ND
11-5-ASB-450 A, B, C	Contractor's Building; Door	Exterior caulking	2.3% Chrysotile
11-5-ASB-451A, B, C	Confrence/Employee's Building; Windows	Exterior caulking	3.0% Chrysotile
11-5-ASB-452 A, B, C	Confrence/Employee's Building; Windows	Exterior glazing	0.8% Chrysotile
11-5-ASB-463 A, B	NaHCL Storage House for No. 1 & 2 Screenhouse	Exterior cement skim coat	ND
11-5-ASB-464 A	NaHCL Storage House for No. 1 & 2 Screenhouse	Exterior door caulking	6.0% Chrysotile
11-5-ASB-465 A, B	Cable House 931; Door	Exterior caulking	3.0% Chrysotile
11-5-ASB-466 A, B	Cable House 922; Door	Exterior caulking	3.0% Chrysotile
11-5-ASB-467 A, B	Confrence/Employee's Building; Door	Exterior caulking	1.3% Chrysotile
11-5-ASB-471 A, B	Cable House 724, 725, 730; Doors	Exterior caulking	3.8% Chrysotile
11-5-ASB-472 A, B	West Capacitor Bank (No. 1 & 2 Unit)	Tar and gravel	ND
11-5-ASB-473 A, B	Electrical Conduit Tunnel; Wall	Felt tubes (multiple layers; homogeneous)	ND
11-5-ASB-474 A, B	Electrical Conduit Tunnel; Wall ✱	Layer A; Expansion joint caulking on wall; cloth felt and tar compound	6.5% Chrysotile
11-5-ASB-475 A, B	Electrical Conduit Tunnel; Wall ✱	Layer B; Expansion joint caulking on wall; brown fibrous material coated with white paint	15% Chrysotile
11-5-ASB-476 A	Electrical Conduit Tunnel; Wall	Tar coating on wall	ND
11-5-ASB-480 A, B	Northwest Transformer Pad; Ground Cables Extend Out of the Ground ✱ ✱	Tar/rubber compound	70% Chrysotile
11-17-ASB-573 A, B	Parcel B; Level Transistor Shed; Adjacent to 1.3 Million Gallon Day Oil Tank	Flat transite paneling	70% Chrysotile
11-17-ASB-574 A, B	Parcel B; 1.3 Million Gallon Oil Tank; Perimeter	Black caulking	25% Chrysotile

✱ DUCT LINE E. OF CAP BANK 3

✱ ✱ G TRANSFORMER

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**Table 1  
English Station  
Asbestos Survey Analytical Results Summary**

Sample ID	Sample Location	Sample Material Description	Asbestos Analytical Results
11-17-ASB-575 A, B	Parcel B; Pipes Intrudes Dike Wall North of 1.3 Million Gallon Day Oil Tank	Black caulking	25% Chrysotile
11-17-ASB-576 A, B	Parcel B; Sheet Metal Jackets Around Pipes North of 1.3 Million Gallon Day Oil Tank abut to each other	White caulking	2.5% Chrysotile
11-17-ASB-577 A, B	Parcel B; Transfer Pump House; Window	Exterior window caulking	5.25% Chrysotile
11-17-ASB-578 A, B	Parcel B; Transfer Pump House; Window	Interior window glazing	ND
11-17-ASB-579 A, B	Parcel B; Transfer Pump House; Door	Exterior door caulking	4.75% Chrysotile
11-17-ASB-580 A, B	Parcel B; Transfer Pump House; Door	Interior door caulking	5.0% Chrysotile
11-17-ASB-581 A, B, C	Parcel B; Foam House; Door	Exterior door caulking	6.5% Chrysotile
11-17-ASB-582 A, B	Parcel B; Transfer Pump House; Decking	Layer A; Gravelly tar/tarred gravel	ND
11-17-ASB-583 A, B	Parcel B; Transfer Pump House; Decking	Layer B; felt and tar (multiple layers; homogeneous)	ND
11-17-ASB-584 A, B	Parcel B; Transfer Pump House; Decking	Layer C; Brown fibrous insulation	ND
11-17-ASB-585 A, B	Parcel B; Transfer Pump House; Decking	Layer D; Tar adhesive	ND
11-17-ASB-586 A, B	Parcel B; Foam House; Door Window Panel	Interior caulking	ND
11-12-ASB-599 A, B	#6 Oil Day Tank; Decking	Layer A; Sandy tar & felt	4.3% Chrysotile
11-12-ASB-600 A, B	#6 Oil Day Tank; Decking	Layer B; Tar & felt	3.8% Chrysotile
11-12-ASB-601 A, B	#6 Oil Day Tank; Decking	Layer C; Fiberglass	ND
11-12-ASB-602 A, B	#6 Oil Day Tank; Decking	Layer D; Tar	ND
11-12-ASB-603 A, B	Between Light Oil Tank & Concrete Tank Pedestal	Weather caulk	1.5% Chrysotile
11-12-ASB-604 A, B	#6 Oil Day Tank; Concrete Wall	Wall seam gasket	ND
11-12-ASB-605 A, B	Fuel Oil Pipe Trench	Tar/Sealant	7.3% Chrysotile
11-12-ASB 606 A, B	Pipe Breach for #6 Oil Day Tank	Gray ext caulk	4.0% Chrysotile
11-12-ASB 607 A, B	Pipe Breach for #6 Oil Day Tank	Black tar/asphalt	5.3% Chrysotile
11-12-ASB 608 A, B	#6 Oil Day Tank; Metal Jackets	Ext. caulk	ND
11-12-ASB 609 A, B	#6 Oil Day Tank Area	Asphalt tar sealant	4.5% Chrysotile
11-12-ASB-610 A, B	Cable House 723,726 & 729; Decking	Tar & felt	ND
11-12-ASB-611 A, B	Cable House 723,726 & 729; Flashing	Tar & felt (multiple layers; homogeneous)	15% Chrysotile
11-12-ASB-612	Cable House 723,726 & 729; Vent Covering	Tar & felt (multiple layers; homogeneous)	40% Chrysotile
11-12-ASB-613 A, B	Cable House 723,726 & 729; Parapet Wall Covering	Tar & felt (multiple layers; homogeneous)	20% Chrysotile
11-12-ASB 614 A, B	Cable House 723,726 & 729; Exterior Wall	Granular cementitious surface coating	4.3% Chrysotile

**Notes:** Asbestos content equal to or greater than 1% requires abatement prior to demolition.

Shaded concentrations indicate material is asbestos-containing ( $\geq 1$  asbestos).

\* = indicates trace levels of asbestos were detected, but at concentrations of less than 1%

ND = none detected

**Table 1  
English Station  
Asbestos Survey Analytical Results Summary**

<b>Sample ID</b>	<b>Sample Location</b>	<b>Sample Material Description</b>	<b>Asbestos Analytical Results</b>
11-12-ASB-615 A, B	Cable House 723,726 & 729; Exterior Wall	Granular asphaltic surface coating	5.5% Chrysotile
11-12-ASB-616 A, B	Cable House 723 & 726 and 729; Door	Exterior caulking	1.5% Chrysotile
11-12-ASB-617 A, B, C	Guard Shack; Interior	Layer A; Beige 12" x 12" floor tile	ND
11-12-ASB-617 A, B, C	Guard shack; interior	Tan mastic from sample above	ND
11-12-ASB-618 A, B	Guard Shack; Interior	Layer B; Green 12" x 12" floor tile	ND
11-12-ASB-618 A, B, C	Guard Shack; Interior	Black mastic from sample above	ND
11-12-ASB-619 A, B	Guard Shack; Interior	Layer C; Off-white 12" x 12" floor tile	1.5% Chrysotile
11-12-ASB-619 A, B	Guard Shack; Interior	Black mastic from sample above	ND
11-12-ASB-620 A, B	Guard Shack; Interior	Layer D; Green 9" x 9" floor tile with associated mastic	2.8% Chrysotile
11-12-ASB-621 A, B	Guard Shack; Interior	4" black baseboard	ND
11-12-ASB-621 A, B	Guard Shack; Interior	Tan mastic from sample above	ND
11-12-ASB-622 A, B	Guard Shack; Wall Adjoining Roof Top	Exterior wall caulk	15% Chrysotile
11-12-ASB-623 A, B	Guard Shack; Decking	Layer A; Rubber membrane	ND
11-12-ASB-624 A, B	Guard Shack; Decking	Layer B; Tar adhesive	20% Chrysotile
11-12-ASB-625 A, B	Guard Shack; Flashing	Tar and felt	20% Chrysotile
11-12-ASB-626	Conduit Tunnel Entry; Door	Flat transite	25% Chrysotile
11-12-ASB-627	Conduit Tunnel Entry; Wall	Corrugated transite	30% Chrysotile
11-12-ASB-628 A, B	Conduit Tunnel Roof; Decking	Layer A; Felt and tar	40% Chrysotile
11-12-ASB-629 A, B	Conduit Tunnel Roof; Decking	Layer B; Felt and tar	40% Chrysotile
11-12-ASB-630A, B	Conduit Tunnel Roof; Decking	Layer C; Felt and tar	40% Chrysotile
11-12-ASB-631A, B	Conduit Tunnel Roof; Decking	Layer D; Felt and tar	40% Chrysotile
11-12-ASB-632A, B	Conduit Tunnel Roof; Flashing	Flashing	60% Chrysotile
11-12-ASB-633A, B	Conduit Tunnel; Door	Caulking in conjunction with corrugated transite wall	30% Chrysotile
11-12-ASB-634A, B	Interior Conduit Tunnel Sewer Pipes; Tunnel Pipe	Layer A (asphalt coat)	45% Chrysotile
11-12-ASB-635A, B	Interior Conduit Tunnel Sewer Pipes; Tunnel Pipe	Layer B (mud-pack material)	30% Chrysotile 10% Amosite
11-12-ASB-636A, B	Interior Conduit Tunnel Sewer Pipes; Tunnel Pipe	Layer C (wool)	ND

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**Notes:** Asbestos content equal to or greater than 1% requires abatement prior to demolition.  
 Shaded concentrations indicate material is asbestos-containing ( $\geq 1$  asbestos).  
 \* = indicates trace levels of asbestos were detected, but at concentrations of less than 1%  
 ND = none detected

**Table 2  
Assumed ACBMs**

<b>Suspect Material</b>	<b>United Illuminating Map References</b>
Asbestos Pipe Insulation (various locations) (types include canvas wrap material, mag-block material, corrugated/air cell material, layered paper material, and mud-pack material)	None
Asbestos Pipe-Fitting Insulation (various locations)	None
Asbestos Jacket Insulation (various locations) (types include canvas wrap material, mag-block material, corrugated/air cell material, layered paper material, and mud-pack material)	None
Flashing (36-inch ventilators atop coal bunker roof; low-pressure boiler areas)	1981-168 28120-57
Insulating Compound for Ebony Asbestos Wood (filler material for countersunk holes)	28120-82 28120-83 1981-136
Asbestos Boiler Gasket (associated with instrument sleeves; low-pressure boiler areas)	1981-39
Expansion Joint Corrugated Paper (low-pressure boiler)	1981-69 1981-77
Rolled Fire Felt (low-pressure boiler)	1981-69 1981-77
Back Stay Packing With Boiler Wall Expansion Joint ("J.M Airtite")	1981-69 1981-77

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**Table 3  
ACBM Summary and Quantity Estimates**

<b>Material</b>	<b>Quantity (approximate)</b>
Floor Tile and Mastic	7,000 square feet
Window Glazing (interior and exterior)	680 units
Pipe Coating - weatherproofing (city water lines; low-pressure side only)	400 linear feet
Ebonized Asbestos Board (includes caulking for counter-sunk drill holes)	18,000 square feet
Reactor Room - floor panels	3,000 square feet
Flat Transite Panels (includes asbestos caulking)	46,575 square feet
Switch Panel Black Backer Board	4,500 square feet
Arc Diffusing Panels (transite)	575 units
Interior Boiler Rope Packing	9,200 linear feet
Interior Boiler Packing Insulation	25,000 square feet
Gasket Material (associated with boilers, exhaust flu's and piping)	3,000 units
Interior Boiler Expansion Joint Insulation (corrugated paper, "asbestoscell," and "J.M. Airtite" materials)	9,200 square feet
HVAC Vibrational Dampeners	60 units
Asbestos Pipe Insulation	72,500 linear feet
Asbestos Pipe Fitting Insulation	9,250 units
Asbestos Jacket Insulation	90,000 square feet
Baseboard and Mastic	50 linear feet
Gypsum Wall Board With Transite Backing	460 square feet
Roof Decking	74,802 square feet
Roof Flashing	8,254 linear feet
Parapet Wall Covering	1,741 square feet
Boiler Stack Pedestal Covering	3,565 square feet
Sash Skylight Wall Covering	6,900 square feet
Vent Exhaust Flue; Breeching Cement	173 linear feet
Window Caulking (interior and exterior)	3,500 units

**Table 3 (continued)  
ACBM Summary and Quantity Estimates**

<b>Material</b>	<b>Quantity (approximate)</b>
Plaster	144 square feet
Exterior Asphalt Caulking (various locations)	4,000 linear feet
Fibrous Wall Covering	380 square feet
Joint Compound	259 square feet
Linoleum Floor Covering (without mastic)	345 square feet
Corrugated Transite Siding (includes asbestos caulking)	48,139 square feet
Door Caulk (interior and exterior)	30 units
Cable House - Exterior Granular Cementitious Surface Coating (sandy)	1,136 square feet
Electrical Conduit Tunnel Expansion Joint	61 linear feet
Electrical Grounding Cables - Tar Sealant	100 square feet
1.3 Million Gallon Tank - Perimeter Caulk	135.5 linear feet
Exterior Fuel Oil Piping - Insulation Caulk	500 linear feet
Rolled Fire Felt - Boiler Interior	9,200 square feet
Cable House - Exterior Granulated Asphaltic Surface Coating	1,104 square feet
Transite Conduit Pipe	1,725 linear feet
Piping With Asbestos Residue	1,000 linear feet
Roofing Tar (Station B Roof Hatchway only)	173 square feet
<p><b>Notes:</b>  ACBM - asbestos-containing building material  Quantities listed are approximated, based on a review of applicable plans, analytical data, and site inspection.  Actual quantities will vary.</p>	

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**Table 4  
English Station  
Miscellaneous Hazardous Materials  
Sample Summary**

Sample ID	Sample Location	Sample Material Description
<i>Low Pressure Boiler/Turbine Areas</i>		
10-5-MISC-01	1 <sup>st</sup> floor; Eastern Coal Ash Alley; Drum Storage Area	Concrete chips
10-5-MISC-02	1 <sup>st</sup> floor; Eastern Coal Ash Alley; Sanitary Receptor No. 3	Sewage sludge
10-5-MISC-03	1 <sup>st</sup> floor; Boiler Water Treatment Chemical Storage Room; Trench Drain	Sediment
10-5-MISC-04	1 <sup>st</sup> floor; Fuel Oil Pump Room; Trench Drain	Sediment
10-5-MISC-05	1 <sup>st</sup> floor; Current Machine Shop; Trench Drain	Sediment
10-5-MISC-06	1 <sup>st</sup> floor; Current Machine Shop; Tool Room; Trench Drain	Sediment
10-5-MISC-07	1 <sup>st</sup> floor; Eastern Coal Ash Alley; Trench Drain	Sediment
10-5-MISC-08	1 <sup>st</sup> floor; Eastern Coal Ash Alley; Adjacent to Drum Storage Area; Trench Drain	Sediment
10-5-MISC-09	1 <sup>st</sup> floor; Eastern Coal Ash Alley (at blow-down discharge point of overhead air receiver tank); Trench Drain	Sediment
10-5-MISC-10	1 <sup>st</sup> floor; Lube Oil Room; DTE Oil Tank (North Tank)	Oil
10-5-MISC-11	1 <sup>st</sup> floor; Lube Oil Room; DTE Oil Tank (Center Tank)	Oil
10-5-MISC-12	1 <sup>st</sup> floor; Lube Oil Room; DTE Oil Tank (South Tank)	Oil
10-5-MISC-13	1 <sup>st</sup> floor; Condenser Area; Ash Gate Oil Tank	Residual oil
10-5-MISC-14	1 <sup>st</sup> floor; Condenser Area; Elevator Sump	Sediment/Sludge
10-5-MISC-15	1 <sup>st</sup> floor; Boiler Water Treatment Chemical Storage Room	Concrete chips (composite sample)
10-5-MISC-16	1 <sup>st</sup> floor; Boiler Water Treatment Chemical Mixing Tank Area	Concrete chips
10-6-MISC-17	#1 <sup>st</sup> floor; Condenser Area; Circulating Water Pump (for No. 6 Condenser)	Residual oil
10-6-MISC-18	#1 <sup>st</sup> floor; Condenser Area (No. 6 Unit); Circulating Water Pump	Concrete chips
10-6-MISC-19	#1 <sup>st</sup> floor; Condenser Area; Reciprocating Dry Vacuum Pumps (for No. 5 Condenser)	Residual oil
10-6-MISC-20	#1 <sup>st</sup> floor; Condenser Area; Reciprocating Dry Vacuum Pumps (for No. 5 Condenser)	Concrete chips
10-6-MISC-21	#1 <sup>st</sup> floor; Condenser Area; Hot Well Pump (for No. 4 Condenser)	Residual oil
10-6-MISC-22	#1 <sup>st</sup> floor; Condenser Area; Hot Well Pump (for No. 4 Condenser)	Concrete chips

OUTSIDE  
STOCK ROOM

**Table 4 (continued)  
English Station  
Miscellaneous Hazardous Materials  
Sample Summary**

<b>Sample ID</b>	<b>Sample Location</b>	<b>Sample Material Description</b>
10-6-MISC-23	1 <sup>st</sup> floor; Condenser Area; Steam-Driven Boiler Feed Pump No. 7	Residual oil
10-6-MISC-24	1 <sup>st</sup> Floor; Condenser Area; Steam-Driven Boiler Feed Pump No. 7	Concrete chips
10-6-MISC-25	1 <sup>st</sup> Floor; Condenser Area; Electric-Powered Boiler Feed Pump No. 6	Residual oil
10-6-MISC-26	1 <sup>st</sup> Floor; Condenser Area; Steam-Driven Boiler Feed Pump No. 6	Concrete chips
10-6-MISC-27	1 <sup>st</sup> Floor; Condenser Area (No. 3 Unit); Air Compressor Pad	Concrete chips
10-6-MISC-28	1 <sup>st</sup> Floor; Condenser Area (No. 2 Unit); TELLEO Oil Tank	Oil
10-6-MISC-29	1 <sup>st</sup> Floor; Condenser Area (No. 2 Unit); Water Discharge Tunnel	Sediment
10-6-MISC-30	1 <sup>st</sup> Floor; Condenser Area (No. 2 Unit); SMOOT Oil Pump Pad	Concrete chips
10-6-MISC-31	1 <sup>st</sup> Floor; Condenser Area (No. 2 Unit); Ash Gate Oil Pump Pad	Concrete chips
10-6-MISC-32	1 <sup>st</sup> Floor; Lube Oil Room	Concrete chips
10-6-MISC-33	1 <sup>st</sup> Floor; Lube Oil Room	Concrete chips
10-6-MISC-34	1 <sup>st</sup> Floor; FD Fan Room; North Drum Storage Area (skip hoists)	Concrete chips
10-6-MISC-35	1 <sup>st</sup> Floor; West Coal Ash Alley; Ash Hopper	Coal Ash
10-6-MISC-36	1 <sup>st</sup> Floor; West Coal Ash Alley; Ash Hopper (Rear Sump)	Coal Ash
10-6-MISC-37	1 <sup>st</sup> Floor; Heavy Oil Pump Room; Pump Pad	Concrete chips
10-7-MISC-38	2 <sup>nd</sup> Floor; Turbine Area; Exciter Unit Nos. 1 through 4	Residual oil
10-7-MISC-39	2 <sup>nd</sup> Floor; Turbine Area; No. 6 Turbine	Residual oil
10-7-MISC-40	2 <sup>nd</sup> Floor; Low Pressure Turbine Area; No. 6, Lube Oil Reservoir	Residual oil
10-7-MISC-41	2 <sup>nd</sup> Floor; Low-Pressure Turbine Area; House Generator Nos. 1 & 2	Residual oil
10-7-MISC-42	2 <sup>nd</sup> Floor; Low Pressure Turbine Area; No. 2 Turbine	Concrete chips
10-7-MISC-43	2 <sup>nd</sup> Floor; Low Pressure Turbine Area; No. 4 Turbine	Concrete chips
10-7-MISC-44	2 <sup>nd</sup> Floor; Low Pressure Turbine Area; Boiler No. 6; Firing chamber	Ash
10-12-MISC-45	2 <sup>nd</sup> Floor; Low Pressure Boiler Area; Boiler No. 5; Firing Chamber	Oil
10-13-MISC-46	2 <sup>nd</sup> Floor; Low Pressure Boiler Area; Ash Vacuum Pump Bag Filter Tanks (between Boiler Nos. 7 and 9)	Ash

**Table 4 (continued)  
English Station  
Miscellaneous Hazardous Materials  
Sample Summary**

<b>Sample ID</b>	<b>Sample Location</b>	<b>Sample Material Description</b>
10-13-MISC-47	2 <sup>nd</sup> Floor; Low Pressure Turbine Area; Overhead Crane	Residual oil
10-13-ASB-MISC-48	8 <sup>th</sup> floor; Low Pressure Boiler Area; East Skip Hoist Motor	Residual oil
10-13-ASB-MISC-49	7 <sup>th</sup> floor; Low Pressure Boiler Area; Electric Coal Conveyor Motor (for former exterior coal conveyor system)	Residual oil
10-13-ASB-MISC-50	7 <sup>th</sup> floor; Low Pressure Boiler Area; Electric Coal Conveyor Motor (for former exterior coal conveyor system)	Concrete chips
10-13-ASB-MISC-51	8 <sup>th</sup> floor; Low Pressure Boiler Area; Electric Coal Conveyor Motor (for existing horizontal coal conveyor systems)	Residual oil
10-13-ASB-MISC-52	8 <sup>th</sup> floor; Low Pressure Boiler Area; Electric Coal Conveyor Motor (for existing horizontal coal conveyor systems)	Concrete chips
10-15-MISC-53	1 <sup>st</sup> floor; Condenser Area; Concrete Holding Tank (over discharge tunnel)	Oily Sludge
10-15-MISC-53 A	1 <sup>st</sup> Floor; Subsurface floor drain sump; between Boiler Feed Pumps 3 and 4	Oily water
10-15-MISC-54	8 <sup>th</sup> Floor; Low Pressure Boiler Area; Coal Feed Bunker atop Boiler No. 2	Slag/Aggregate
11-3-MISC-110	1 <sup>st</sup> Floor; Forced Draft Fan Room; Stained Concrete Floor (north end; outside tool crib, across from drum storage area)	Concrete chips
11-5-MISC-111	1 <sup>st</sup> Floor; Condenser Area; Stained Concrete Floor (around smoot and ash gate oil tanks/pump pads)	Concrete (floor)
11-5-MISC-112	1 <sup>st</sup> Floor; Screen House No. 1; De-Watering Pump	Oil
12-2-MISC-126	4 <sup>th</sup> Floor; Low Pressure Boiler Area; Service Air Compressor Line Piping	Oil-stained piping
12-13-MISC-128	1 <sup>st</sup> Floor; Heavy Oil Room	Fuel oil (No. 6)
<b><i>High Pressure Boiler/Turbine Areas</i></b>		
10-27-ASB-MISC-55	1 <sup>st</sup> Floor; No. 8 Condenser Area; 18-Foot Sump	Sump water
10-27-MISC-56	1 <sup>st</sup> Floor; No. 8 Condenser Area; Condensate Pump 8-1	Oil sediment
10-27-MISC-57	1 <sup>st</sup> Floor; No. 8 Condenser Area; Subgrade Pit for Turbine Lube Oil Tank	Oily Sediment
10-27-MISC-58	1 <sup>st</sup> Floor; No. 8 Condenser Area; Turbine Lube Oil Conditioning Tank (Bowser System)	Oily water
10-27-MISC-59	1 <sup>st</sup> Floor; No. 8 Condenser Area; Turbine Lube Oil Tank; Circulating Pump Pad	Concrete chips
10-27-MISC-60	1 <sup>st</sup> Floor; No. 8 Condenser Area; Turbine Lube Oil Tank	Oil

**Table 4 (continued)  
English Station  
Miscellaneous Hazardous Materials  
Sample Summary**

<b>Sample ID</b>	<b>Sample Location</b>	<b>Sample Material Description</b>
10-27-MISC-61	1 <sup>st</sup> Floor; No. 8 Condenser Area; Subgrade Pit for Turbine Lube Oil Tank	Concrete chips
10-27-MISC-62	1 <sup>st</sup> Floor; No. 8 Condenser Area; Hydrogen Seal Oil System	Oil Sludge
10-27-MISC-63	1 <sup>st</sup> Floor; No. 8 Condenser Area; Hydrogen Seal Oil System	Concrete chips
10-27-MISC-64	1 <sup>st</sup> Floor; High Pressure Boiler No. 13 Area; Sump No. 6	Water
10-27-MISC-65	1 <sup>st</sup> Floor; High Pressure Boiler No. 13 Area; Sump No. 7	Water
10-27-MISC-66	1 <sup>st</sup> Floor; High Pressure Boiler No. 13 Area; Sump No. 7	Sediment
10-27-MISC-67	1 <sup>st</sup> Floor; High Pressure Boiler No. 13 Area; Main Ash Duct	Ash
10-27-MISC-68	1 <sup>st</sup> Floor; High Pressure Boiler No. 14 Area; Sump No. 8	Water
10-27-MISC-69	1 <sup>st</sup> Floor; High Pressure Boiler No. 14 Area; Sump No. 8	Sediment
10-27-MISC-70	1 <sup>st</sup> Floor; High Pressure Boiler No. 14 Area; Sump No. 9	Water
10-27-MISC-71	1 <sup>st</sup> Floor; High Pressure Boiler No. 14 Area; Sump No. 9	Sediment
10-27-MISC-72	1 <sup>st</sup> Floor; HP Boiler Area Nos. 13 and 14; Ash Pulverizer Fan Motor	Sludge (composite)
10-27-MISC-73	1 <sup>st</sup> Floor; Heavy Oil Room; Sump	Water
10-27-MISC-74	1 <sup>st</sup> Floor; Heavy Oil Room; Subgrade Oil Piping Trench	Oily sludge
10-28-MISC-75	1 <sup>st</sup> Floor; Heavy Oil Room; Fuel Oil Mixing Tank	Oil
10-28-MISC-76	1 <sup>st</sup> Floor; Heavy Oil Room; Kerosene Parts Cleaning Tank	Residual oil/sludge
10-28-MISC-77	1 <sup>st</sup> Floor; Heavy Oil Room; Heavy Oil Pump Pad	Concrete chips
10-28-MISC-78	1 <sup>st</sup> Floor; Heavy Oil Room; Light Oil Pump Pad	Concrete chips
10-28-MISC-79	1 <sup>st</sup> Floor; High Pressure Boiler No. 14 Area; Oil Stained Floor Beneath Air Compressor	Concrete chips
10-28-MISC-80	1 <sup>st</sup> Floor; High Pressure Boiler No. 13 Area; Concrete Floor Beneath Station Transformer 30-B	Concrete chip
10-28-MISC-81	1 <sup>st</sup> Floor; High Pressure Boiler No. 13 Area; Concrete Floor Beneath Station Transformer 7-B	Concrete chip
10-28-MISC-82	1 <sup>st</sup> Floor; High Pressure Boiler No. 14 Area; Concrete Floor Beneath Station Transformer 8-A and 8-B	Concrete chips

**Table 4 (continued)  
English Station  
Miscellaneous Hazardous Materials  
Sample Summary**

<b>Sample ID</b>	<b>Sample Location</b>	<b>Sample Material Description</b>
10-28-MISC-83	1 <sup>st</sup> Floor; High Pressure Boiler No. 14 Area; Concrete Floor Beneath Station Transformer 38-A	Concrete chips
10-28-MISC-84	1 <sup>st</sup> Floor; High Pressure Boiler No. 14 Area; Ash Hopper	Ash
10-28-MISC-85	1 <sup>st</sup> Floor; Trench Drain (between high pressure boiler Nos. 13 & 14 areas)	Sediment
10-28-MISC-86	2 <sup>nd</sup> Floor; High-Pressure Boiler No. 13 Area; Boiler Feed Pumps	Oil/sludge
10-28-MISC-87	2 <sup>nd</sup> Floor; High Pressure Boiler No. 13 Area; Boiler Feed Pump Concrete Pad	Concrete chip
10-28-MISC-88	2 <sup>nd</sup> Floor; High Pressure Boiler No. 14 Area; Boiler Feed Pumps	Residual oil/sludge (composite)
10-28-MISC-89	2 <sup>nd</sup> Floor; High Pressure Boiler No. 14 Area; Boiler Feed Pump Concrete Pad	Concrete chips
10-28-MISC-90	2 <sup>nd</sup> Floor; High Pressure Boiler No. 14 Area; Booster Pump Concrete Pad	Concrete chips
10-28-MISC-91	2 <sup>nd</sup> Floor; High Pressure Boiler No. 13 Area; Booster Pump Concrete Pad	Concrete chips
10-28-MISC-92	1 <sup>st</sup> Floor Mezzanine Level; Lube Oil Holding Tank Room; North Tank ("used oil")	Oil
10-28-MISC-93	1 <sup>st</sup> Floor Mezzanine Level; Lube Oil Holding Tank Room; North Tank ("new oil")	Oil
10-28-MISC-94	1 <sup>st</sup> Floor Mezzanine Level; Lube Oil Holding Tank Room	Concrete chips
10-29-99-MISC-95	2 <sup>nd</sup> Floor; High Pressure Boiler No. 13 Area; North Hopper Coal Feed Motor	External yellow residue
10-29-MISC-96	1 <sup>st</sup> Floor; Condenser No. 8	Internal residue/scaling
10-29-MISC-97	3 <sup>rd</sup> floor; High Pressure Boiler No. 13 Area; Soot Blower Unit	Residual oil/sludge
10-29-MISC-98	3 <sup>rd</sup> floor; High Pressure Boiler No. 14 Area; Soot Blower Unit	Residual oil/sludge
10-29-MISC-99	5 <sup>th</sup> floor; High Pressure Boiler No. 13 Area; Ash Vacuum Tank Room (atop ash silo)	Ash
10-29-MISC-100	5 <sup>th</sup> Floor; High Pressure Boiler No. 13 Area; Coal Silo	Ash
10-29-MISC-101	6 <sup>th</sup> floor; High Pressure Boiler No. 13 Area; Smokestack Leachate Discharge Pipe	Leachate
10-29-MISC-102	7 <sup>th</sup> floor; High Pressure Boiler No. 13 Area; Concrete Pad for Forced Draft Fan (low speed)	Concrete chips
10-29-MISC-103	7 <sup>th</sup> Floor; High Pressure Boiler No. 13 Area; Concrete Pad for Induced Draft Fan (low speed)	Concrete chips
10-29-MISC-104	7 <sup>th</sup> Floor; High Pressure Boiler No. 14 Ara; Concrete Pad for Forced Draft Fan (low speed)	Concrete

**Table 4 (continued)  
English Station  
Miscellaneous Hazardous Materials  
Sample Summary**

<b>Sample ID</b>	<b>Sample Location</b>	<b>Sample Material Description</b>
10-29-MISC-105	7 <sup>th</sup> floor; High Pressure Boiler No. 13 Area; Air Heater Insert Cleaning/Dip Tank	Sludge
10-29-MISC-106	8 <sup>th</sup> Floor; High Pressure Boiler No. 13 Area; Air Heater Drive Motor	Residual oil/sludge
11-3-MISC-107	9 <sup>th</sup> floor; High Pressure Boiler No. 13 area; Elevator Room; Concrete Floor	Concrete chips
11-3-MISC-108	9 <sup>th</sup> floor; High Pressure Boiler No. 13 Area; Elevator Room; Elevator Motor Lube Oil Drip Pan	Oil
11-3-MISC-109	2 <sup>nd</sup> Floor; High Pressure Boiler No. 13 Area; North Hopper Coal Feed Motor	Residual oil/sludge
12-2-MISC-127	6 <sup>th</sup> Floor; High Pressure Boiler No. 13 Area; Service Air Compressor Line Piping	Oil-stained piping
12-13-MISC-129	1 <sup>st</sup> Floor; Heavy Oil Room	Fuel oil (No. 6)
<b>Station B</b>		
11-16 MISC-113	2 <sup>nd</sup> Floor; Overhead Crane	Oil residue
11-16 MISC-114	1 <sup>st</sup> Floor; PCB Storage Area; Concrete Floor	Concrete chips
11-16-MISC-115	1 <sup>st</sup> Floor; PCB Storage Area; Concrete Floor	Concrete chips
11-16-MISC-116	1 <sup>st</sup> Floor; PCB Storage Area; Concrete Floor	Concrete chips
11-16-MISC-117	Basement Floor; Turbine/Condenser footings	Concrete chips
11-16-MISC-118	Basement Floor; Turbine/Condenser footings	Concrete chips
11-16-MISC-119	Basement Floor; Unknown Equipment Concrete Pads	Concrete chips
11-16-MISC-120	Basement Floor; Unknown Equipment Concrete Pads	Concrete chips
11-16-MISC-121	1 <sup>st</sup> Floor; Oil-Stained Concrete Floor; (adjacent to abandoned fuel dispensing pumps)	Concrete chips
11-16-MISC-122	Basement Floor; Oil-Stained Concrete Floor	Concrete chips
11-16-MISC-123	1 <sup>st</sup> Floor; Oil-Stained Wood Floor	Wood chips
11-16-MISC-124	2 <sup>nd</sup> Floor; Switchgear Boxes	Wood chips
11-16-MISC-125	2 <sup>nd</sup> Floor; Switchgear Boxes	Wood chips
<b>Station B (Bulk Oil Storage Area)</b>		
12-13-MISC-130	Fuel Oil Pump House	Fuel oil (No. 6)
ES-W5	1 <sup>st</sup> Floor; PCB Storage Area; Concrete Floor	Concrete chips
Notes:		

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**Table 5  
Hazardous Material Survey  
Analytical Results**

Media	Sample ID													
	10-5-MISC													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>Volatle Organic Substances (VOCs) (ppb)</b>														
1,1-Dichloroethylene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	BDL
trans-1,2-Dichloroethylene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL
1,1-Dichloroethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL
cis-1,2-Dichloroethylene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL
n-Butylbenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL
p-Isopropyltoluene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL
Naphthalene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL
Tetrachloroethylene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL
1,1,1-Trichloroethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL
Trichloroethylene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL
1,2,4-Trimethylbenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL
1,3,5-Trimethylbenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL
Vinyl chloride	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL
Methylene Chloride	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL
Freon	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL
Total Solvents	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>TCLP Metals (ppm)</b>														
Arsenic	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.06	NA	NA	NA	BDL
Barium	BDL	1.1	BDL	0.7	0.6	BDL	0.6	BDL	BDL	BDL	NA	NA	NA	BDL
Cadmium	0.007	BDL	0.025	0.039	0.161	BDL	0.023	0.258	0.047	0.047	NA	NA	NA	0.049
Chromium, Total	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.05	BDL	BDL	NA	NA	NA	BDL
Lead	BDL	0.026	BDL	0.194	0.222	0.009	0.041	2.08	0.052	0.052	NA	NA	NA	0.076
Mercury	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.005	BDL	BDL	NA	NA	NA	BDL
Selenium	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL
Silver	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL
<b>Polychlorinated Biphenyls (PCBs) (ppm)</b>														
PCBs	25	BDL	3	4	BDL	19	BDL	4,000	2	BDL	BDL	BDL	1	BDL
<b>Semivolatile Organic Compounds (SVOCs) (ppb)</b>														
Acenaphthene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL
Anthracene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL
Benzo(a)anthracene	BDL	124	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL
Benzo(b)fluoranthene	BDL	555	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL
Benzo(k)fluoranthene	BDL	BDL	BDL	BDL	BDL	242	BDL	BDL	BDL	BDL	NA	NA	NA	BDL
Benzo(a)pyrene	BDL	102	107	BDL	BDL	214	BDL	BDL	BDL	BDL	NA	NA	NA	BDL
Bis(2-ethyl hexyl)phthalate	BDL	BDL	BDL	BDL	BDL	3,035	BDL	66,636	BDL	BDL	NA	NA	NA	1,606
Butyl benzyl phthalate	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL
Chrysene	BDL	149	164	BDL	BDL	135	BDL	BDL	BDL	BDL	NA	NA	NA	BDL
Di-n-butyl phthalate	BDL	BDL	BDL	BDL	BDL	BDL	BDL	12,403	BDL	BDL	NA	NA	NA	BDL
Fluoranthene	BDL	377	250	BDL	BDL	BDL	103	BDL	BDL	BDL	NA	NA	NA	108
Fluorene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL
Phenanthrene	BDL	296	235	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL
Pyrene	BDL	313	382	BDL	BDL	101	119	BDL	BDL	BDL	NA	NA	NA	101
1,2,4-Trichlorobenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL
<b>Total Petroleum Hydrocarbons (TPH) (ppm)</b>														
TPH	NA	693	5,258	4,586	856	12,144	2,112	668,710	297,924	297,924	NA	NA	NA	664
<b>pH (no units)</b>														
pH	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

**Table 5 (continued)  
Hazardous Material Survey  
Analytical Results**

Media	Sample ID													
	10-5		-10-5-MISC						10-6					
	15	16	17	18	19	20	21	22	23	24	25	26	27	28
<b>Volatile Organic Substances (VOCs) (ppb)</b>														
1,1-Dichloroethylene	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-Dichloroethylene	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethylene	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Butylbenzene	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
p-Isopropyltoluene	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethylene	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethylene	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl chloride	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylene Chloride	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Freon	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solvents	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>TCLP Metals (ppm)</b>														
Arsenic	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.015	0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Total	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.03	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Polychlorinated Biphenyls (PCBs) (ppm)</b>														
PCBs	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
<b>Semivolatile Organic Compounds (SVOCs) (ppb)</b>														
Acenaphthene	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benz(a)anthracene	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethyl hexyl)phthalate	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Total Petroleum Hydrocarbons (TPH) (ppm)</b>														
TPH	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,416	NA	NA	NA	NA
<b>pH (no units)</b>														
pH	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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**Table 5 (continued)**  
**Hazardous Material Survey**  
**Analytical Results**

Media	Sample ID													
	10-6-MISC									10-7-MISC				
	29	30	31	32	33	34	35	36	37	38	39	40	41	42
<b>Volatile Organic Substances (VOCs) (ppb)</b>														
1,1-Dichloroethylene	BDL	NA	NA	NA	NA	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA
1,1,2-Dichloroethylene	BDL	NA	NA	NA	NA	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	BDL	NA	NA	NA	NA	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethylene	BDL	NA	NA	NA	NA	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA
n-Butylbenzene	BDL	NA	NA	NA	NA	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA
p-Isopropyltoluene	BDL	NA	NA	NA	NA	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA
Naphthalene	BDL	NA	NA	NA	NA	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA
Tetrachloroethylene	BDL	NA	NA	NA	NA	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	BDL	NA	NA	NA	NA	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA
Trichloroethylene	BDL	NA	NA	NA	NA	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	BDL	NA	NA	NA	NA	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene	BDL	NA	NA	NA	NA	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA
Vinyl chloride	BDL	NA	NA	NA	NA	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA
Methylene Chloride	BDL	NA	NA	NA	NA	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA
Freon	BDL	NA	NA	NA	NA	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA
Total Solvents	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Metals (ppm)</b>														
Arsenic	BDL	NA	NA	NA	NA	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA
Barium	BDL	NA	NA	NA	NA	BDL	BDL	0.6	NA	NA	NA	NA	NA	NA
Cadmium	0.007	NA	NA	NA	NA	BDL	0.027	0.013	NA	NA	NA	NA	NA	NA
Chromium, Total	BDL	NA	NA	NA	NA	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA
Lead	0.089	NA	NA	NA	NA	BDL	0.087	5.13	NA	NA	NA	NA	NA	NA
Mercury	BDL	NA	NA	NA	NA	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA
Selenium	BDL	NA	NA	NA	NA	BDL	0.01	BDL	NA	NA	NA	NA	NA	NA
Silver	BDL	NA	NA	NA	NA	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA
<b>Polychlorinated Biphenyls (PCBs) (ppm)</b>														
PCBs	BDL	BDL	BDL	1	2	3	BDL	BDL	BDL	4	5	4	BDL	
<b>Semivolatile Organic Compounds (SVOCs) (ppb)</b>														
Acenaphthene	BDL	NA	NA	NA	NA	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA
Anthracene	BDL	NA	NA	NA	NA	BDL	134	BDL	NA	NA	NA	NA	NA	NA
Benz(a)anthracene	BDL	NA	NA	NA	NA	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	BDL	NA	NA	NA	NA	BDL	1,264	BDL	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	BDL	NA	NA	NA	NA	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	BDL	NA	NA	NA	NA	BDL	134	BDL	NA	NA	NA	NA	NA	NA
Bis(2-ethyl hexyl)phthalate	BDL	NA	NA	NA	NA	1,946	BDL	BDL	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	BDL	NA	NA	NA	NA	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA
Chrysene	BDL	NA	NA	NA	NA	BDL	304	BDL	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	BDL	NA	NA	NA	NA	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA
Fluoranthene	BDL	NA	NA	NA	NA	BDL	1,106	127	NA	NA	NA	NA	NA	NA
Fluorene	BDL	NA	NA	NA	NA	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA
Phenanthrene	BDL	NA	NA	NA	NA	BDL	1,163	BDL	NA	NA	NA	NA	NA	NA
Pyrene	BDL	NA	NA	NA	NA	BDL	1,905	158	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	BDL	NA	NA	NA	NA	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA
<b>Total Petroleum Hydrocarbons (TPH) (ppm)</b>														
TPH	1,418	NA	NA	NA	NA	NA	3,388	256	NA	NA	NA	NA	NA	NA
<b>pH (no units)</b>														
pH	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

**Table 5 (continued)  
Hazardous Material Survey  
Analytical Results**

Media	Sample ID															
	10-7-MISC		10-12-MISC		10-13-MISC						10-15-MISC			10-27-MISC		
	43	44	45	46	47	48	49	50	51	52	53	53A	54	55	56	
<b>Volatile Organic Substances (VOCs) (ppb)</b>																
1,1-Dichloroethylene	NA	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	
1,1,2-Dichloroethylene	NA	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	
1,1-Dichloroethane	NA	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	
cis-1,2-Dichloroethylene	NA	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	
n-Butylbenzene	NA	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	
p-Isopropyltoluene	NA	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	
Naphthalene	NA	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	
Tetrachloroethylene	NA	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	
1,1,1-Trichloroethane	NA	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	
Trichloroethylene	NA	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	
1,2,4-Trimethylbenzene	NA	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	
1,3,5-Trimethylbenzene	NA	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	
Vinyl chloride	NA	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	
Methylene Chloride	NA	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	
Freon	NA	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	
Total Solvents	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>Metals (ppm)</b>																
Arsenic	NA	0.46	NA	0.12	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL*	BDL	
Barium	NA	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	1.5	BDL	BDL	BDL*	BDL	
Cadmium	NA	0.108	NA	0.211	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL*	0.017	
Chromium, Total	NA	1.56	NA	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL*	BDL	
Lead	NA	0.127	NA	BDL	NA	NA	NA	NA	NA	NA	0.151	BDL	BDL	BDL	0.007*	
Mercury	NA	BDL	NA	0.012	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL*	BDL	
Selenium	NA	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL*	BDL	
Silver	NA	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL*	BDL	
<b>Polychlorinated Biphenyls (PCBs) (ppm)</b>																
PCBs	BDL	BDL	BDL	BDL	18	20	4	BDL	3	BDL	BDL	3	BDL	BDL	24	
<b>Semivolatile Organic Compounds (SVOCs) (ppb)</b>																
Acenaphthene	NA	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	
Anthracene	NA	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	
Benz(a)anthracene	NA	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	
Benzo(b)fluoranthene	NA	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	
Benzo(k)fluoranthene	NA	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	
Benzo(a)pyrene	NA	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	
Bis(2-ethyl hexyl)phthalate	NA	BDL	NA	204	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	
Butyl benzyl phthalate	NA	BDL	NA	109	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	
Chrysene	NA	BDL	NA	106	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	
Di-n-butyl phthalate	NA	BDL	NA	151	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	
Fluoranthene	NA	BDL	NA	230	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	
Fluorene	NA	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	
Phenanthrene	NA	BDL	NA	245	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	
Pyrene	NA	BDL	NA	110	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	
1,2,4-Trichlorobenzene	NA	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	
<b>Total Petroleum Hydrocarbons (TPH) (ppm)</b>																
TPH	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.5	174,374
<b>pH (no units)</b>																
pH	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

**Table 5 (continued)  
Hazardous Material Survey  
Analytical Results**

Media	Sample ID													
	10-27-MISC													
	57	58	59	60	61	62	63	64	65	66	67	68	69	70
<b>Volatile Organic Substances (VOCs) (ppb)</b>														
1,1-Dichloroethylene	35	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,1,2-Dichloroethylene	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,1-Dichloroethane	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	96	BDL
cis-1,2-Dichloroethylene	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL
n-Butylbenzene	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL
p-Isopropyltoluene	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Naphthalene	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Tetrachloroethylene	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,1,1-Trichloroethane	479	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Trichloroethylene	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2,4-Trimethylbenzene	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,3,5-Trimethylbenzene	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Vinyl chloride	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Methylene Chloride	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Freon	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Total Solvents	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Metals (ppm)</b>														
Arsenic	BDL	NA	NA	NA	NA	NA	NA	BDL*	BDL*	BDL	BDL	BDL*	BDL	BDL*
Barium	BDL	NA	NA	NA	NA	NA	NA	BDL*	BDL*	1.3	BDL	BDL*	0.7	BDL*
Cadmium	BDL	NA	NA	NA	NA	NA	NA	BDL*	BDL*	BDL	BDL	BDL*	BDL	BDL*
Chromium, Total	BDL	NA	NA	NA	NA	NA	NA	BDL*	BDL*	BDL	BDL	BDL*	BDL	BDL*
Lead	0.016	NA	NA	NA	NA	NA	NA	0.054*	BDL*	0.051	0.02	BDL*	0.025	BDL*
Mercury	BDL	NA	NA	NA	NA	NA	NA	0.006*	BDL*	BDL	BDL	BDL*	BDL	BDL*
Selenium	0.04	NA	NA	NA	NA	NA	NA	BDL*	BDL*	0.02	BDL	BDL*	BDL	BDL*
Silver	BDL	NA	NA	NA	NA	NA	NA	BDL*	BDL*	BDL	BDL	BDL*	BDL	BDL*
<b>Polychlorinated Biphenyls (PCBs) (ppm)</b>														
PCBs	BDL	BDL	BDL	BDL	BDL	1	BDL	BDL	BDL	10	BDL	2	2	BDL
<b>Semivolatile Organic Compounds (SVOCs) (ppb)</b>														
Acenaphthene	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Anthracene	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Benzo(a)anthracene	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	288	BDL	BDL	BDL	BDL
Benzo(b)fluoranthene	773	NA	NA	NA	NA	NA	NA	BDL	BDL	388	BDL	BDL	BDL	BDL
Benzo(k)fluoranthene	829	NA	NA	NA	NA	NA	NA	BDL	BDL	344	BDL	BDL	BDL	BDL
Benzo(a)pyrene	416	NA	NA	NA	NA	NA	NA	BDL	BDL	357	BDL	BDL	BDL	BDL
Bis(2-ethyl hexyl)phthalate	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Butyl benzyl phthalate	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Chrysene	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	447	BDL	BDL	BDL	BDL
Di-n-butyl phthalate	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Fluoranthene	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	747	BDL	BDL	BDL	BDL
Fluorene	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Phenanthrene	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	312	BDL	BDL	BDL	BDL
Pyrene	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	660	BDL	BDL	BDL	BDL
1,2,4-Trichlorobenzene	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL
<b>Total Petroleum Hydrocarbons (TPH) (ppm)</b>														
TPH	7,774	NA	NA	NA	NA	NA	NA	46	2.1	6,090	738	1.9	3,069	BDL
<b>pH (no units)</b>														
pH	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

**Table 5 (continued)  
Hazardous Material Survey  
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Media	Sample ID													
	10-27-MISC				10-28-MISC									
	71	72	73	74	75	76	77	78	79	80	81	82	83	84
<b>Volatile Organic Substances (VOCs) (ppb)</b>														
1,1-Dichloroethylene	BDL	NA	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	BDL
1,1,2-Dichloroethylene	60	NA	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	BDL
1,1-Dichloroethane	90	NA	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	BDL
cis-1,2-Dichloroethylene	146	NA	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	BDL
n-Butylbenzene	BDL	NA	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	BDL
p-Isopropyltoluene	BDL	NA	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	BDL
Naphthalene	BDL	NA	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	BDL
Tetrachloroethylene	1,377	NA	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	BDL
1,1,1-Trichloroethane	BDL	NA	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	BDL
Trichloroethylene	387	NA	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	BDL
1,2,4-Trimethylbenzene	BDL	NA	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	BDL
1,3,5-Trimethylbenzene	BDL	NA	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	BDL
Vinyl chloride	25	NA	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	BDL
Methylene Chloride	BDL	NA	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	BDL
Freon	BDL	NA	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	BDL
Total Solvents	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Metals (ppm)</b>														
Arsenic	BDL	NA	BDL	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	NA	BDL
Barium	0.7	NA	BDL	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	NA	BDL
Cadmium	BDL	NA	BDL	0.015	NA	BDL	NA	NA	NA	NA	NA	NA	NA	0.028
Chromium, Total	BDL	NA	BDL	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	NA	BDL
Lead	0.015	NA	BDL	0.291	NA	BDL	NA	NA	NA	NA	NA	NA	NA	BDL
Mercury	BDL	NA	BDL	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	NA	BDL
Selenium	BDL	NA	BDL	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	NA	BDL
Silver	BDL	NA	BDL	BDL	NA	BDL	NA	NA	NA	NA	NA	NA	NA	BDL
<b>Polychlorinated Biphenyls (PCBs) (ppm)</b>														
PCBs	29	26	BDL	10	BDL	BDL	BDL	2	BDL	9,200	18,000	52	595	BDL
<b>Semivolatile Organic Compounds (SVOCs) (ppb)</b>														
Acenaphthene	BDL	NA	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL
Anthracene	BDL	NA	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL
Benz(a)anthracene	121	NA	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL
Benzo(b)fluoranthene	BDL	NA	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL
Benzo(k)fluoranthene	BDL	NA	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL
Benzo(a)pyrene	213	NA	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL
Bis(2-ethyl hexyl)phthalate	BDL	NA	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL
Butyl benzyl phthalate	BDL	NA	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL
Chrysene	363	NA	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	2,364
Di-n-butyl phthalate	BDL	NA	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL
Fluoranthene	305	NA	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL
Fluorene	133	NA	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL
Phenanthrene	753	NA	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	19,375
Pyrene	367	NA	BDL	22,753	NA	NA	NA	NA	NA	NA	NA	NA	NA	3,198
1,2,4-Trichlorobenzene	264	NA	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL
<b>Total Petroleum Hydrocarbons (TPH) (ppm)</b>														
TPH	16,114	NA	0.7	922,260	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>pH (no units)</b>														
pH	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

**Table 5 (continued)  
Hazardous Material Survey  
Analytical Results**

Media	Sample ID														
	10-28-MISC											10-29-MISC			
	85	86	87	88	89	90	91	92	93	94	95	96	97	98	
<b>Volatle Organic Substances (VOCs) (ppb)</b>															
1,1-Dichloroethylene	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	NA	NA	
1,1,2-Dichloroethylene	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	NA	NA	
1,1-Dichloroethane	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	NA	NA	
cis-1,2-Dichloroethylene	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	NA	NA	
n-Butylbenzene	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	NA	NA	
p-Isopropyltoluene	16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	NA	NA	
Naphthalene	158	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	NA	NA	
Tetrachloroethylene	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	NA	NA	
1,1,1-Trichloroethane	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	NA	NA	
Trichloroethylene	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	NA	NA	
1,2,4-Trimethylbenzene	106	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	NA	NA	
1,3,5-Trimethylbenzene	34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	NA	NA	
Vinyl chloride	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	NA	NA	
Methylene Chloride	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	NA	NA	
Freon	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	NA	NA	
Total Solvents	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>Metals (ppm)</b>															
Arsenic	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	BDL	NA	NA
Barium	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	BDL	NA	NA
Cadmium	0.112	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.057	BDL	NA	NA
Chromium, Total	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	BDL	NA	NA
Lead	0.266	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.299	BDL	NA	NA
Mercury	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	BDL	NA	NA
Selenium	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	BDL	NA	NA
Silver	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	BDL	NA	NA
<b>Polychlorinated Biphenyls (PCBs) (ppm)</b>															
PCBs	100	6	1	16	BDL	BDL	1	BDL	BDL	6	NA	BDL	12	8	
<b>Semivolatile Organic Compounds (SVOCs) (ppb)</b>															
Acenaphthene	113	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	BDL	NA	NA
Anthracene	137	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	BDL	NA	NA
Benz(a)anthracene	444	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	BDL	NA	NA
Benzo(b)fluoranthene	559	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	BDL	NA	NA
Benzo(k)fluoranthene	437	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	BDL	NA	NA
Benzo(a)pyrene	410	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	BDL	NA	NA
Bis(2-ethyl hexyl)phthalate	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	BDL	NA	NA
Butyl benzyl phthalate	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	BDL	NA	NA
Chrysene	497	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	BDL	NA	NA
Di-n-butyl phthalate	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	BDL	NA	NA
Fluoranthene	1,255	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	BDL	NA	NA
Fluorene	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	BDL	NA	NA
Phenanthrene	765	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	BDL	NA	NA
Pyrene	1,071	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	BDL	NA	NA
1,2,4-Trichlorobenzene	BDL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	BDL	NA	NA
<b>Total Petroleum Hydrocarbons (TPH) (ppm)</b>															
TPH	2,780	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	440	561	NA	NA
<b>pH (no units)</b>															
pH	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9	NA	NA	NA

**Table 5 (continued)**  
**Hazardous Material Survey**  
**Analytical Results**

Media	Sample ID													
	10-29-MISC						11-3-MISC							
	99	100	101	102	103	104	105	106	107	108	109	110	111	112
<b>Volatile Organic Substances (VOCs) (ppb)</b>														
1,1-Dichloroethylene	BDL	BDL	NA	NA	NA	NA	BDL	NA						
1,1,2-Dichloroethylene	BDL	BDL	NA	NA	NA	NA	BDL	NA						
1,1-Dichloroethane	BDL	BDL	NA	NA	NA	NA	BDL	NA						
cis-1,2-Dichloroethylene	BDL	BDL	NA	NA	NA	NA	BDL	NA						
n-Butylbenzene	BDL	BDL	NA	NA	NA	NA	BDL	NA						
p-Isopropyltoluene	BDL	BDL	NA	NA	NA	NA	BDL	NA						
Naphthalene	BDL	BDL	NA	NA	NA	NA	BDL	NA						
Tetrachloroethylene	BDL	BDL	NA	NA	NA	NA	BDL	NA						
1,1,1-Trichloroethane	BDL	BDL	NA	NA	NA	NA	BDL	NA						
Trichloroethylene	BDL	BDL	NA	NA	NA	NA	BDL	NA						
1,2,4-Trimethylbenzene	BDL	BDL	NA	NA	NA	NA	BDL	NA						
1,3,5-Trimethylbenzene	BDL	BDL	NA	NA	NA	NA	BDL	NA						
Vinyl chloride	BDL	BDL	NA	NA	NA	NA	BDL	NA						
Methylene Chloride	BDL	BDL	NA	NA	NA	NA	BDL	NA						
Freon	BDL	BDL	NA	NA	NA	NA	BDL	NA						
Total Solvents	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Metals (ppm)</b>														
Arsenic	BDL	BDL	0.05	NA	NA	NA	BDL	NA						
Barium	BDL	BDL	BDL	NA	NA	NA	BDL	NA						
Cadmium	BDL	0.084	0.21	NA	NA	NA	0.012	NA						
Chromium, Total	BDL	0.66	0.66	NA	NA	NA	BDL	NA						
Lead	BDL	0.7	BDL	NA	NA	NA	0.113	NA						
Mercury	BDL	BDL	BDL	NA	NA	NA	BDL	NA						
Selenium	0.1	0.01	0.06	NA	NA	NA	BDL	NA						
Silver	BDL	BDL	BDL	NA	NA	NA	BDL	NA						
<b>Polychlorinated Biphenyls (PCBs) (ppm)</b>														
PCBs	BDL	BDL	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1	3	BDL	BDL
<b>Semivolatile Organic Compounds (SVOCs) (ppb)</b>														
Acenaphthene	BDL	BDL	BDL	NA	NA	NA	BDL	NA						
Anthracene	BDL	BDL	BDL	NA	NA	NA	BDL	NA						
Benz(a)anthracene	BDL	BDL	BDL	NA	NA	NA	BDL	NA						
Benzo(b)fluoranthene	BDL	BDL	BDL	NA	NA	NA	BDL	NA						
Benzo(k)fluoranthene	BDL	BDL	BDL	NA	NA	NA	BDL	NA						
Benzo(a)pyrene	BDL	BDL	BDL	NA	NA	NA	BDL	NA						
Bis(2-ethyl hexyl)phthalate	BDL	BDL	BDL	NA	NA	NA	BDL	NA						
Butyl benzyl phthalate	BDL	BDL	BDL	NA	NA	NA	BDL	NA						
Chrysene	108	BDL	BDL	NA	NA	NA	BDL	NA						
Di-n-butyl phthalate	BDL	BDL	BDL	NA	NA	NA	BDL	NA						
Fluoranthene	181	119	BDL	NA	NA	NA	BDL	NA						
Fluorene	BDL	BDL	BDL	NA	NA	NA	BDL	NA						
Phenanthrene	184	230	BDL	NA	NA	NA	BDL	NA						
Pyrene	255	BDL	BDL	NA	NA	NA	BDL	NA						
1,2,4-Trichlorobenzene	BDL	BDL	BDL	NA	NA	NA	BDL	NA						
<b>Total Petroleum Hydrocarbons (TPH) (ppm)</b>														
TPH	NA	NA	110	NA	NA	NA	133	NA						
<b>pH (no units)</b>														
pH	9.3	3.3	3.0	NA	NA	NA	7.2	NA						