



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION I
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

DEC 17 2019

United Illuminating Company
Attn: Shawn Crosbie, Project Manager
180 Marsh Hill Road
Orange, Connecticut 06477

Haven River Properties, LLC
Attn: David Tropper, Managing Partner
84-25 Abingdon Road
Kew Gardens, New York 11415

Re: PCB Cleanup and Risk-Based Disposal Approval under 40 CFR §§ 761.61(a) and (c)
English Station Parcel A / New Haven, CT

Dear Mssrs. Crosbie and Tropper:

This is in response to the Notification by the United Illuminating Company ("UI")¹ to address PCB-contaminated soil, sediment, concrete, and other debris located on Parcel A ("the Site") of the English Station properly located at 510A Grand Avenue in New Haven, Connecticut as authorized by the federal PCB regulations at 40 CFR Part 761. PCBs are present on the Site at concentrations that exceed the allowable PCB level for *unrestricted use* under the federal PCB regulations at 40 CFR § 761.61(a). UI has requested approval to address the PCB contamination within the Site area under the PCB cleanup and disposal options at 40 CFR §§ 761.61(a) and (c).

Based on the information provided, the Site is owned by Haven River Properties, LLC ("HRP") but UI will be conducting the remedial actions proposed in the submitted Notification, which include the following activities:

1. Collect pre-excavation (i.e., verification samples) in the location where sheet piling may be required to support the soil excavation, to confirm PCB concentrations are less than or equal to ("≤") 1 part per million ("ppm");

¹ Information was submitted by UI to satisfy the notification requirement under 40 CFR §§ 761.61(a)(3) and (c). Information was provided dated November 2018 (*Parcel A Remedial Action Plan*); March 25, 2019 (UI Comment Response Letter); September 19, 2019 (revised September 2019 *Parcel A Remedial Action Plan*); November 15, 2019 (response to CTDEEP and EPA comments transmitted during November 7, 2019 conference call); December 2019 (revised December 2019 *English Station Parcel A PCB Remedial Action Plan, as revised December 2019*); and, December 10, 2019 (emails pertaining to contractor work plans submittals and clean cover). These submittals will be referred to as the "Notification."

2. Collect samples for PCB analysis from debris piles located on Parcel A to determine if PCBs concentrations are ≥ 1 ppm or $\geq 10 \mu\text{g}/100 \text{ cm}^2$ and if so, remove the pile(s) and dispose off-site as a ≥ 50 ppm *PCB remediation waste* in accordance with 40 CFR § 761.61(a)(5)(i)(B)(2)(iii). Attachment 2;
3. Following removal of the debris piles, if PCBs were identified at ≥ 1 ppm or $\geq 10 \mu\text{g}/100 \text{ cm}^2$ in a debris pile, the underlying material will be sampled for PCBs and removed as necessary to achieve a PCB cleanup standard of ≤ 1 ppm north of the Parcel A demarcation line and ≤ 10 ppm south of the Parcel A demarcation line;
4. Remove water from subsurface structures, including the manholes and catch basins, treat water for discharge in accordance with 40 CFR 761.79(b)(1)(iii), and dispose of captured sediments with the treatment system components as a ≥ 50 ppm PCB waste in accordance with 40 CFR § 761.61(a)(5)(i)(B)(2)(iii);
5. Sample the subsurface concrete structures and concrete piping for PCBs; and, if PCB concentrations are found at > 1 ppm, the contaminated structure and/or piping will be removed and disposed off-site as a *PCB remediation waste* in accordance with 40 CFR § 761.61(a)(5)(i)(B)(2)(iii), with exception of subsurface concrete which cannot be removed due to structural concerns where the requirements under 40 CFR § 761.30(p) for *Continued use of porous surfaces contaminated with PCBs regulated for disposal by spills of liquid PCBs* will be implemented;
6. Dewater the cooling water tunnel, treat water for discharge in accordance with 40 CFR § 761.79(b)(1)(iii) and dispose of captured sediments with the treatment system components as a ≥ 50 ppm PCB waste in accordance with 40 CFR § 761.61(a)(5)(i)(B)(2)(iii);
7. If present, remove remaining sediments from tunnel and place in lined storage container; test accumulated free water in storage container to determine if the PCB concentration is $< 0.5 \mu\text{g}/\text{L}$ and/or the sediment passes the paint filter test for disposal in a landfill; and, dispose of dewatered sediment as a < 50 ppm PCB waste in accordance with 40 CFR § 761.61(a)(5)(i)(B)(2)(ii);
8. Excavate PCB-contaminated soil with greater than > 1 ppm but < 50 ppm located within the ≤ 1 ppm PCB demarcation area (i.e., north of the Parcel A demarcation line), and dispose off-site as a *PCB remediation waste* in accordance with 40 CFR § 761.61(a)(5)(i)(B)(2)(ii). Attachment 3;
9. Collect post-excavation soil samples (with exception of the sheet pile area(s) sidewalls) in accordance with 40 CFR Part 761 Subpart O to confirm that the PCB concentrations remaining are ≤ 1 ppm;

10. Construct a clean cover comprised of an orange geotextile, and a minimum 4-feet of clean soil or a 2-feet clean soil cover overlain with a minimum 3 inches of bituminous concrete, over > 1 ppm but ≤ 10 ppm *PCB remediation waste* and over subsurface concrete where the requirements under 40 CFR § 761.30(p) for *Continued use of porous surfaces contaminated with PCBs regulated for disposal by spills of liquid PCBs* are implemented. Attachment 4, and;
11. Record a deed notice in accordance with 40 CFR § 761.61(a)(8) to document PCB concentrations remaining at the Site and any use restrictions and cap maintenance requirements.

UI has proposed alternatives to the prescriptive requirements under 40 CFR § 761.61(a). Specifically, UI is proposing the following: a modification to the cap design requirements under 40 CFR § 761.61(a)(7); and, pre-verification sampling in locations where sheet piling will be installed to limit groundwater infiltration and to facilitate excavation.

EPA has determined that: (1) the proposed cover is consistent with the Connecticut Department of Energy and Environmental Protection (“CTDEEP”) regulations for ≤ 10 ppm PCB-contaminated soil (i.e., *PCB remediation waste*) for an Industrial/Commercial setting; and, (2) the proposed pre-verification sampling at the location where sheet piling will be required for excavation is reasonable. EPA finds that the proposed alternative sampling and alternative clean cover, once completed, will not present an unreasonable risk of injury to health or the environment. EPA applies this no unreasonable risk standard in accordance with the PCB regulations at 40 CFR § 761.61(c), and the Toxic Substances Control Act, at 15 C § 2605(e).

UI may proceed with its plan in accordance with 40 CFR §§ 761.61(a) and (c), and its Notification, subject to this Approval and the conditions of Attachment 1. Please be aware that this Approval requires certification by both UI and the Site owner, HRP, of acceptance of the Approval conditions stated herein. Failure of either party to submit such certification shall be grounds for EPA’s withdrawal of this Approval.

This Approval does not release UI or HRP from any applicable requirements of federal, state or local law, including those requirements related to groundwater monitoring or to remediation of contaminants, including PCBs, at the property by the CTDEEP.

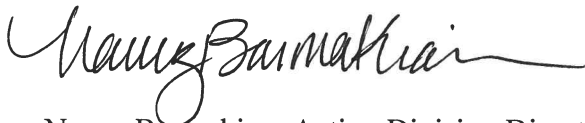
Questions and correspondence regarding this Approval should be directed to:

Kimberly N. Tisa, PCB Coordinator (LCRD07-2)
United States Environmental Protection Agency
5 Post Office Square, Suite 100
Boston, Massachusetts 02109-3912
Telephone: (617) 918-1527
Tisa.kimberly@epa.gov

EPA encourages the compliance with greener cleanup practices for all cleanup projects, and recommends adherence to the ASTM Standard Guide to Greener Cleanups E2893-16 (Guide) for work conducted under this Approval and the Notification. Greener Cleanups is the practice of integrating options that minimize the environmental impacts of cleanup actions in order to incorporate practices that maximize environmental and human benefit. Please see Section 6 of the Guide for the Best Management Practices (BMP) Process dated May 2016 (See www.astm.org/Standards/E2893.htm for additional information). EPA encourages you to review the Guide and implement any practices that are feasible. If implemented, the PCB completion report (see Attachment 1, Condition 21) should include a section on BMP Documentation, as described in Section 6.6.5 of the Guide.

EPA shall not consider this specific project complete until it has received all submittals required under this Approval, including construction of the clean cover and recording of the deed notice. Please be aware that upon EPA receipt and review of the submittals, EPA may request any additional information necessary to establish that the work has been completed in accordance with 40 CFR Part 761, the Notification, and this Approval.

Sincerely,



Nancy Barmakian, Acting Division Director
Land, Chemicals and Redevelopment Division

Attachment 1: Approval Conditions

Attachment 2: Figure 6 - Parcel A Existing Conditions Plan and Site Work

Attachment 3: Figure 8 - Parcel A PCB Soil Remediation Areas

Attachment 4: Figure 9 – Parcel A Final Site Conditions and Grading

cc: Gary Trombly, CTDEEP
File

ATTACHMENT 1

**PCB CLEANUP AND RISK-BASED DISPOSAL APPROVAL CONDITIONS
ENGLISH STATION PARCEL A (“the Site”)
510A GRAND AVENUE
NEW HAVEN, CONNECTICUT**

GENERAL CONDITIONS

1. This Approval is granted under the authority of Section 6(e) of the Toxic Substances Control Act (TSCA), 15 U.S.C. § 2605(e), and the PCB regulations at 40 CFR Part 761, and applies solely to the PCB-contaminated soil, concrete, and debris located on the English Station Parcel A property as identified in the Notification.
 - a. In the event that the United Illuminating Company (“UI”) or Haven River Properties, LLC (“HRP” and together, “the Parties”) identifies new Site conditions, or PCB-contaminated soil or other media not described in the Notification, which is subject to cleanup and disposal under the PCB regulations, UI or HRP shall be required to notify EPA and to clean up such PCB-contaminated soil and other media in accordance with 40 CFR Part 761.
 - b. UI or HRP may submit a separate plan to address such PCB contamination not identified in the Notification or may modify the Notification to incorporate cleanup of such PCBs under this Approval in accordance with Condition 16.
2. The Parties shall conduct on-site activities in accordance with the conditions of this Approval and with the Notification.
3. In the event that the cleanup and disposal plan described in the Notification differs from the conditions specified in this Approval, the conditions of this Approval shall govern.
4. The terms and abbreviations used herein shall have the meanings as defined in 40 CFR § 761.3 unless otherwise defined within this Approval.

2

Information was submitted by UI to satisfy the notification requirement under 40 CFR §§ 761.61(a)(3) and (c). Information was provided dated November 2018 (*Parcel A Remedial Action Plan*); March 25, 2019 (UI Comment Response Letter); September 19, 2019 (revised September 2019 *Parcel A Remedial Action Plan*); November 15, 2019 (response to CTDEEP and EPA comments transmitted during November 7, 2019 conference call); and December 2019 (revised December 2019 *English Station Parcel A PCB Remedial Action Plan*); and, December 10, 2019 (emails pertaining to contractor work plans submittals and clean cover). These submittals will be referred to as the “Notification.”

5. UI must comply with all applicable federal, state and local regulations in the storage, handling, and disposal of all PCB wastes, including PCBs, PCB Items and decontamination wastes generated under this Approval. In the event of a new spill during remedial actions, UI shall contact EPA within 24 hours for direction on PCB cleanup and sampling requirements.
6. UI is responsible for the actions of all officers, employees, agents, contractors, subcontractors, and others who are involved in activities conducted under this Approval. If at any time UI has or receives information indicating that UI or any other person has failed, or may have failed, to comply with any provision of this Approval, it must report the information to EPA in writing within 24 hours of having or receiving the information.
7. This Approval does not constitute a determination by EPA that the transporters or disposal facilities selected by UI are authorized to conduct the activities set forth in the Notification. UI is responsible for ensuring that its selected transporters and disposal facilities are authorized to conduct these activities in accordance with all applicable federal, state and local statutes and regulations.
8. This Approval does not: 1) waive or compromise EPA's enforcement and regulatory authority; 2) release UI or HRP from compliance with any applicable requirements of TSCA or of any other federal, state or local law; or 3) release UI or HRP from liability for, or otherwise resolve, any violations of TSCA or of any other federal, state or local law.
9. Failure to comply with the Approval conditions specified herein shall constitute a violation of the requirement in § 761.50(a) to store or dispose of PCB waste in accordance with 40 CFR Part 761 Subpart D.

NOTIFICATION AND CERTIFICATION CONDITIONS

10. This Approval may be revoked if the EPA does not receive written notification from UI and HRP of their acceptance of the conditions of this Approval within 10 business days of receipt.
11. UI shall notify EPA at least 5 business days before conducting removal of *PCB remediation waste* under this Approval, and shall provide its schedule to implement and complete the activities described in the Notification and authorized by this Approval.
12. Prior to beginning soil excavation work authorized under this Approval, UI shall submit the following information:
 - a. pre-verification sampling results for the soil located within the sheet piling area with any proposed modifications that are necessary to the remediation plan based on these results;

- b. a contractor work plan detailing the specific methods for air monitoring, and removal, decontamination, storage, and disposal of PCB-containing wastes. UI and its remediation contractor shall incorporate any changes EPA deems necessary to comply with the conditions of this Approval and the PCB Regulations at 40 CFR Part 761;
- c. a certification signed by the selected oversight contractor and remediation contractor, if applicable, stating that the contractor(s) has read and understands the Notification, and agrees to abide by the conditions specified in this Approval; and,
- d. a certification signed by the selected analytical laboratory, stating that the laboratory has read and understands the extraction and analytical method requirements and the quality assurance requirements specified in the Notification and in this Approval.

CLEANUP AND DISPOSAL CONDITIONS

13. The cleanup level for *PCB remediation waste* at the Site shall be less than or equal to (“≤”) 1 mg/Kg (or parts per million (“ppm”), except as provided in subparagraphs (a) and (c), below.
- a. The PCB cleanup standard shall be less than or equal to (“≤”) 10 ppm to the south of the demarcation line as shown on Attachment 2. *PCB remediation waste* with greater than (>) 1 ppm but ≤ 10 ppm shall be covered with an orange geotextile fabric overlain with: (1) a minimum 4-foot clean soil cover or; (2) a minimum 2-foot clean soil cover overlain with a minimum 3 inches of bituminous concrete, in compliance with the Connecticut Department of Energy and Environmental Protection Remediation (“CTDEEP”) Regulations.
 - b. All post-cleanup verification sampling for bulk *PCB remediation waste* (i.e., soil) shall be performed on a bulk basis (i.e. mg/Kg) and PCB analytical results reported on a dry-weight basis. Verification sampling for bulk *PCB remediation waste* shall comply with the procedures and frequencies described in the Notification, except as otherwise required herein. Confirmatory samples shall be collected from both excavation bottoms and sidewalls, as applicable.
 - i) In the event PCB concentrations greater than or equal to (\geq) 50 ppm are identified within the Site boundaries during remediation work, UI shall notify EPA with 24 hours of discovery and within 3 business days, shall submit, in writing, its plan to clean up and dispose of the PCB-contaminated waste to comply with 40 CFR Part 761 and this Approval.

- c. *Porous surfaces* (e.g., concrete) shall be sampled on a bulk basis (i.e., mg/Kg) and PCB analytical results reported on a dry-weight analysis. Sampling for *porous surfaces* shall be conducted in accordance with the EPA Region 1 *Standard Operating Procedure for Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs) Revision 4, May 5, 2011*, at a maximum depth interval of 0.5 inches.
 - i) In the event that subsurface concrete structures are present which cannot be removed due to structural stability concerns and where PCB concentrations are > 1 ppm, the requirements under 40 CFR § 761.30(p) for *Continued use of porous surfaces contaminated with PCBs regulated for disposal by spills of liquid PCBs* will be implemented, which shall include, at a minimum, the following : (1) covering the PCB-contaminated *porous surface* with a resistant coating or barrier, and (2) marking of the PCB-contaminated *porous surface* with the PCB M_L mark.
 - d. Chemical extraction for PCBs shall be conducted using Method 3500B/3540C of SW-846; and, chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another extraction or analytical method(s) is validated according to Subpart Q.
14. All PCB waste (at any concentration) generated as a result of the activities described in the Notification, excluding any decontaminated materials, shall be marked in accordance with 40 CFR § 761.40; stored in a manner prescribed in 40 CFR § 761.65; and, disposed of in accordance with 40 CFR § 761.61(a)(5), unless otherwise specified below:
- a. Non-liquid cleaning materials, such as PPE and similar materials resulting from decontamination, shall be disposed of in accordance with 40 CFR § 761.79(g)(6).
 - b. Moveable equipment, tools, and sampling equipment shall be decontaminated in accordance with either 40 CFR § 761.79(b)(3)(i)(A), § 761.79(b)(3)(ii)(A), or § 761.79(c)(2).
 - c. PCB-contaminated water generated during decontamination or dewatering shall be decontaminated in accordance with 40 CFR § 761.79(b)(1) or disposed of under § 761.70.

INSPECTION, MODIFICATION AND REVOCATION CONDITIONS

15. UI and HRP shall allow any authorized representative of the Administrator of the EPA to inspect the Site and to inspect records and take samples as may be necessary to determine compliance with the PCB regulations and this Approval. Any refusal by UI or HRP to allow such an inspection (as authorized by Section 11 of TSCA) shall be grounds for revocation of this Approval.
16. Any proposed modification(s) in the plan, specifications, or information in the Notification must be submitted to EPA no less than 14 calendar days prior to the proposed implementation of the change. Such proposed modifications will be subject to the procedures of 40 CFR § 761.61(a)(3)(ii).
17. Any departure from the conditions of this Approval without prior, written authorization from the EPA may result in the revocation, suspension and/or modification of the Approval, in addition to any other legal or equitable relief or remedy the EPA may choose to pursue.
18. Any misrepresentation or omission of any material fact in the Notification or in any records or reports may result in the EPA's revocation, suspension and/or modification of the Approval, in addition to any other legal or equitable relief or remedy the EPA may choose to pursue.
19. Approval for these activities may be revoked, modified or otherwise altered: if EPA finds a violation of the conditions of this Approval or of 40 CFR Part 761, including EPA's PCB Spill Cleanup Policy, or other applicable rules and regulations; if EPA finds that PCBs are migrating from the Site; or, if EPA finds that these activities present an unreasonable risk of injury to health or the environment.

RECORDKEEPING AND REPORTING CONDITIONS

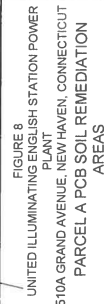
20. UI shall prepare and maintain all records and documents required by 40 CFR Part 761, including but not limited to the records required under Subparts J and K and shall submit same to HRP. A written record of these activities shall be established and maintained by both UI and HRP in a centralized location until such time as EPA approves in writing a request for an alternative disposition of such records. All records shall be made available for inspection by authorized representatives of EPA.
21. UI shall submit a final completion report in both a hard copy and electronic version (e.g., CD-ROM), to the EPA and HRP within 60 days of completion of the activities authorized under this Approval. Laboratory analytical reports may be provided in electronic format only. At a minimum, this final report shall include: a short narrative of the project activities with photographic documentation and Greener Cleanups BMP documentation,

if implemented; characterization and confirmation sample analytical results; copies of the analytical chains of custody; field and laboratory quality control/quality assurance checks; the quantity of PCB waste disposed of off-site; copies of manifests and bills of lading; and, copies of certificates of disposal or similar certifications issued by the disposer. UI shall also provide to EPA the estimated cost of the PCB remediation work completed under this Approval.

22. Within sixty (60) days of completion of PCB remediation activities, HRP shall submit to EPA a certification as required at 40 CFR § 761.61(a)(8)(i)(B), that it has recorded the notation on the deed as required under § 761.61(a)(8)(i)(A) with a copy of the recorded deed notice. The deed notice shall also include a requirement for maintenance of the cover to be constructed over > 1 ppm but ≤ 10 ppm *PCB remediation waste* remaining at the Site and for ensuring the requirements under 40 CFR § 761.30(p) are met for the concrete structures, if applicable.
23. Required submittals shall be mailed to:
- Kimberly N. Tisa, PCB Coordinator
United States Environmental Protection Agency
5 Post Office Square, Suite 100 (LCRD07-2)
Boston, Massachusetts 02109-3912
Telephone: (617) 918-1527
24. No record, report or communication required under this Approval shall qualify as a self-audit or voluntary disclosure under EPA audit, self-disclosure or penalty policies.

END OF ATTACHMENT 1





NOVEMBER 2018, REVISED DECEMBER 2019 SCALE: 1" = 30'

Weston & Sampson
Weston & Sampson Engineers, Inc.
273 Dividend Road, Rocky Hill, CT 06067

SOIL HAVING PCB CONCENTRATIONS ≥ 1 MG/KG AND ≥ 10 MG/KG WILL BE RENDERED NON-EXCAVATEABLE WITH 4 FEET OF CLEAN BACKFILL MATERIAL.

PCB-IMPACTED SOILS <10 MG/KG TO BE EXCAVATED AND DISPOSED OFF-SITE PER SPECIFICATION SECTION 02 61 01 16 - HANDLING, TRANSPORTATION AND OFF-SITE DISPOSAL OF EXCAVATED MATERIALS

APPROXIMATE PARCEL BOUNDARY

SOIL BORING LOCATION WITH PCB'S > 1 MG/KG BUT < 10 MG/KG

SOIL BORING LOCATION WITH PCB'S < 1 MG/KG

TRANSPORTATION, AND OFF-SITE D
APPROXIMATE PARCEL BOUNDARY

SOIL BORING LOCATION WITH PCBS > 1 MG/KG BUT < 10 MG/KG

LIMITS OF WORK

PCB-IMPACTED SOILS > 50 MG/KG TO BE EXCAVATED AND DISPOSED OFF-SITE
PER SPECIFICATION SECTION 02 61 00 16- HANDLING, TRANSPORTATION, AND
OFF-SITE DISPOSAL OF EXCAVATED MATERIALS

ANTICIPATED LOCATIONS OF SHEET PILE INSTALLATION

NOTES:

1. CONTRACTOR SHALL OBTAIN GENERAL PERMIT TO DISCHARGE REMEDIATION GROUNDWATER TO SURFACE WATER AND INSTALL DEWATERING TREATMENT SYSTEM PRIOR TO PERFORMING EXCAVATION ACTIVITIES PER SPECIFICATION SECTION 02 23 19-DEWATERING AT A LOCATION APPROVED BY UNITED ILLUMINATING AND ENGINEER.

2. PRIOR TO PERFORMING EXCAVATION ACTIVITIES, THE CONTRACTOR SHALL STAKE-OUT ALL EXCAVATION AREAS IN THE FIELD FOR APPROVAL BY THE ENGINEER. ANY EXCAVATIONS BEYOND THE LIMITS OF WORK SHOWN MUST BE APPROVED BY THE ENGINEER. DURING THE COURSE OF THE WORK, THE CONTRACTOR SHALL MAINTAIN SOIL EXCAVATION AREAS AS ESTABLISHED VERTICAL CONTROL POINTS. THE CONTRACTOR SHALL USE SURVEYING TECHNIQUES SUCH THAT DEPTHS OF EXCAVATION CAN BE READILY DETERMINED FROM INSTRUMENT SURVEY BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.

3. EXCAVATION AREAS SHOWN ON THIS PLAN ARE APPROXIMATE LIMITS. SOIL AND OTHER MATERIALS SHALL BE HANDLED AND DISPOSED IN ACCORDANCE WITH SPECIFICATION SECTION 02 61 00.16-HANDLING, TRANSPORTATION, AND DISPOSAL OF EXCAVATED MATERIALS AND ALL RELEVANT LOCAL, STATE, AND FEDERAL REGULATIONS. SEE LEGEND ON THIS SHEET FOR DIFFERENT OPTIONS BASED ON PCB CONCENTRATIONS IN THE SOIL.

4. CONTAMINATED MATERIAL MAY BE ENCOUNTERED BEYOND THE LIMITS OF EXCAVATION IDENTIFIED ON THE DRAWING. THE CONTRACTOR MAY BE REQUIRED TO EXTEND EXCAVATION ACTIVITIES, AS REQUIRED BY LIMITED ILLUMINATING, BASED ON CONFIRMATORY SAMPLE RESULTS. THE CONTRACTOR SHALL REMAIN RESPONSIBLE FOR EXCAVATION SUPPORT FOR THE EXTENDED AREA.

5. CONTRACTOR SHALL NOT BACKFILL EXCAVATED AREAS UNTIL UNITED ILLUMINATING HAS RECEIVED AND APPROVED CONFIRMATORY SAMPLING RESULTS. ADDITIONAL EXCAVATION MAY BE REQUIRED BASED ON CONFIRMATORY SAMPLE RESULTS.

6. THE CONTRACTOR SHALL PRECHARACTERIZE THE PCB-IMPACTED SOILS FOR DISPOSAL.
7. DEBRIS WITHIN THE PCB-IMPACTED AREAS SHALL BE SIZED AS REQUIRED BY THE APPROVED DISPOSAL FACILITY AND DISPOSED OF WITH THE PCB-IMPACTED SOILS.

8. CONCRETE DEADMEN WITHIN THE PCB-IMPACTED AREA SHALL BE DECONTAMINATED. ONCE PCB-IMPACTED SOILS HAVE BEEN EXCAVATED AND CONFIRMATION SAMPLES INDICATE THAT PCB'S ARE <1 MG/KG IN THE EXCAVATION AREA, EXPOSED CONCRETE SHALL BE DECONTAMINATED/DUBLE WASH RINSED AS PER 40 CFR PART 761 SUBPART S, AND SAMPLED TO DETERMINE PCB CONCENTRATIONS. IF DETERMINED PCB CONCENTRATIONS ARE >1 MG/KG, THE CONCRETE WILL BE MARKED WITH AN ML SIGN AS PER 40 CFR PART 761 SUBPART C AND COVERED BY GEOTEXTILE FABRIC PRIOR TO BACKFILLING.

9. CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPORTING EXCAVATIONS AS PER SPECIFICATION SECTION 02 50 00-SUPPORT OF EXCAVATION.

10. ALL EXCAVATIONS 24 FT. WILL REQUIRE TEMPORARY SHEETING. THE DEPTH OF SHEETING SHALL BE A MINIMUM OF TWO TIMES THE DEPTH OF EXCAVATION, IF NOT OBSTRUCTED BY SUBSURFACE STRUCTURES. SIDE SLOPING AS PER SPECIFICATION SECTION 02 50-00-SUPPORT OF EXCAVATION MAY BE USED

11. ALL MATERIALS THAT COME INTO CONTACT WITH PCB-CONTAMINATED SOIL AND GROUNDWATER MUST BE DECONTAMINATED IN ACCORDANCE WITH THE SPECIFICATIONS
12. WETTING AND MISTING OF SOILS WILL BE REQUIRED TO CONTROL FUGITIVE DUST AND

THE ENGINEER SHALL HAVE AUTHORITY TO REQUIRE WATER APPLICATION AND WORK STOPPAGE IF MEASURES ARE INADEQUATE. SEE DUST CONTROL AND AIR MONITORING SPECIFICATION 01 14 16 FOR MORE DETAIL.

13. THE CONTRACTOR SHALL INSTALL WASTE STORAGE AREAS FOR SOIL WITH PCBs GREATER THAN EQUAL TO 50 MG/KG AND SOILS WITH PCBs > 1 MG/KG BUT < 50 MG/KG. THE EXACT LOCATIONS WILL BE PRESENTED IN THE CONTRACTOR'S EXCAVATED MATERIALS MANAGEMENT PLAN (EMMP) AND APPROVED BY THE ENGINEER AND UNITED ILLUMINATING PCB-IMPACTED SOILS ABOVE THE GROUNDWATER TABLE SHALL BE DIRECT LOADED FROM THE EXCAVATION AREAS IF POSSIBLE. PCB-IMPACTED SOILS FROM BELOW THE GROUNDWATER

TABLE SHALL BE DEWATERED, EXCAVATED, AND PLACED IN WATER-TIGHT CONTAINERS/ROLL-OFFS AND STORED WITHIN THE WASTE STORAGE AREAS. AT A MINIMUM, THE WASTE STORAGE AREAS SHALL ALSO HAVE TWO LAYERS OF POLYETHYLENE SHEETING AND BEARDED AT THE EDGES TO PREVENT CROSS-CONTAMINATION. SEE SPECIFICATION SECTION 02 61 00 16- HANDLING, TRANSPORTATION, AND OFF-SITE DISPOSAL OF EXCAVATED MATERIALS FOR ADDITIONAL INFORMATION.

14. FOR EXCAVATION BELOW THE GROUNDWATER TABLE, THE EXCAVATION SHALL BE DEWATERED PER SPECIFICATION SECTION 02 23.19-DEWATERING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT "WET SOILS" (I.E. SOILS THAT WOULD FAIL A PAINT FILTER TEST) ARE NOT LOADED FOR TRANSPORT OFF-SITE IF SOILS ARE STILL "WET" FOLLOWING DEWATERING. THE CONTRACTOR SHALL TEST REMAINING WATER F WATER

CONCENTRATIONS ARE <0.5 UG/L, THE CONTRACTOR SHALL MIX IN A DRYING AGENT APPROVED BY THE ENGINEER, AT NO MORE THAN 20% OF THE "WET SOILS" VOLUME. IF WATER CONCENTRATION ARE >0.5 UG/L, THE CONTRACTOR SHALL PERFORM ADDITIONAL DEWATERING OF THE "WET SOILS" UNTIL THEY WOULD PASS A PAINT FILTER TEST BEFORE ADDING DRYING AGENT. THE CONTRACTOR SHALL TREAT ADDITIONAL DEWATERING EFFLUENT IN THE DEWATERING EFFLUENT TREATMENT SYSTEM FOR DECONTAMINATION.

15. SOILS FROM THE ADJOINING PARCEL B THAT CONTAIN PCBs SHALL BE STORED IN TEMPORARY WASTE STORAGE AREAS ON PARCEL A PRIOR TO SHIPPING FOR OFF-SITE DISPOSAL.

1000 JOURNAL OF CLIMATE

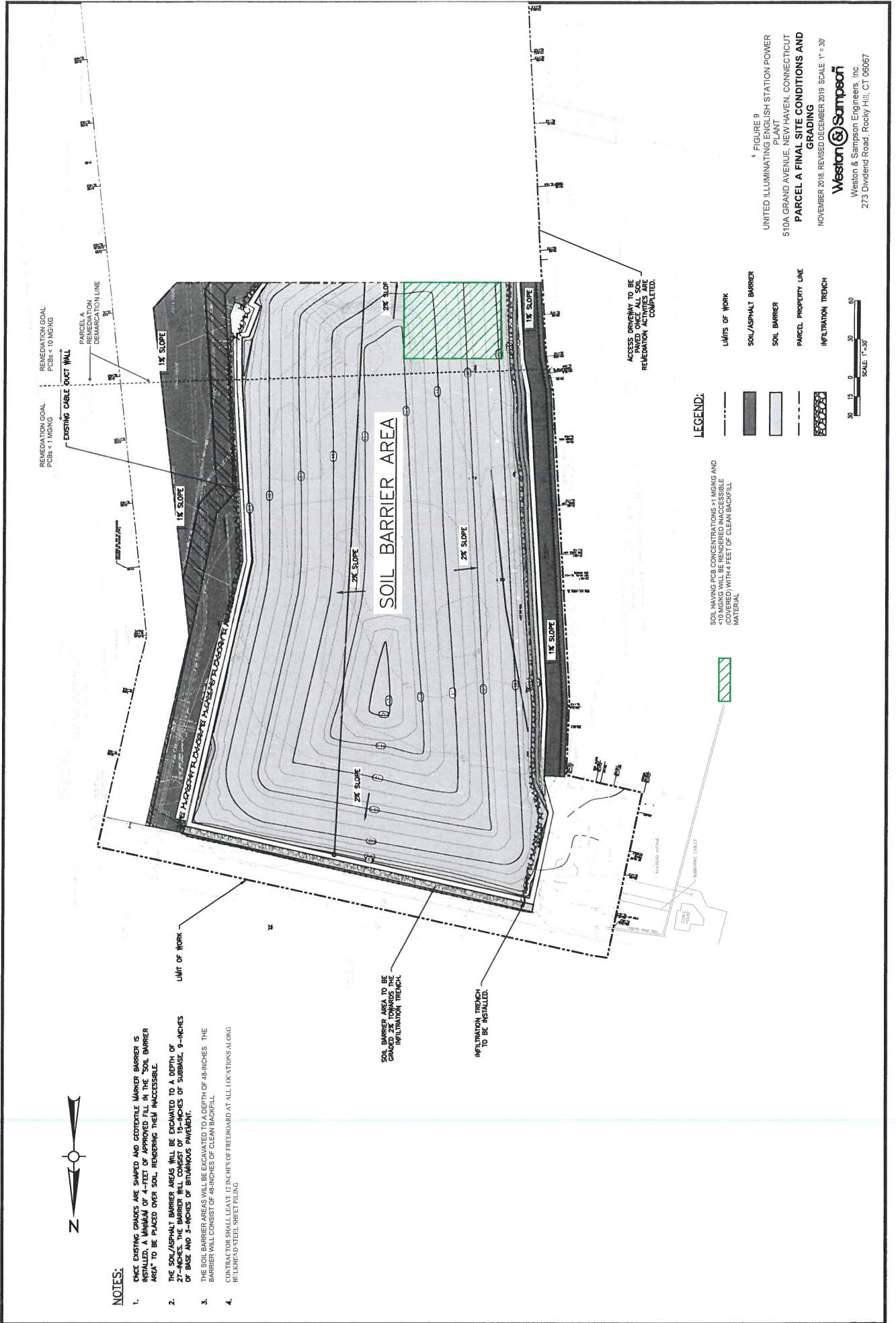


FIGURE 9
UNITED ILLUMINATING ENGINEERING STATION POWER
PLANT
510A GRAND AVENUE, NEW HAVEN, CONNECTICUT
**PARCEL A FINAL SITE CONDITIONS AND
GRADING**
NOVEMBER 2018 REVISED DECEMBER 2019 SCALE: 1"=30'

Weston & Sampson
Weston & Sampson Engineers, Inc.
273 Dividend Road, Rocky Hill, CT 06067