

**FINDING OF SUITABILITY FOR EARLY TRANSFER  
(FOSET)**

**STRATFORD ARMY ENGINE PLANT  
STRATFORD, CONNECTICUT**

**September 2008**

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**1. PURPOSE**

The purpose of this Finding of Suitability for Early Transfer (FOSET) is to document the environmental suitability of Stratford Army Engine Plant (SAEP), Stratford, Connecticut for early transfer to a Purchaser (who will be identified through a public auction process) consistent with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 120(h)(3)(C) (42 U.S.C. § 9620(h)(3)(C)), and Department of Defense (DOD) and Army policy. In addition, the FOSET identifies use restrictions necessary to protect human health and the environment after the early transfer.

Under CERCLA, Section 120(h)(3), the United States is required to provide a covenant in the deed conveying the property warranting that all remedial action necessary to protect human health and the environment has been taken before the date of transfer. For a federal facility that is not listed on the United States Environmental Protection Agency (USEPA) National Priorities List (NPL), CERCLA Section 120(h)(3)(C) allows the Governor of the State in which the property is located to defer the CERCLA covenant requirement. These types of transfers under CERCLA Section 120(h)(3)(C) are typically called "Early Transfers," in which the United States will execute and deliver the warranty after transfer of the property when all the response actions necessary to protect human health and the environment have been taken. Under CERCLA Section 120(h)(3)(B), all remedial action has been taken if the construction and installation of an approved remedial design has been completed, and the remedy has been demonstrated to be operating properly and successfully. All response actions must comply with all applicable federal and state standards. The period between the transfer of title and the making of this final warranty is known as the "deferral period."

The Governor of the State in which the property is located, may defer the CERCLA warranty requirement if she determines that the property is suitable for transfer on the basis of the following findings:

- The property is suitable for transfer for the use intended by the transferee, and the intended use is consistent with protection of human health and the environment;
- The deed or other agreements proposed to govern the transfer between the United States and the recipient of the property contains the assurances set forth in CERCLA Section 120(h)(3)(C)(ii), including: (a) the protection of human health and the environment; (b) no disruption of any pending or ongoing response actions or corrective actions, or oversight activities; (c) provision for schedules for

- investigation and completion of response actions; and (d) the use covenants/restrictions, as specified in the attached CERCLA Notice, Assurances, Warranty, and Access Provisions and other Deed Provisions (Attachment 6) and the attached Environmental Protection Provisions (EPPs) (Attachment 7) necessary to protect human health and/or the environment after the early transfer, and to prevent interference with any existing or planned environmental restoration activities;
- The federal agency requesting the deferral has provided notice, by publication in a newspaper of general circulation in the vicinity of the property, of the proposed transfer and of the opportunity for the public to submit, within a period of no less than 30 days after the date of the notice, written comments on the suitability of the property for transfer;
  - The deferral and transfer of the property will not substantially delay any necessary response actions at the property.

In addition, DOD and United States Department of Army (Army) policy requires that the Military Department proposing to transfer property prepare a Finding of Suitability for Early Transfer (FOSET). This FOSET will be submitted as part of the Covenant Deferral Request, in which the Army will seek from the Governor of the State of Connecticut approval of the Early Transfer.

## **2. PROPERTY DESCRIPTION AND HISTORY**

SAEP ("Property") is located in Stratford, Connecticut, on the Stratford Point peninsula adjacent to the Housatonic River in the southeast corner of Fairfield County. A site map of the Property is provided at Attachment 1. SAEP was formerly a government-owned, contractor-operated facility. The U.S. Army currently owns the land and the buildings and has responsibility for the jurisdiction, control, and accountability of SAEP. SAEP consists of approximately 78 acres of improved land with 52 buildings, paved roadways, parking lots and grounds.

SAEP has a long industrial history and was used to develop, test, and manufacture aircraft and engines, and other aerospace products, for 65 years. From 1929 until 1948 the plant was used to manufacture aircraft. The earliest buildings were constructed in 1929 for the Sikorsky Aircraft Corporation. The plant was expanded during World War II to accommodate mass production. During this time the shoreline was extended to provide land area for new buildings. The plant was idle from 1948 until 1951. From 1952 until it closed in 1997 the plant was used to produce reciprocating aircraft engines, nose cones for intercontinental ballistic missile re-entry vehicles, and turbine engines for both commercial and military applications.

A brief history of the Property is as follows:

1929 to 1939: Sikorsky Aero Engineering Corporation developed and manufactured seaplanes at the Stratford plant.

1939 to 1948: Chance Vought Aircraft located its operations at the Stratford plant in 1939, and the company became known as Vought-Sikorsky Aircraft Division. Sikorsky developed the helicopter and left the plant in 1943 because of overcrowding. Chance Vought developed the "Corsair" for the U.S. Navy, and mass produced Corsairs during World War II. Chance Vought vacated the Stratford plant in 1948.

1948 to 1951: The Stratford plant was idle.

1951 to 1976: The U.S. Air Force procured the Stratford plant in 1951 and named it Air Force Plant No. 43. The Avco Corporation (AVCO) was contracted by the Air Force to operate the plant. AVCO manufactured radial engines for aircraft in the 1950s, and developed and manufactured turbine engines, primarily for aircraft, in the 1960s and 1970s.

1976 to Present: The plant was transferred from the U.S. Air Force to the U.S. Army in 1976. At that time, the plant was re-named the Stratford Army Engine Plant, although it continued under AVCO operations. AVCO was contracted by the Army to develop the AGT-1500 engine to power the Abrams tank. AVCO also developed and manufactured marine and industrial engines. AVCO merged with Textron in December 1985, and subsequently formed the Textron Lycoming Stratford Division. The contract for operation of SAEP was transferred from Textron Lycoming to Allied Signal in 1994. Allied Signal continued to develop, manufacture and test turbine engines at SAEP for both military and commercial aircraft and land vehicles until 1997. Since the cessation of Allied Signal operations in 1997, the focus of activities at SAEP has been completion of an environmental assessment of the Site and evaluating potential Site re-development.

### **3. INTENDED FUTURE USE**

The purchaser for the SAEP will be identified through a public auction process. Consistent with past uses of the SAEP and the Economic Development zoning overlay, the primary intended reuse of the property is commercial and industrial reuse.

### **4. ENVIRONMENTAL DOCUMENTATION**

A determination of the environmental condition of the Property has been made based upon an Environmental Baseline Survey (1996), as updated in March 2002. A draft Remedial Investigation was sent to CTDEP September 2004 and updated based on interim comments through 2005. A draft Feasibility Study and Proposed Plan were submitted to Connecticut Department of Environmental Protection (CTDEP) in August 2005. The draft Feasibility Study has not been finalized.

The information that follows is a result of a complete search of SAEP files during the development of these environmental surveys. A complete list of documents providing information on environmental conditions of the Property is attached (Attachment 2). The Administrative Record containing documents relating to environmental investigation and

remediation will be provided to the Purchaser after transfer of the property.

## 5. ENVIRONMENTAL CONDITION OF PROPERTY

A summary of the ECP categories are provided in Table 1 - Description of Property (Attachment 3). ECP categories apply to CERCLA hazardous substances and petroleum product disposal or release.

### 5.1 Storage, Release or Disposal of Hazardous Substances

As a result of historical activities on the property, hazardous substances were stored for one year or more, released, or disposed on the property in excess of the reportable quantities listed in Title 40, Code of Federal Regulations (CFR), Parts 373 and 302.4. All environmental soil and groundwater remediation activities on the property have not yet been completed. Previous remedial actions included remediation and construction of the Causeway cover system. The cover system was completed in 2001 to prevent direct contact with soil and erosion of the Causeway surface. A draft Remedial Investigation was submitted to CTDEP in September 2004. A draft Feasibility Study was prepared in 2005 to evaluate the remedial alternatives in response to the unacceptable risks associated with soil and indoor air. A summary of Remedial Investigation results exceeding comparison criteria for the property is provided below. A summary of the environmental remediation sites is provided in Table 2 – Notification of Hazardous Substance Storage, Release, or Disposal (Attachment 4).

#### 5.1.1 Soil

- Soil contaminant concentrations were compared to both the Industrial/Commercial (I/C) Direct Exposure Criteria (DEC) and the GB (non-potable) groundwater Pollutant Mobility Criteria (PMC). Contaminant concentrations exceeding these criteria have been detected at depths of up to seven feet below ground surface (bgs). Areas where contaminants exceed these criteria include the Hazardous Waste and Waste Oil Area, the Jet Fuel Tank Farm, the former Building 2 Chromium Plating Facility, the manufacturing areas of Building 2, the south parking lot and other miscellaneous areas.
  - **Hazardous Waste and Waste Oil Area.** The Hazardous Waste and Waste Oil Area consists of waste storage areas in and around Buildings 13, 15, and 74—the former Oil House Tank Farm Building. Concentrations of contaminants above RSR criteria were detected within an area encompassed by Buildings 74, 64-2, 13, and 15. Contaminants exceeding RSR criteria include cVOCs, BTEX, PAHs, other SVOCs, inorganics, PCBs, and TPH. Free phase hydrocarbons containing PCBs are present in this area adjacent to Building 38.
  - **Jet Fuel Tank Farm.** Jet fuel, diesel fuel, gasoline, and cleaning agents were stored in USTs at the former Jet Fuel Tank Farm adjacent to Building 34. Leaks from the tank farm USTs and piping resulted in releases of fuel and solvents to soil adjacent to Building 34.

- Contaminated soils were excavated when the tank farm was replaced with ASTs in 1989. Soil samples taken following excavation of contaminated soil indicates residual fuel and chlorinated solvent-related contamination. Concentrations of arsenic, benzene, and TPH in soil exceed RSR criteria. Concentrations of vinyl chloride in groundwater exceed RSR criteria.
- **Former Building 2 Chromium Plating Facility.** The former Building 2 Chromium Plating Facility was located in the northeastern corner of Building 2 since 1951. The concentrations of total chromium were detected at concentrations up to 25.5 mg/L, versus the CTDEP GB PMC of 0.5 mg/L. The higher chromium concentrations were detected in the northern corner of the former Building 2 Chromium Plating Facility.
  - **Building 2 Manufacturing.** The Building 2 manufacturing area contained degreasers, heat treatment, dip tanks, press pits, metal working machines and paint spray booths covering an area of about 18.8 acres. Concentrations of TPH, carbon tetrachloride, dichloromethane, TCE, PAHs, arsenic, vanadium, and cadmium in soil exceed RSR criteria. Concentrations of cVOCs in groundwater exceed RSR criteria.
  - **South Parking Lot.** The South Parking Lot was expanded and re-graded with fill, including soil excavated during construction of the Building 65 foundation and storage tank removal at the former Jet Fuel Tank Farm (after aeration to remediate soil). Concentrations of 1,1,2,2-TCA, PAHs, SVOCs, and cadmium exceed RSR criteria for samples from borings completed in the final placement location of this soil.
- Comparing contaminants to the GB PMC indicates the majority of the volatile organic compounds (VOC) exceedances, including tetrachloroethene, toluene, trichloroethene, vinyl chloride, xylenes, and ethylbenzene, are within 200 feet of the dike between Buildings 74, 13 and 64-2. Polycyclic aromatic hydrocarbons (PAHs), including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, carbazole, chrysene, dibenz(ah)anthracene, ideno(1,2,3-c,d)pyrene, and pyrene, above the GB PMC were found in the South Parking Lot located in the southeastern portion of the site, south of Building 6, and in samples within 200 feet of the western portion of the dike.
  - Cadmium and chromium were found to exceed the GB PMC near Building 2 and the South Parking Lot. The chromium exceedances are all associated with the former chromium plating room in Building 2. Cadmium was found in the south parking lot with a maximum detected concentration of 0.112 mg/L compared to the GB PMC of 0.05 mg/L. This sample was collected between 0 and 2 feet bgs at SB22A1-1 near Building 6A. Other exceedances of the GB PMC for cadmium are also from samples collected beneath the South Parking Lot.
  - Exceedances of the Industrial/Commercial Direct Exposure Criteria (I/C DEC) include lead, PAHs and PCBs. The majority of the soils above I/C DEC are co-located with detections above the GB PMC.

### 5.1.2 Soil Vapor

- Two VOCs (trichloroethylene (TCE) and tetrachloroethene (PCE)) were detected in soil vapor above the Industrial/Commercial Volatilization Criteria (I/C VC) of 0.26 ppm vapor for TCE and 1 ppm vapor for PCE. TCE was detected beneath Buildings 2, 3, 10 and 12 at levels above the I/C VC with the highest concentrations beneath Building 2. Detections above the I/C VC for PCE were less frequent.

### 5.1.3 Groundwater

- VOCs including PCE, TCE, trichloroethane (TCA), dichloroethene (DCE) and vinyl chloride were detected in groundwater above the I/C VC. TCE and DCE exceed the I/C VC across much of the site west of Sniffens Lane. PCE exceeds the I/C VC beneath Building 2 and 12 and the West Parking Lot. TCA exceeds the I/C VC in the central part of the site beneath Building 2.
- Metals and volatile organic compounds in groundwater under the Property exceed the surface water protection criteria defined in the RSR.

## 5.2. PETROLEUM AND PETROLEUM PRODUCTS

### 5.2.1. UNDERGROUND AND ABOVE-GROUND STORAGE TANKS (UST/AST)

Current UST/AST Sites - There are zero underground and two above-ground petroleum storage tanks (UST/AST) on the property. These two tanks of 1,000 and 100 gallon capacity store diesel fuel for the emergency generator in Building 68. There is no evidence of petroleum releases from these sites.

Former UST/AST Sites - There were 45 underground and 49 above-ground petroleum storage tanks (UST/AST) on the property that have been removed or closed in place. Petroleum product releases occurred at the following sites: Waste Oil Accumulation Tanks, Transfer System & Oil House Tank Farm (near Buildings 13, 15 and 74), CWTP Pump Station (near Building 63), Building 6, Building 72 Pumping Station, Jet Fuel Tank Farms (near Buildings 19 and 34), Building 9 Vehicle Repair Shop, and Building 52 Plasma Spray Facility. Remedial actions have not been completed at these areas. In 1989, the original tanks at the Jet Fuel Tank Farm were removed and approximately 2,000 cubic yards of fuel-contaminated soil was excavated. Soil samples taken following excavation of contaminated soil indicates residual fuel and chlorinated solvent-related contamination.

A summary of the UST/AST petroleum product activities is provided in Table 3 – Notification of Petroleum Products Storage, Release, or Disposal (Attachment 5).

### 5.2.2. NON-UST/AST STORAGE, RELEASE, OR DISPOSAL OF PETROLEUM PRODUCTS

There was non-UST/AST storage or release of petroleum products on the property in the Container Accumulation and Drum Staging Areas (near Buildings 19, 37, 74), the Satellite

Accumulation Areas (in or near Buildings 3, 3A, 4, 6, 6A, 7, 15, 16, 19,) and the Scrap Metal Yard (near Building 16), Building 16 Floor Drains, stormwater system outfalls. The petroleum products were used for the following types of activities: lubricants and cutting oils from machining operations and other industrial operations. In some of these storage and accumulation areas, some fuel-VOCs were found although it cannot be determined if they resulted from drum storage or previously removed USTs, fill, or other sources. Remedial actions were conducted at the Drum Storage Area north of Building 19. Approximately 120 cubic yards of soil were excavated and sent off-site for disposal. Remedial actions were not performed at the other Container Accumulation and Drum Staging Areas.

A summary of the non-UST/AST petroleum activities is provided in Table 3 – Notification of Petroleum Products Storage, Release, or Disposal (Attachment 5).

### **5.3. POLYCHLORINATED BIPHENYLS (PCB)**

The following PCB-containing equipment were located on the property: 17 large PCB transformers that were removed in 2006. At the time of the removal of the PCB transformers the equipment was operational, properly labeled in accordance with federal and state regulations, and was determined not to be leaking. There is no evidence of releases from these PCB-containing transformers. As documented in the RI and in subsequent investigation, PCB has also been detected in soil exceeding RSR criteria (see Section 5.1.1) and on adjacent property (see Section 5.10). There is no evidence that they are associated with the identified PCB-containing equipment.

### **5.4. ASBESTOS**

There is asbestos-containing material (ACM) in all of the buildings at SAEP except Buildings 48, 64-1, 64-2, and 65. The ACM includes: roofing materials, flashing, firedoors, window caulking, electrical wire insulation, insulation (on steam pipes, condensate return lines and water pipes), floor tiles, and transite paneling. See Final Asbestos Survey Report, April 1998 for additional information. The ACM does not currently pose a threat to human health or the environment because all friable asbestos that posed an unacceptable risk to human health has been removed or encapsulated.

### **5.5. LEAD-BASED PAINT (LBP)**

All of the buildings at SAEP are known or presumed to contain lead-based paint (LBP) with the exception of Building 65 (constructed in 1991). The property was not used for residential purposes. The deed will include a lead-based paint warning and covenant (Attachment 7).

### **5.6. RADIOLOGICAL MATERIALS**

The following buildings were used for radiological activities: 2, 3, 4, 6, 6A, 13, 16, 18, and 19. Most of these buildings used low-level sealed sources for research, development, and testing. Thorium alloys were machined in Building 2 for the production of turbine engines. All



of the machine turnings of the alloys were recovered and recycled. There is no evidence of any release of radiological materials at these buildings. A radiological field survey was conducted at those sites having radiological activities and the survey concluded these areas are suitable for unrestricted use. In a 14 July 1999 letter the Nuclear Regulatory Commission indicated that the all portions of the facility (except the causeway) were released for unrestricted use. The radiation contaminated soils were remediated from the causeway in March 2000 and a permeable cover system was installed on the causeway in 2002 and has no restrictions related to radiological contamination.

#### **5.7. RADON**

There was no radon surveys conducted on the property.

#### **5.8. MUNITIONS AND EXPLOSIVES OF CONCERN (MEC)**

Based on a review of existing records and available information, there is no evidence that Munitions and Explosives of Concern (MEC) are present on the property. The property was exclusively used as an industrial and administrative area. There is no record of MEC being discovered on the property. There is no record that munitions-related activities occurred at the Property. The term "MEC" means military munitions that may pose unique explosives safety risks, including: (A) unexploded ordnance (UXO), as defined in 10 U.S.C. §101(e)(5); (B) discarded military munitions (DMM), as defined in 10 U.S.C. §2710(e)(2); or (C) munitions constituents (e.g., TNT, RDX), as defined in 10 U.S.C. §2710(e)(3), present in high enough concentrations to pose an explosive hazard.

#### **5.9. OTHER PROPERTY CONDITIONS**

There are no other hazardous conditions on the property that present an unacceptable risk to human health and the environment

#### **5.10. ADJACENT PROPERTY CONDITIONS**

There is a PCE plume from an upgradient source that has migrated under the West Parking Lot. In addition, an ecological risk study indicates that a shift in the benthic community exists in the Tidal Flats but no specific analyte responsible for the observed effects was identified. These areas are not used by humans. While there is evidence to support the theory that activities at SAEP have contributed to PCB and other contamination in the Tidal Flats, there are potentially many non-federal sources up-river of SAEP that are also believed to have released contamination, including PCBs, that have migrated to the Tidal Flats. While the Tidal Flats are not federal property, and hence not subject to the Early Transfer provisions of CERCLA Section 120(h), the Army is responsible for addressing any releases of hazardous substances to the Tidal Flats and the Outfall 008 area that were generated by its activities at SAEP and that pose an unacceptable risk to human health or the environment. Sediment in the tidal inlet leading from, both abutting and extending beyond SAEP property, is polluted with volatile organic compounds, semi-volatile organic compounds, PCBs, and metals in excess of reference location

concentrations and these pollutants are likely associated with the discharge from the SAEP treatment plant.

## **6. ENVIRONMENTAL PROTECTION PROVISIONS**

In consideration of the intended use of the Property as commercial and industrial reuse, certain terms and conditions are required for the proposed transfer, including the prohibition on residential use. These terms and conditions are set forth in Attachment 6 – CERCLA Deed Provisions and in Attachment 7 –Environmental Protection Provisions and will be incorporated in the deed.

## **7. ENVIRONMENTAL REMEDIATION AGREEMENTS**

In 1992, AVCO Corporation certified the closure of the chemical waste treatment lagoons in accordance with the closure plan of September 1987, as amended. Long-term semi-annual monitoring is required until at least 2019. All remediation activities on the property, required by the approved closure plan, are completed or in place and operating properly and successfully (See Section 5.1 Environmental Remediation Sites). The deed will include a provision reserving the Army's right to conduct remediation activities (Attachment 6).

## **8. RESPONSE ACTION ASSURANCES**

The Army's environmental investigation and remediation of hazardous substances at the Property have been conducted in accordance with the Department of Army Installation Restoration Program requirements, as part of the Defense Environmental Restoration Program, 10 U.S.C. Sections 2701-2708. The Property is being disposed of consistent with CERCLA Section 120 and Executive Order 12580. The ongoing environmental investigation and remediation of hazardous substances on the Property after transfer will be accomplished by the Purchaser under the provisions of the purchase agreement and deed entered into between the United States and the Purchaser for the transfer and cleanup of the property. In executing the purchase agreement and recording the deed, the purchaser will assume responsibility for achieving regulatory closure of the cleanup sites located on the Property, in accordance with all applicable federal and state laws and regulations, to include, but not limited to, the State's corrective action regulations (Regulations of Connecticut State Agencies (RCSA) 22a-449(c)-105(h)), and the Remediation Standard Regulations (RCSA 22a-133k). After the Early Transfer, the Stewardship Permit will be transferred to the Purchaser, who will then become the permittee. In addition, as a condition of sale, the Purchaser sign the Connecticut Transfer of Establishment Form III (Form III) as the certifying party and will be required to investigate and remediate SAEP in accordance with applicable Connecticut remediation standards for the protection of human health and the environment. While the Tidal Flats are not federal property, the Army is responsible for addressing any releases of hazardous substances to the Tidal Flats and the Outfall 008 area that were generated by its activities at SAEP and that pose an unacceptable risk to human health or the environment.

As required under CERCLA Section 120(h)(3)(C)(ii), the following response action assurances will be provided upon selection of a Purchaser (see Attachment 6):

- Provide for any necessary covenants/restrictions on the use of the Property to ensure the protection of human health and the environment;
- Provide that there will be covenants/restrictions on use as necessary to ensure that required investigations, response actions, and oversight activities will not be disrupted;
- Provide that all necessary response actions will be taken, and identify the schedules for investigation and completion of all necessary response actions, as approved by the appropriate regulatory agency; and
- Provide that the federal agency responsible for the Property subject to transfer will, if necessary, submit a budget request to the Director of the Office of Management and Budget that adequately addresses schedules for the investigation and completion of all necessary response actions, subject to congressional authorizations and appropriations.

### **8.1 LAND USE CONTROLS**

Prior to the completion of necessary environmental restoration, the conveyance deed or other agreement will require the Grantee to adhere to the land use controls identified in Attachment 7. Land use restrictions, notifications, covenants, conditions and institutional controls will be implemented to ensure that the intended use of the property is consistent with the requirements of CERCLA Section 120 (h)(3)(C) for the protection of human health and the environment. These land use controls are necessary for any ongoing or planned environmental restoration activities to protect human health or the environment after the early transfer. These provisions shall ensure any required future remedial investigations, response actions, and oversight activities will not be interrupted. The land use controls will remain in effect until terminated, removed, or modified with CTDEP concurrence.

### **8.2 SCHEDULE FOR REMEDIAL INVESTIGATIONS AND RESPONSE ACTIONS**

The conveyance deed will state that all necessary response actions will be taken at the Property on a schedule in coordination with the CTDEP. The schedule will be in compliance with the CERCLA 120(h)(3)(ii)(III) requirement to avoid any substantial delay of remedial actions at the Property and will be determined in the Permit. The schedule will be changed only as circumstances warrant, as provided by the purchase agreement, cleanup agreement and the requirements of CTDEP. Changes to the schedule may occur as a result of identification of additional sampling requirements, discovery of additional contamination, unanticipated conditions during field work efforts and additional review and revisions of documentation such as work plans, reports and designs.

### **8.3 BUDGET REQUESTS**

Response actions required on the Property will be funded by the Purchaser, as provided in the purchase agreement and deed between the United States and the Purchaser. If the Purchaser is found to be default of the cleanup agreement, the Army will perform all necessary response actions required by CERCLA. If the Army has to conduct response actions as a result of the Purchaser's default or early termination of the purchase agreement, the Army will make requests for funding to the Director of the Office of Management and Budget that adequately address all necessary response actions at the Property.

## **9. NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) COMPLIANCE**

The environmental impacts associated with the proposed transfer of the Property have been analyzed in accordance with the National Environmental Policy Act (NEPA). The results of this analysis were documented in the Environmental Impact Statement for Disposal & Reuse of the SAEP, April 1999. Any encumbrances or conditions identified in the NEPA analysis as necessary to protect human health or the environment will be included in the deed restrictions.

## **10. DEFERRED WARRANTY**

When all response actions necessary to protect human health and the environment with respect to any hazardous substances remaining on the Property at the time of transfer have been completed, the Army shall execute and deliver to the purchaser of the Property (or its successor) an appropriate document containing a warranty that all response actions have been taken.

## **11. REGULATORY/PUBLIC COORDINATION**

The CTDEP and the public were notified of the initiation of this FOSET. The 30-day public review period was from October 4, 2007, to November 3, 2007. Regulatory/public comments received during the 30-day public comment period were reviewed and incorporated, as appropriate. A copy of the regulatory/public comments and the Army Response will be included as Attachment 8– Regulatory/Public Comments and Attachment 9 – Responsiveness Summary.

## **12. FINDING OF SUITABILITY FOR EARLY TRANSFER**

Based on the above information, I conclude that all DOD requirements to reach a Finding of Suitability for Early Transfer of the Property to a Purchaser for industrial and commercial reuse have been met. These uses of the Property are consistent with the protection of human health and the environment, subject to inclusion of the covenants and notifications in this document and the agreement between the Purchaser and the CTDEP. In addition, the terms and conditions set forth in the EPP (Attachment 7) shall be included in the deed for the Property to further ensure the protection of human health and the environment. The CERCLA Deed Provisions (Attachment 6) includes the CERCLA §120(h)(3)(C) covenant and access provisions.

With the covenants, conditions, and restrictions in the CERCLA Deed Provisions and the EPP, the Property can be transferred in its present condition for its intended purpose(s) without

unacceptable risk to human health and the environment [CERCLA § 120(h)(3)(C)(i)(I)]. The deed for the Property will contain the following covenants and access clause:

- The covenant under CERCLA §120(h)(3)(A)(ii)(II) warranting that any additional remedial action under CERCLA found to be necessary after the grant of the deferred warranty with respect to such hazardous substances remaining on the Property at the time of transfer shall be conducted by the United States.
- The clause as required by CERCLA §120(h)(3)(A)(iii) granting the United States access to the Property in any case in which remedial action or corrective action is found to be necessary after the date of transfer.

As required under CERCLA § 120(h)(1) and DOD FOSET Guidance, a description of remedial action taken, if any, and notification of hazardous substance activities and petroleum product activities shall be provided in the deed. See Table 1 - Description of Property, Table 2 - Notification of Hazardous Substance Storage, Release, or Disposal, Table 3 - Notification of Petroleum Product Storage, Release, or Disposal.



Addison D. Davis, IV  
Deputy Assistant Secretary of the Army  
(Environment, Safety and Occupational Health)

2 OCT 08

Date

9 Attachments

Attachment 1 - Site Map

Attachment 2 - Administrative Record Document List

Attachment 3 - Table 1 - Description of Property

Attachment 4 - Table 2 - Notification of Hazardous Substance Storage, Release, or Disposal

Attachment 5 - Table 3 - Notification of Petroleum Product Storage, Release, or Disposal

Attachment 6 - CERCLA Notice, Covenant, and Access Provisions and Other Deed Provisions

Attachment 7 - Environmental Protection Provisions

Attachment 8 - Regulatory/Public Comments

Attachment 9 - Army Responses to Regulatory/Public Comments

**ATTACHMENT 2**

**ADMINISTRATIVE RECORD DOCUMENT LIST**

| <b>TITLE</b>  | <b>AUTHOR</b>                                | <b>DATE</b> |
|---|--|-------------|
| Draft Feasibility Study – SAEP  | US Army ACSIM – NCRFO                        | May-05      |
| Final Remedial Investigation Survey Report – SAEP (Vol. I to IV)  | US Army ACSIM – NCRFO                        | Sep-04      |
| NCRA Causeway Surface Design Phase I & II (Appendices I, II, VI to XI)  | Weston Solutions                             | Aug-03      |
| SAEP FOSL BRAC Determination of Availability  | US Army ISMA                                 | May-03      |
| NCRA Causeway Surface Design Phase I & II   | Weston Solutions                             | Apr-03      |
| Remedial Investigation (Vol. I & II) Text & Maps  | Harding ESE                                  | Jan-03      |
| Causeway: Basis of Design – Non-time Critical Removal Action 100% Phases I & II (Vol. I, II & III)                            | Harding ESE                                  | Aug-01      |
| Causeway & Dike – Final Decision Document Non-time Critical Removal Action  | Harding ESE                                  | Jan-01      |
| EE/CA OU2 Source Area   | Harding-Lawson Associates/ Foster Wheeler    | Nov-00      |
| Pilot-Scale Treatability Study Report for Chromium & VOC Groundwater OU2 EE/CA – Final  | Harding-Lawson Associates/ Foster Wheeler    | Oct-00      |
| Causeway & Dike – Final Engineering Evaluation & Cost Analysis  | Harding-Lawson Associates/ Foster Wheeler    | Sep-00      |
| Remedial Investigation (Vol. 1 to 9)  | URS Grenier/Woodward-Clyde                   | Sep-00      |
| Causeway: ALAEA Remedial Action Plan for SAEP Causeway & Radiation Final Status Survey  | Honeywell                                    | Jul-00      |
| Groundwater OU2 NCRA Pre-design Investigation Report – Final (Vol. I & II)  | Harding-Lawson Associates/ Foster Wheeler    | May-00      |
| Causeway & Dike – Pre-design Investigation Report NCRA Final with Addendum  | Harding-Lawson Associates/ Foster Wheeler    | Apr-00      |
| Geotech Investigation Summary Causeway NCRA   | Harding-Lawson Associates                    | Feb-00      |
| Indoor Air Monitoring Plan Occupied Building Areas  | Harding-Lawson Associates/ Foster Wheeler    | Feb-00      |
| Lead-Based Paint Guidelines for Disposal  | DOD/EPA                                      | Dec-99      |
| Base Closure & Realignment Cleanup Plan   | Harding-Lawson                               | Nov-99      |
| Remedial Investigation Human Health Problem Formulation Technical Memorandum  | URS Grenier/Woodward-Clyde                   | Nov-99      |
| Tenants (SAEP) Misc. Correspondence   | Department of the Army                       | Oct-99      |
| Community Relations Plan  | Harding-Lawson Associates                    | Sep-99      |
| Groundwater (Cr & VOC) Operable Unit 2 EE/CA Work Plan – Non-time Critical Removal Action                                     | Harding-Lawson Associates/ Foster Wheeler    | Aug-99      |
| Sikorsky Memorial Airport Environmental Impact Statement & Evaluation - Proposed Improvements to Runway 6-24 – Final – Vol. I | US DOT FAA/CT DOT Bureau of Aviation & Ports | May-99      |
| Environmental Impact Statement for Disposal & Reuse of the SAEP   | Corps of Engineers                           | Apr-99      |
| Radiation Survey – Completion of Final Status   | WE Manage, Inc.                              | Dec-98      |
| Status of Radiation Surveys (Selected Areas)  | WE Manage                                    | Dec-98      |

| TITLE  | AUTHOR                            | DATE   |
|--|-----------------------------------|--------|
| Remedial Investigation Work Plan (Vol. I, II & III)                                | Woodward-Clyde                    | Oct-98 |
| Site Safety & Health Plan – Remedial Investigation                                 | Woodward-Clyde                    | Oct-98 |
| Groundwater Assessment Monitoring Program 15 <sup>th</sup> Year First Event Report | Sound Environmental Solutions     | May-98 |
| Asbestos Survey Final Report (Vol. I & II)   | Malcolm-Pernie                    | Apr-98 |
| Defense Environmental Restoration Program  | Department of Defense             | Mar-98 |
| FOST/FOSL Guidance   | Army Material Command BRAC Office | Feb-98 |
| Asbestos Survey Report/Appendix A Analytical Data                                  | Malcolm Pernie                    | Dec-97 |
| DOD Base Reuse Implementation Manual   | Department of Defense             | Dec-97 |
| Facility Demolition & Environmental Remediation Cost Estimate                      | ABB Environmental Services, Inc.  | Oct-97 |
| Environmental Baseline Survey Report - Final                                       | ABB Environmental Services, Inc.  | Dec-96 |
| Remedial Investigation Report Phase II (Vol. I & II)                               | Woodward-Clyde                    | Mar-96 |
| Environmental Liability Cost Analysis  | Woodward-Clyde                    | Nov-94 |
| Remedial Investigation Report (Vol. I & II)  | Woodward-Clyde                    | Jun-93 |
| Surface Impoundment Closure  | VFL Technology Corp.              | Aug-92 |
| National Oil & Hazardous Substances Pollution Contingency Plan                     | US EPA                            | Jan-92 |
| Remedial Investigation Work Plan   | Woodward-Clyde                    | Jan-92 |
| Preliminary Assessment Screening – Final   | Woodward-Clyde                    | Dec-91 |
| Lagoon Closure Phase II  | VFL Technology Corp.              | Mar-90 |
| Historical Properties Report – SAEP  | Building Technology, Inc.         | Jul-84 |
| Historical Commission Archeological Overview                                       | Envirosphere Company              | Feb-84 |

**ATTACHMENT 3**

**TABLE 1 - DESCRIPTION OF PROPERTY**

| <b>Building Number and Property Description</b> | <b>EBS Parcel Designation</b> | <b>Condition Category</b> | <b>Response Actions</b>   |
|---|-------------------------------|---------------------------|---|
| North Parking Lot                               | 1-HR(P)<br>(5.34 acres)       | 6                         | The RI data indicate arsenic soil concentrations at two locations that exceed the Connecticut Department of Environmental Protection (CTDEP) Industrial/Commercial Direct Exposure Criteria (I/C DEC). Both of the exceedances are below four feet and covered with an asphalt paving. This cover prevents direct contact and requires no further action other than a land use restriction regarding penetration and excavation in the area. In addition, silver was detected in groundwater at one monitoring well location at a concentration exceeding the CTDEP Surface Water Protection Criteria (SWPC). |
| Tidal Flats                                     | 2-HR/PR<br>(43.52 acres)      | 6                         | The Tidal Flats are not federal property. They are, however, areas that have potentially been impacted by activities at SAEP, and, therefore, areas that may require a response action by the Army. An ecological risk study indicates that a potential risk primarily from PCBs exists in the Tidal Flats. These areas are not used by humans. Sources of PCBs are highly suspected to be from multiple locations, to include locations upstream of SAEP. Remedial action to address this site are still undefined, but should not interfere with the Early Transfer of SAEP.                                |
| Northern Portion of Building 2                  | 3-HR/PR/A/L<br>(4.17 acres)   | 6                         | The RI indicates groundwater beneath this parcel contains arsenic, lead, copper, and VOC concentrations exceeding CTDEP SWPC. VOC concentrations in groundwater beneath the parcel exceed the CTDEP I/C VC. There are soil gas VOC concentrations exceeding CTDEP criteria beneath this parcel.   |



| Building Number and Property Description  | EBS Parcel Designation            | Condition Category | Response Actions   |
|---|-----------------------------------|--------------------|--|
| Building 65   | 4-HR (P)<br>(1.14 acres)          | 6                  | No subsurface explorations have been conducted beneath this parcel. However, adjacent parcels have groundwater VOC concentrations exceeding CTDEP SWPC and I/C VC. Indoor air quality in this area indicates no VOC concentration exceedances of CTDEP I/C IATC.   |
| Building 36 (pumphouse)<br>Building 73 (storage shed)   | 5-A/L<br>(0.58 acres)             | 6                  | The RI indicates groundwater beneath this parcel contains arsenic, copper, lead, mercury, thallium, and zinc concentrations exceeding CTDEP SWPC.  |
| Building 58   | 6-HR/PR/HS/PS/A/L<br>(0.48 acres) | 6                  | The RI indicates groundwater beneath this parcel contains arsenic, cadmium, copper, lead, mercury, zinc, 1,1-DCE, and phenanthrene concentrations exceeding CTDEP SWPC.  |
| Western Portion of Building 2   | 7-HR/A/L<br>(1.67 acres)          | 6                  | The RI indicates groundwater beneath this parcel contains arsenic, copper, lead, zinc, and VOC concentrations exceeding CTDEP SWPC.  |
| Central Portion of Building 2   | 8-S/HR/PR(P)/A/L<br>(11.35 acres) | 6                  | The RI indicates VOC concentrations in groundwater exceeding CTDEP SWPC and I/C VC. Soil gas exceedances require indoor air monitoring in this area. This area has relatively high concentrations of VOCs in groundwater and will require remedial action. Interim use would require mitigation air handling measures. |
| Building 13<br>Building 15<br>Building 37 (pumphouse)<br>Building 38 (pumphouse)<br>Building 44<br>Building 48<br>Building 68 (Emergency Generator)<br>Building 74<br>Building 81 | 9-HR/PR/HS/PS/A/L<br>(3.32 acres) | 6                  | The RI indicates several locations in this parcel that have soil concentrations exceeding the CTDEP GB PMC for VOCs, and soil concentrations exceeding the CTDEP I/C DEC for SVOCs. Groundwater beneath this parcel contains arsenic, copper, lead, zinc, phenanthrene, and VOC concentrations exceeding CTDEP SWPC.   |

| Building Number and Property Description  | EBS Parcel Designation             | Condition Category | Response Actions  |
|---|------------------------------------|--------------------|---|
| West Parking Lot  | 10-HR<br>(3.56 acres)              | 6                  | The RI indicates groundwater contamination is not from a SAEP source. Suspected source is located on airport property. No further action is anticipated for this parcel   |
| Building 1  | 11-HR/PR/A/L<br>(1.86 acres)       | 6                  | Groundwater beneath this parcel contains arsenic and silver concentrations exceeding CTDEP SWPC. Arsenic is believed to be a naturally occurring component of the glacially derived soils. Indoor air monitoring results from Building 1 indicate VOC concentrations less than CTDEP I/C IATCs.   |
| Building 2<br>Building 3<br>Building 63<br>Building 70<br>Building 77 <sup>1</sup><br><sup>1</sup> Building 77 was a portable building removed during plant closure | 12-HR/PR/HS/PS/A/L<br>(4.35 acres) | 6                  | The RI indicates VOC concentrations in groundwater exceeding CTDEP SWPC and I/C VC. Soil gas exceedances require indoor air monitoring in this area. This area has relatively high concentrations of VOCs in groundwater and will require remedial action. Interim use would require mitigation air handling measures. In addition, concentrations of hexavalent chromium in groundwater and soils exceed CTDEP RSR criteria. |
| Building 7<br>Building 7A<br>Building 8<br>Building 9<br>Building 10  | 13-HR/PR/HS/PS/A/L<br>(3.28 acres) | 6                  | The RI indicates VOC concentrations in groundwater exceeding CTDEP SWPC and I/C VC. Concentrations of VOCs in soil gas and indoor air exceed CTDEP RSR criteria. Interim use would require mitigation air handling measures.  |
| Building 64-1<br>Building 64-2  | 14-PS/HR/PR/A/L<br>(0.87 acres)    | 6                  | Soil along the dike within this parcel contains VOC concentrations that exceed CTDEP GB PMC. VOC concentrations in groundwater exceeding CTDEP SWPC and I/C VC.   |
| Parking Lot South of Building 2   | 15-HR(P)/PR(P)<br>(0.82 acres)     | 6                  | No subsurface explorations have been conducted beneath this parcel. However, adjacent parcels have groundwater VOC and arsenic concentrations exceeding CTDEP SWPC. No further action is anticipated for this parcel.   |

| Building Number and Property Description                        | EBS Parcel Designation             | Condition Category | Response Actions   |
|---|------------------------------------|--------------------|--|
| Building 3<br>Building 67                                       | 16-HS/HR(P)/A/L<br>(3.39 acres)    | 6                  | The RI indicates VOC concentrations in groundwater exceeding CTDEP SWPC and I/C VC. Interim use may require mitigation air handling measures. Concentrations of arsenic and nickel in soil exceed the CTDEP I/C DEC.   |
| Building 16<br>Building 33<br>Building 40                       | 17-HS/PS/HR/PR/A/L<br>(3.27 acres) | 6                  | Groundwater beneath this parcel contains arsenic, cadmium, copper, lead, mercury, silver, zinc, and phenanthrene concentrations exceeding CTDEP SWPC. VOC concentrations in groundwater exceed CTDEP I/C VC. The RI indicates several locations in this parcel that have soil concentrations exceeding the CTDEP GB PMC for benzene, and soil concentrations exceeding the CTDEP I/C DEC for arsenic and lead. |
| Building 59<br>Causeway   | 18-HR(P)/PR(P)/A<br>(2.74 acres)   | 5                  | Radiation survey and removal of radiation contaminated soils completed March 2000. Construction of permeable cover system was completed in 2001.   |
| South Parking Lot   | 19-HR<br>(10.37 acres)             | 6                  | The RI indicates three locations in this parcel that have soil concentrations exceeding the CTDEP GB PMC for cadmium and/or PCBs. Asphalt pavement cover serves to prevent direct contact risk and limit infiltration as an interim stabilization, but parcel must be evaluated to develop a remedy that conforms to the RSRs.   |
| Building 18 (CWTP)<br>Building 71<br>Building 75<br>Building 76 | 20-HS/PS/A/L (0.93 acres)          | 6                  | The RI indicates two locations in this parcel that has soil concentrations exceeding the CTDEP GB PMC for PCBs. Asphalt pavement cover serves to prevent direct contact risk and limit infiltration as an interim stabilization, but parcel must be evaluated to develop a remedy that conforms to the remediation standard regulations.   |

| <b>Building Number and Property Description</b>  | <b>EBS Parcel Designation</b>   | <b>Condition Category</b> | <b>Response Actions</b>   |
|--|---------------------------------|---------------------------|---|
| RCRA Closure Lagoons   | 21-HS/HR<br>(3.35 acres)        | 4                         | Lagoons have been closed under RCRA and the closure plan., Groundwater monitoring indicates natural attenuation is occurring and semi-annual monitoring is required until at least 2019.  |
| South Parking Lot Western portion  | 22-PR<br>(2.76 acres)           | 5                         | Petroleum-contaminated soils placed in area and treated to meet CTDEP requirements.   |
| Building 72  | 23-PS/PR<br>(0.52 acres)        | 6                         | The RI indicates one location in this parcel that has soil concentrations exceeding the CTDEP I/C DEC and GB PMC for SVOCs. Asphalt pavement cover serves to prevent direct contact risk and limit infiltration as an interim stabilization, but parcel must be evaluated to develop a remedy that conforms to the remediation standard regulations.                      |
| Building 6   | 24-HS/PS/HR/A/L<br>(3.47 acres) | 6                         | The RI indicates one location in this parcel that has soil concentrations exceeding the CTDEP I/C DEC and GB PMC for inorganics, VOCs, and PCBs. Asphalt pavement cover serves to prevent direct contact risk and limit infiltration as an interim stabilization, but parcel must be evaluated to develop a remedy that conforms to the remediation standard regulations. |
| Building 53  | 25-HR(P)/A/L<br>(1.19 acres)    | 6                         | The RI indicates one groundwater sample location in this parcel that has arsenic concentrations exceeding the CTDEP SWPC. Arsenic is believed to be a naturally occurring component of the glacially derived soils.   |
| Building 69 <sup>1</sup><br>Building 79 <sup>1</sup><br>Building 82<br><sup>1</sup> Building 69 and Building 79 were portable buildings removed during plant closure | 26-HR(P)/L<br>(0.48 acres)      | 6                         | The RI indicates VOC concentrations in groundwater exceeding CTDEP I/C VC. Adjacent parcels have groundwater VOC concentrations exceeding CTDEP SWPC and I/C VC.  |

| Building Number and Property Description               | EBS Parcel Designation                    | Condition Category | Response Actions  |
|--|---|--------------------|---|
| Building 3A<br>Building 4<br>Building 5<br>Building 41 | 27-<br>HS/PS/HR/PR/A/L<br>(2.51 acres)    | 6                  | The RI indicates VOC concentrations in groundwater exceeding CTDEP SWPC and I/C VC. Interim use may require mitigation air handling measures. In addition, concentrations of cadmium and lead in groundwater exceed CTDEP SWPC.   |
| Building 19<br>Building 43                             | 28-HS/PS/HR/A/L<br>(1.67 acres)           | 6                  | The RI indicates VOC concentrations in groundwater exceeding CTDEP SWPC and I/C VC. Interim use may require mitigation air handling measures. Interim use may require mitigation air handling measures.   |
| Building 2 (Northeast corner)<br>Building 52           | 29-<br>PS/HR(P)/PR(P)/A/L<br>(0.32 acres) | 6                  | Groundwater beneath this parcel contains VOC concentrations exceeding CTDEP SWPC and I/C VC. The RI indicates benzo(a)pyrene concentrations in soil beneath this parcel exceed the CTDEP I/C DEC. Interim use may require mitigation air handling measures.   |
| Building 34  | 30-PS/HS/A/L<br>(0.24 acres)              | 6                  | Groundwater beneath this parcel contains VOC concentrations exceeding CTDEP SWPC and I/C VC. Interim use may require mitigation air handling measures.  |
| Area East of Building 19                               | 31-HS/PS/HR<br>(0.54 acres)               | 6                  | The RI indicates two locations in this parcel that have soil concentrations exceeding the CTDEP GB PMC for 1,1,2,2-tetrachloroethane. Groundwater beneath this parcel contains VOC concentrations exceeding CTDEP SWPC and I/C VC.  |
| Near Shore Intertidal Flats                            | 32-HR/PR<br>(3.73 acres)                  | 6                  | An ecological risk study indicates that a shift in the benthic community exists in the Tidal Flats. The tidal flats are not used by humans. Sources of PCBs are highly suspected to be from multiple locations, to include locations upstream of SAEP. Remedial action to address this site are still undefined, but should not interfere with the Early Transfer of SAEP |
| South of Building 9                                    | 33-PS<br>(0.2 acres)                      | 5                  | Former location of several USTs. All UST removed and soils were remediated in 1995 but residual soil contamination is present.  |

**Notes:**

|   |  |
|---|--|
| HS – Hazardous Substance Storage                | GB PMC – CTDEP Pollutant Mobility Criteria for a |
| HR - Hazardous Substance Release                | GB (industrial/commercial) aquifer               |
| PS – Petroleum Storage                          | I/C – Industrial/Commercial                      |
| PR – Petroleum Release                          | RCRA – Resource Conservation and Recovery Act    |
| A – Asbestos present                            | PCB – Polychlorinated Biphenyl                   |
| L – Lead-based Paint present                    | RI – Remedial Investigation                      |
| (P) – Probable                                  | SVOCs – Semi-volatile organic compounds          |
| CTDEP – Connecticut Department of Environmental | SWPC – CTDEP Surface Water Protection Criteria   |
| Protection                                      | VOC – Volatile Organic Compound                  |
| CWTP – Chemical waste treatment plant           | VC – Volatilization Criteria                     |
| DEC – Direct Exposure Criteria                  |  |

**Environmental Condition of Property Category:**

- 1 Areas where no storage, release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas)
- 2 Areas where only storage of hazardous substances or petroleum products has occurred (but no release, disposal, or migration from adjacent areas had occurred)
- 3 Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, but at concentrations that do not require a removal or remedial action
- 4 Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, and all remedial actions necessary to protect human health and the environment have been taken
- 5 Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, removal and/or remedial actions are under way, but all required remedial actions have not been taken
- 6 Areas where storage, release, disposal, and/or migration of hazardous substances or petroleum products has occurred, but required response actions have not yet been implemented
- 7 Areas that are unevaluated or require additional evaluation

**ATTACHMENT 4**

**TABLE 2 – NOTIFICATION OF HAZARDOUS SUBSTANCE STORAGE, RELEASE OR DISPOSAL**

| <b>Building Number</b>  | <b>Name of Hazardous Substance(s)</b> | <b>Date of Storage, Release, or Disposal</b>  | <b>Remedial Actions</b>  |
|---|---------------------------------------|---|--|
| Oil House Tank Farm (13 ASTs)   | 1,1,1-TCA<br>TCE<br>PCE               | Oil House Tank Farm constructed in early 1950s. Relocated 30-50 feet west of original location between 1980 and 1982. Waste oil accumulation tanks used from 1981 to 1996. Date of release unknown. | The Waste Oil and Hazardous Waste Accumulation Tanks and aboveground piping were removed in 1998. Chlorinated and fuel-related contaminants were detected in soil within the berm, indicating a release has occurred to soil and shallow groundwater, likely due to spills or leaks from tanks or piping. Concentrations of arsenic and dichloromethane in soils exceed RSR criteria. Concentrations of chloroethane, cis-1,2-DCE, TCE, and vinyl chloride in groundwater exceed RSR criteria. |
| Container Accumulation and Drum Staging Area Between the Former Oil House Tank Farm and Building 37 | Solvents<br>1,1,1-TCA                 | Use began prior to 1980. Date of release unknown.   | A release of chlorinated and fuel-related VOCs to the underlying soils has occurred. Concentrations of cis-1,2-DCE and xylenes in soil exceed RSR criteria. It is unknown if this release occurred from handling and storage of drums after designation of the area as a container storage area, or prior to that time when the area contained storage tanks.  |
| Original Container Storage Area   | Hazardous waste                       | Used from 1980 to 1984.   | This area (north and northwest of Building 13) was used to accumulate 55-gallon drums of hazardous waste. There is no evidence of a release from the drum storage. However, a release has occurred in this area from other activities. Concentrations of BTEX, cVOCs, VOCs, TPH, PCBs, and inorganics (lead) in soils exceed RSR Criteria.   |
| Building 15 and Associated Satellite Accumulation Areas   | Solvents                              | Constructed in 1945. Additional storeroom used as primary chemical storage area constructed between 1960 and 1970.  | A release has occurred in this area. Solvent and fuel-related contaminants were identified in soil; however the presence of the fill from former shoreline filling and an outfall once located beneath Building 15 complicates the determination of the source of the release. Concentrations of TCE and lead in soil exceed RSR criteria.   |

| Building Number  | Name of Hazardous Substance(s)   | Date of Storage, Release, or Disposal | Remedial Actions  |
|--|--|---------------------------------------|---|
| Chemical Waste Treatment Plant (CWTP) Collection System, Pump Station (Building 63), and Associated Piping | Cyanide<br>Cr(VI)<br>Chlorinated and non-chlorinated solvents<br>MEK<br>Naphtha<br>1,4-dioxane<br>Toluene<br>Heavy metals<br>Sulfuric acid<br>Sodium metabisulfite | Operated from 1950s – 1990s           | Sampling results indicate releases have occurred; however, evidence suggests there are other potential sources in addition to the CWTP system. Fuel and oil storage in USTs and ASTs and the wide-spread use of solvents in cleaning procedures within Building 2 are likely contributing sources of contamination. Concentrations of antimony, arsenic, cadmium, copper, lead, and TPH in soils exceed RSR criteria. Concentrations of copper, zinc, cyanide, and cVOCs in groundwater exceed RSR criteria.  |
| Chemical Waste Treatment System Cyanide Destruction Facility (Building 70)                                 | Copper<br>Cadmium<br>Cyanide<br>Sodium hypochlorite<br>Sulfuric acid<br>Sodium hydroxide   | Operated from 1986 to 1997            | There is no evidence of a release. Cyanide was not detected in samples taken adjacent to the CDF and the upstream waste line, nor was copper or cadmium detected at elevated concentrations. Solvent and fuel-related contaminants detected in soil are likely the results of historical activities in this area, including fuel oil storage in USTs, painting and paint storage, waste paint storage and disposal, and open storage. Prior to CDF construction, this area contained an abandoned underground septic tank that reportedly received zinc chromate paint sludge and solvent from 1941 to 1949 (ESE, 1981). The concentration of arsenic in soil exceeds RSR criteria at SB12B6-2. |



| Building Number  | Name of Hazardous Substance(s)                                    | Date of Storage, Release, or Disposal  | Remedial Actions   |
|--|---|--|--|
| Former Chemical Storage and Scrap Metal Reclamation                  | Raw chemicals<br>Magnesium-thorium<br>Titanium and aluminum chips | Constructed in 1944. Date of release unknown. Titanium and aluminum chips collection system used from early 1990s to 1996. | A release has occurred from this area. Concentrations of PAHs and TPH in soil exceed RSR criteria. Concentrations of PCE and TCE in soil vapor exceed RES and I/C VC.  |
| Container Storage Pad and Collection Trench Northeast of Building 13 | Scrap metals<br>Solvents  | Drum storage began around 1943. Concrete pad and collection system built in 1993 and used for a two-year period.           | Concentrations of TCE, numerous PAHs, TPH, antimony, arsenic, beryllium, and lead in soil exceed RSR criteria. The source of the contaminants detected in soils is likely from historical usage of this area prior to 1993.  |
| Magnesium-Thorium Scrap Yard Between Building 13 and Building 44     | Thorium chips   | Scrap yard used in the 1990s. Previously used for storage of drums and debris.   | There is no evidence of a release. No analytes were detected at concentrations greater than RSR numerical criteria.  |
| Open Storage Area Between Buildings 16 and 74                        | Solvents<br>1,1,1-TCA   | Storage occurred from the early 1950s until the 1980s.   | Concentrations of BTEX, cVOCs, PAHs, TPH, PCBs, and inorganics in soils exceed RSR criteria. Concentrations of cVOCs and arsenic in groundwater exceed RSR criteria. Detected analytes in samples associated with this area may have resulted from these storage areas, ASTs historically located within this area, fill used in 1943 to extend the shoreline into the Housatonic, and/or as a result of activities associated with operation of the OATP. |

| Building Number  | Name of Hazardous Substance(s)  | Date of Storage, Release, or Disposal  | Remedial Actions  |
|--|---|--|---|
| CWTP in Building 18                                    | Heavy metals<br>Solvents<br>Acids<br>Cyanide<br>Sulfuric acid<br>Sodium metabisulfite<br>Sodium hydroxide                       | The CWTP was constructed in 1958, and included the Chrome Reduction Unit and clarifier. In 1986 the equalization tanks were constructed, which replaced the equalization lagoon. | The CWTP in Building 18 includes the Chrome Reduction Unit and the Metals Removal Unit (CDM FPC, 1992). The Chrome Reduction Unit consists of six 9,725-gallon tanks. The Metals Removal Unit consists of one 240,000-gallon and two 120,000-gallon equalization tanks, and a 60,000-gallon clarifier.<br><br>There is no evidence of a release from this system. The concentration of dichloromethane in soil exceeds RSR criteria at EBS43-1.   |
| CWTP Solids Handling Area in Building 71               | Metal hydroxide sludge  | Operation began in 1986.   | This area consists of the Solids Handling Area, located in Building 71, which includes an 8,000-gallon FRP thickening tank and two 1-cubic yard filter presses (CDM FPC, 1992).<br><br>There is no evidence of a release. No contaminants were detected above RSR criteria in EBS11-1.  |
| Container Storage Areas A and B (South of Building 18) | Paint<br>Waste acetone<br>Waste sodium hydroxide<br>Waste 1,1,1-TCA<br>Chromium-contaminated plating wastes<br>Sodium hydroxide | Used from 1983 to 1986   | Containerized liquid and solid wastes, typically in 55-gallon drums, were collected from locations at the facility and brought to these storage areas. Container Storage Areas A and B had a combined storage capacity of 2,750 gallons (CDM FPC, 1992).<br><br>There is no evidence of a release. No solvent or fuel-related contamination or cyanide was detected in soil samples collected from outside the perimeter of the storage area; however, no samples were collected from beneath the concrete pad. |
| Sludge Roll-off Container Area North of Building 71    | Sludge  | From 1986 until the facility ceased operation (date unknown)   | There is no evidence of a release. No samples were taken from within this area, but the area was contained within a concrete berm and sludge material was stored in the roll-off for a period of less than 90 days.   |

| Building Number                                    | Name of Hazardous Substance(s)   | Date of Storage, Release, or Disposal | Remedial Actions   |
|--|--|---------------------------------------|--|
| Equalization Impoundment (Lagoon #1)               | Cyanide<br>Cr(VI)<br>Metal Hydroxide<br>Sodium hypochlorite<br>Sodium hydroxides | Operated from 1958 to 1986            | The Equalization Lagoon had an approximate capacity of 480,000 gallons (CDM FPC, 1992). The lagoon has been closed under RCRA Subtitle C, and a post-closure groundwater monitoring program is being conducted. Further soil data is necessary to compare contaminant concentrations in soil to RSR criteria. Additionally, LNAPL has been detected in monitoring well LW-5S, and additional investigations are planned for delineation of the extent of the LNAPL.                                      |
| Sludge Drying Beds (Lagoons #2, #3, and #4)        | Cyanide<br>Cr(VI)<br>Metal Hydroxide<br>Sodium hypochlorite<br>Sodium hydroxides | Operated from 1958 to 1986            | Lagoon #2 was 8 feet deep with an approximate 547,000-gallon capacity, lagoon #3 was 6.5 feet deep with an approximate 385,000-gallon capacity, and lagoon #4 was 8 feet deep with an approximate 754,000-gallon capacity (CDM FPC, 1992).<br><br>A release has occurred, however these beds have been closed under RCRA Subtitle C, and a post-closure groundwater monitoring program is being conducted. Further soil data is necessary to compare contaminant concentrations in soil to RSR criteria. |
| Outfall-008 (OF-008) and Drainage Ditch            | Cyanide<br>Cr(VI)<br>Metal Hydroxide<br>Sodium hypochlorite<br>Sodium hydroxides | The outfall was constructed in 1979.  | Outfall-008 was used to discharge supernatant from the CWTP clarifier to the drainage channel immediately northeast of Building 18 and ultimately to the Housatonic River. Elevated concentrations of VOCs, PAHs, SVOCs, PCBs, and inorganics were identified in sediment impacted by discharges from OF-008. As there are no RSR criteria for sediment, no comparisons were performed   |
| Waste Paint Tank Located Between Buildings 2 and 3 | Paints (zinc chromate primer)<br>Solvents  | 1941 - 1949                           | Paints and solvents were piped to a septic tank. There is no evidence of a release. No borings were collected at the suspected tank location.  |

| Building Number   | Name of Hazardous Substance(s)  | Date of Storage, Release, or Disposal | Remedial Actions  |
|---|---|---------------------------------------|---|
| Building 10 and Associated Satellite Accumulation Areas | Solvents  | Constructed in 1929                   | The concentration of arsenic in soil at SB13G1-1 exceeds RSR criteria by several orders of magnitude (a detection of 3,550 mg/kg compared to the I/C DEC of 10.0 mg/kg). Concentrations of cVOCs, chromium, and hexavalent chromium exceed RSR criteria beneath Building 10.  |
| Building 2 Manufacturing Areas                          | 1,1,1-TCA<br>TCE<br>Alkaline cleaners<br>MEK<br>Acetone<br>Toluene<br>Sodium hydroxide<br>Chromic acid<br>Hydrofluoric acids          | Constructed in 1929                   | A release has occurred. Concentrations of TPH, carbon tetrachloride, dichloromethane, TCE, PAHs, arsenic, vanadium, and cadmium in soil exceed RSR criteria. Concentrations of cVOCs in groundwater exceed RSR criteria.  |
| Building 2 Plating Area                                 | Chlorinated solvents<br>Xylene<br>Toluene<br>Chromium<br>Nickel<br>Copper<br>Cadmium<br>Cyanide<br>TCE<br>MEK<br>Carbon Tetrachloride | Operations began in 1951              | A release of plating solution occurred where CR(VI) migrated to soils beneath the building floor. Chlorinated solvents used for degreasing and cleaning metal components were released from operations in Building 2. A hexavalent chromium plume was identified in groundwater beneath the Chromium Plating Facility and extends beneath parts of Building 10 and Building 12. Concentrations of chromium and hexavalent chromium in soil exceed RSR criteria. Concentrations of TCE, cadmium, chromium, copper, cyanide, Cr(VI), and nickel in groundwater exceed RSR criteria. |

| Building Number   | Name of Hazardous Substance(s)            | Date of Storage, Release, or Disposal  | Remedial Actions  |
|---|---|--|---|
| Building 3 Plating Area   | Solvents<br>Degreasers<br>Chromium        | Operated from 1951 to mid-1970s  | A release has occurred. Elevated concentrations of cVOCs and Cr(VI) were identified in groundwater where chromium plating was conducted. Cr(VI) was detected at a concentration of 0.1 mg/L (SWPC for Cr(VI) is 0.11 mg/L) in at location DP5-9 at eight feet bgs, beneath the southeastern portion of Building 3. Concentrations of cVOCs in groundwater exceed RSR criteria.  |
| Building 3A and Associated Satellite Accumulation Areas                           | Waste solvents (1,1,1-TCA)<br>Acid wastes | Constructed in 1942  | <p>Building 3A was used for engineering and chemical laboratories, a machine shop, a heat treatment area, and office space. Activities conducted within Building 3A have released VOCs to underlying soil. Analytical results from soil samples collected beneath the building floor indicate fuel-related contamination. Concentrations of TPH in soil exceed RSR criteria.</p> <p>In addition, waste solvents (1,1,1-TCA), waste jet fuel, waste oil, and acid wastes were stored in 55-gallon drums in satellite accumulation areas within the building (CDM FPC, 1992), although there is no evidence of a release from these activities.</p> |
| Building 4 Former Brine UST   | Brine<br>Metals<br>Sludge                 | The ECM process was decommissioned in 1987 (ABB-ES, 1996), and the tank was removed in 1989 (CDM FPC, 1992). | <p>A 20,000-gallon brine storage tank is located beneath the northernmost corner of Building 4, and used during the ECM process (cutting of parts by placing metals in a brine bath).</p> <p>No concentrations of detected analytes at sample locations are greater than the RSR numerical criteria.</p>  |
| Research and Development Area in Northern Building 3, Building 3A, and Building 4 | Heavy metals<br>Solvents                  | Constructed in 1930. A spill of cleaning solvents occurred north of Building 3A in April 1989.               | According to the PAS, this area was a disposal and uncontrolled release area. Concentrations of arsenic, nickel, and TPH in soil, cVOCs in groundwater, and TCE and PCE in soil vapor exceed RSR criteria.  |

| Building Number  | Name of Hazardous Substance(s) | Date of Storage, Release, or Disposal   | Remedial Actions   |
|--|--------------------------------|---|--|
| Building 19 Dry Well   | Solvents                       | Disposal to the dry well reportedly ceased in 1987; it is unknown when disposal to the dry well may have begun (CDM FPC, 1992). | There is no evidence of a release. The exact location or existence of the dry well could not be determined based on a review of records and a site inspection conducted in October 2003.   |
| Drum Storage Area East (North) of Building 19  | 1,1,1-TCA<br>PCE<br>Solvents   | Unknown   | There is documentation of a release of chlorinated solvents and fuel. Contaminated soil was removed in 1990. Results of soil and groundwater samples indicate residual fuel and chlorinated solvent contamination in soil and groundwater and cyanide in soil at the drum storage area. Concentrations of 1,1,2,2-tetrachloroethane (1,1,2,2-TCA) in soil exceed RSR criteria. Concentrations of cVOCs and arsenic in groundwater exceed RSR criteria. |
| Building 7 Waste Oil Satellite Accumulation Area and Building 7/7A Drains                                      | Paints<br>Solvents             | Constructed in 1943   | The drains associated with Buildings 7-7A handled waste petroleum product. Fuel and solvent-related contaminants and cyanide were detected in soil near the buildings. Concentrations of antimony, arsenic, cadmium, lead, and cVOCs in soil exceed RSR criteria.  |
| Building 8 Flammable Storage Area (Paints and Solvents) and Building 8 Waste Paint Satellite Accumulation Area | Flammable paints<br>Solvents   | Used from 1943 – 1990s  | There is no evidence of a release. No concentrations of detected analytes exceed RSR numerical criteria.   |

| Building Number                             | Name of Hazardous Substance(s)  | Date of Storage, Release, or Disposal  | Remedial Actions  |
|---|---|--|---|
| Building 16 Floor Drains, Sumps, and Piping | Carbon Tetrachloride<br>TCE<br>1,1,1-TCA<br>Mercury                         | Used from 1953 - 1991  | Documentation indicates that VOCs and fuels were released to the drainage system in Building 16 and detections of VOCs in soils collected along the drainage system, and downgradient groundwater, suggest that a release has occurred. Other potential contributing sources of VOCs and fuel include prior usage of this area in the 1940s for open storage of containers and documented releases from the Building 34 Jet Fuel Tank Farm. Concentrations of TPH and lead in soils at SB17A2-6 and PCBs at SB17A2-1 exceed RSR criteria. No concentrations of analytes detected in groundwater exceed RSR criteria. In soil vapor, TCE was detected slightly above RSR criteria in SG-99-32. |
| OATP in Building 64-2                       | Copper<br>1,1,1-TCA<br>Ammonia<br>Sodium hydroxide<br>Chromic acid<br>Zyglo | The OATP was constructed in 1976. Releases were documented in 1978 and 1981. | This area contains an oil skimmer in Building 64-2, the 200,000-gallon surge tank adjacent to B64-2 and the 10,000-gallon sodium hydroxide (NaOH)/Alum tank at B64-2. Accidental releases to the stormwater system have been documented. The first included the discharge of 25 to 30 pounds of chromic acid in May of 1978, when a tank containing residual chromic acid was accidentally overturned and the acid discharged to a storm drain (CDM FPC, 1992). The second involved a spill of approximately 20 gallons of Zyglo penetrant dye into a storm drain in October of 1981 (W-C, 1991). No samples have been collected.   |

| Building Number                                  | Name of Hazardous Substance(s)                        | Date of Storage, Release, or Disposal | Remedial Actions  |
|--|---|---------------------------------------|---|
| Discharge to the Housatonic River at Outfall-007 | Chromic acid<br>Cr(VI)<br>Zyglo (metal penetrant dye) |                                       | <p>Treated stormwater from the OATP discharges through Outfall 007. Four chemical releases to the intertidal flats have been documented. These releases involved:</p> <ul style="list-style-type: none"> <li>• In May 1978, a spill of 25 to 30 pounds of chromic acid was discharged into the OATP and into the river via OF-007 (W-C, 1991).</li> <li>• In August 1978, CTDEP was advised that a yellow plume of Cr(VI) was extending approximately 200 yards from OF-007 (CDM FPC, 1992). This release occurred during a period when it is suspected that effluent from the CWTP was routed to the OATP for discharge via OF-007.</li> <li>• Approximately 75 gallons of oil sludge from the OATP bypassed clogged skimmers and discharged from OF-007 in July 1979 (W-C, 1991).</li> <li>• In October 1981, approximately 20 gallons of "Zyglo," a fluorescent metal penetrant dye was spilled into a storm drain and discharged from OF-007 (W-C, 1991).</li> </ul> <p>Sediment sample location OF-007 (SD) was taken at Outfall 007. Analytes detected in sediment included cVOCs, VOCs, PAHs, SVOCs, and PCBs. As there are no RSR criteria for sediment, no comparisons were performed.</p> |



| Building Number   | Name of Hazardous Substance(s) | Date of Storage, Release, or Disposal | Remedial Actions   |
|---|--------------------------------|---------------------------------------|--|
| Facility Outfalls-001 through -006 and the Intertidal Flats   | Solvents<br>Paints             | Constructed in 1953                   | Solvent, PCBs, and fuel-related contaminants were detected in sediment samples located adjacent to the six facility outfalls associated with the stormwater system. As there are no RSR criteria for sediment, no comparisons were performed. It should be noted however, that these samples are located off the main portion of the SAEP property within the tidal flats, in an area of the Housatonic River that likely has been contaminated as a result of the numerous industrial operations upstream. Furthermore, the current SAEP shoreline is a result of several expansions, most notably in 1943, which utilized both river sediments and fill from offsite.  |
| Building 65 Area;<br>Previous Location of Buildings 52 and 55 | Paint (zinc-chromate)          | Unknown                               | <p>In 1990, Buildings 52 and 55 were demolished in order to construct Building 65. Building 52 and 55 had previously been used for production material warehousing. During excavation for the Building 65 foundation, contaminated soils were discovered that contained petroleum hydrocarbons and inorganics including cadmium, chromium, lead and copper distributed throughout much of the Building 65 area (Textron, 1991). This contamination was believed to partially be the result of disposal of zinc-chromate undercoat used in aircraft painting processes conducted in Building 2 in the 1940s, and/or from fill obtained from contaminated river sediments. An estimated 12,000 cubic yards of paint- and petroleum-contaminated soil was excavated to the low tide water level and placed in a soil pile in the South Parking Lot (W-C, 1991).</p> <p>Soil samples were collected outside the footprint of the excavated soils. The concentration of TPH in soil at SB06A2-2 exceeds RSR criteria.</p> |
| Building 58 and Associated Satellite Accumulation Areas       | Waste 1,1,1-TCA                | Constructed in 1967                   | Waste 1,1,1-TCA and waste jet fuels were stored in satellite accumulation areas located in the building. This area was also used for open storage in the 1950s and 1960s. It is not believed that activities within the building were associated with a release.   |

| Building Number   | Name of Hazardous Substance(s) | Date of Storage, Release, or Disposal | Remedial Actions   |
|---|--------------------------------|---------------------------------------|--|
| Building 48 and Associated Satellite Accumulation Areas | Paint cans                     | Constructed in 1961                   | Prior to construction of Building 48, aerial photographs indicated that this area was used for open storage (USEPA, 1990). Paint cans and waste paint were stored in Building 48 in 55-gallon drums in satellite accumulation areas located in the building (CDM FPC, 1992). The concentration of dichloromethane in soil exceeds RSR criteria.  |
| Building 12 and Associated Satellite Accumulation Areas | Ammonia<br>Waste filters       | Constructed in 1942                   | Waste filters were stored in accumulation areas located in this building. A 1943 fire insurance map depicts a machine oil storage area adjacent to the building (AFM FIC, 1943). A 1956 map shows three 1,000 gallon anhydrous ammonia tanks (FIA, 1956) in this area.<br><br>Both TCE and PCE were detected in soil vapor above the I/C VC beneath Building 12. PCE exceeds the I/C VC beneath Building 12. |

| Building Number   | Name of Hazardous Substance(s) | Date of Storage, Release, or Disposal                 | Remedial Actions |
|---|--------------------------------|---|------------------|
| <b>Acronyms:</b>  |                                |   |                  |
| 1,1,1-TCA = 1,1,1-trichloroethane                       |                                | NRC = National Research Council                       |                  |
| AST = Aboveground storage tank                          |                                | OATP = Oil Abatement Treatment Plant                  |                  |
| Bgs = Below ground surface                              |                                | OF = Outfall  |                  |
| BTEX = Benzene, toluene, ethylbenzene, and xylene       |                                | PAH = Polynuclear aromatic hydrocarbon                |                  |
| CDF = Cyanide Destruction Facility                      |                                | PCB = Polychlorinated biphenyl                        |                  |
| cis-1,2-DCE = cis-1,2-dichloroethene                    |                                | PCE = Tetrachloroethene                               |                  |
| Cr(VI) = Hexavalent chromium                            |                                | RCRA = Resource Conservation and Recovery Act         |                  |
| cVOCs = Chlorinated volatile organic compounds          |                                | RSR = Remediation Standard Regulation                 |                  |
| CWTP = Chemical Waste Treatment Plant                   |                                | SAEP = Stratford Army Engine Plant                    |                  |
| ECM = Electrochemical machining                         |                                | SVOC = Semi-volatile organic compound                 |                  |
| I/C = Industrial/commercial                             |                                | TCE = Trichloroethene                                 |                  |
| LNAPL = Light non-aqueous phase liquid                  |                                | TPH = Total petroleum hydrocarbons                    |                  |
| mg/kg = Milligrams per kilogram                         |                                | USEPA = United States Environmental Protection Agency |                  |
| NaOH = Sodium hydroxide                                 |                                | UST = Underground storage tank                        |                  |
| NPDES = National Pollutant Discharge Elimination System |                                | VOC = Volatile organic compound                       |                  |
|   |                                | VC = Volatilization Criteria                          |                  |

**ATTACHMENT 5**

**TABLE 3 – NOTIFICATION OF PETROLEUM PRODUCT STORAGE, RELEASE, OR DISPOSAL**

| <b>Building Number</b>   | <b>Name of Petroleum Product(s)</b>  | <b>Date of Storage, Release, or Disposal</b>  | <b>Remedial Actions</b>   |
|--|--|---|---|
| Oil House Tank Farm<br>(13 ASTs)   | Coolants<br>Lubricants<br>Hydraulic oils<br>Varsol<br>Spent jet fuel<br>Waste oils | Oil House Tank Farm constructed in early 1950s. Relocated 30-50 feet west of original location between 1980 and 1982. Waste oil accumulation tanks used from 1981 to 1996. Date of release unknown. | The Waste Oil and Hazardous Waste Accumulation Tanks and aboveground piping were removed in 1998. Chlorinated and fuel-related contaminants were detected in soil within the berm, indicating a release has occurred to soil and shallow groundwater, likely due to spills or leaks from tanks or piping. Concentrations of arsenic and dichloromethane in soils exceed RSR criteria. Concentrations of chloroethane, cis-1,2-DCE, TCE, and vinyl chloride in groundwater exceed RSR criteria.  |
| Hazardous Waste and Waste Oil Transfer Systems Between Buildings 13 and 15 | Waste fuel<br>Waste solvent/oil mixtures<br>Waste oil                              | Installed prior to 1970   | The waste fuel and waste solvent and oil systems each consisted of a 500-gallon underground receiving tank. The waste oil transfer system consisted of two 400-gallon underground steel tanks. A release of fuels and chlorinated solvents to soil has occurred. Possible volatilization of PCE and TCE contamination in vadose zone soil may have impacted soil vapor in the vicinity of Building 15. However, none of the samples can be uniquely associated with the receiving pits and underground transfer lines. Concentrations of BTEX, cVOCs, VOCs, TPH, PCBs, and inorganics in soils exceed RSR criteria. Concentrations of cVOCs and arsenic in groundwater exceed RSR criteria. |
| Oil/Alum Tank  | Cutting Oils   | 1976 - 1997   | The Oil/Alum tank was an aboveground, 10,000-gallon welded carbon steel tank mounted on a concrete pad. There is no evidence of a release from this tank. No contaminants were detected above RSR criteria.   |

| Building Number   | Name of Petroleum Product(s)                           | Date of Storage, Release, or Disposal  | Remedial Actions  |
|---|--|--|---|
| Container Accumulation and Drum Staging Area Between the Former Oil House Tank Farm and Building 37 | Waste oil<br>Fuel                                      | Use began prior to 1980. Date of release unknown.  | A release of chlorinated and fuel-related VOCs to the underlying soils has occurred. Concentrations of cis-1,2-DCE and xylenes in soil exceed RSR criteria. It is unknown if this release occurred from handling and storage of drums after designation of the area as a container storage area, or prior to that time when the area contained storage tanks. |
| Metal Chips Oily Sump (Northwest corner of Building 13)   | Cutting oils<br>Metal chips                            | Concrete pit for metal chips was removed in 1993.  | There is no evidence of a release. Sample SB09B11-1 was taken from within the area of the former metal chips bin, but not adjacent to the chip sump. No detected concentrations in samples from SB09B11-1 are greater than RSR numerical criteria.  |
| Building 15 and Associated Satellite Accumulation Areas   | Coolants<br>Hydraulics<br>Waste oils                   | Constructed in 1945.   | A release has occurred in this area. Solvent and fuel-related contaminants were identified in soil; however the presence of the fill from former shoreline filling and an outfall once located beneath Building 15 complicates the determination of the source of the release. Concentrations of TCE and lead in soil exceed RSR criteria                     |
| Former Chemical Storage and Scrap Metal Reclamation   | Oily metal chip storage<br>Titanium and aluminum chips | Constructed in 1944. Metal chips concrete sump removed in 1993. Titanium and aluminum chips collection system used from early 1990s to 1996. | Oil-water separator located in Building 13. Concentrations of PAHs and TPH in soil exceed RSR criteria. Concentrations of PCE and TCE in soil vapor exceed RES and I/C VC.  |
| Container Storage Pad and Collection Trench Northeast of Building 13                                | Scrap metals<br>Oils                                   | Drum storage began around 1943. Concrete pad and collection system built in 1993 and used for a two-year period.                             | Concentrations of TCE, numerous PAHs, TPH, antimony, arsenic, beryllium, and lead in soil exceed RSR criteria. The source of the contaminants detected in soils is likely from historical usage of this area prior to 1993.   |

| Building Number  | Name of Petroleum Product(s) | Date of Storage, Release, or Disposal                  | Remedial Actions   |
|--|------------------------------|--|--|
| Open Storage Area Between Buildings 16 and 74          | Propane<br>Oil and grease    | Storage occurred from the early 1950s until the 1980s. | <p>The 1953 aerial photograph and a 1956 Fire Insurance Map depict three 1800-gallon propane ASTs at the future location of the OATP (Building 64-2). A 1970 aerial photograph depicts storage tanks adjacent to Building 37 and three small buildings located between Building 38 and the three 1800-gallon propane ASTs.</p> <p>Concentrations of BTEX, cVOCs, PAHs, TPH, PCBs, and inorganics in soils exceed RSR criteria. Concentrations of cVOCs and arsenic in groundwater exceed RSR criteria. Detected analytes in samples associated with this area may have resulted from these storage areas, ASTs historically located within this area, fill used in 1943 to extend the shoreline into the Housatonic, and/or as a result of activities associated with operation of the OATP.</p> |
| Container Storage Areas A and B (South of Building 18) | Waste jet fuel<br>Waste oil  | Used from 1983 to 1986                                 | <p>Containerized liquid and solid wastes, typically in 55-gallon drums, were collected from locations at the facility and brought to these storage areas. Container Storage Areas A and B had a combined storage capacity of 2,750 gallons (CDM FPC, 1992).</p> <p>Based on available information, there is no evidence of a release. No solvent or fuel-related contamination or cyanide was detected in soil samples collected from outside the perimeter of the storage area; however, no samples were collected from beneath the concrete pad.</p>   |
| Former UST at Building 18                              | #2 Fuel Oil                  | 1956 - 1989  | <p>A 1,000-gallon #2 Fuel Oil UST was located adjacent to Building 18. There is no evidence of a release. Fuel-related contaminants were not detected in SB20A1-1. No contaminants were detected above RSR criteria.</p>   |

| Building Number  | Name of Petroleum Product(s)                          | Date of Storage, Release, or Disposal  | Remedial Actions   |
|--|---|--|--|
| Building 2 Former USTs                                 | Fuel oils<br>Gasoline<br>Oils                         | Oil USTs were abandoned in place in 1955. Septic tank was abandoned in place in 1969. Status of other tanks unknown. | <p>Former USTs at Building 2 include two 2,500-gallon oil USTs underneath Building and a 1,500-gallon sanitary UST 2 (CDM FPC, 1992). The exact location of these tanks is not known. In addition, five other fuel storage tanks have been identified at Building 2: two 5,000-gallon fuel oil USTs; a 10,000-gallon and a 15,000-gallon fuel oil tank, and a 500-gallon gasoline tank. The status of these tanks is unknown.</p> <p>Based on available information, there is no evidence of a release. The exact location of the tanks is unknown. Furthermore, no sample locations were taken proximal to other identified fuel storage tanks at Building 2.</p> |
| Former Gasoline USTs near Building 10                  | Gasoline  | Approximately 1931 to 1943   | Two 1,000-gallon gasoline USTs were identified on fire maps (AFM FIC, 1931). The current status of these tanks is unknown. There is no evidence of a release. No detected concentrations in soil boring SB1311-1 are greater than RSR numerical criteria.  |
| Building 6 and Associated Satellite Accumulation Areas | Waste calibration fuel<br>Waste jet fuel<br>Waste oil | Constructed in 1944  | Building 6 was used for engine testing, parts storage, painting, and as an experimental hangar. 55-gallon drums were used for storage within various satellite accumulation areas located throughout the building (CDM FPC, 1992). Concentrations of arsenic in soil exceed RSR criteria at sample location SB24A1-1.  |

| Building Number   | Name of Petroleum Product(s)       | Date of Storage, Release, or Disposal  | Remedial Actions  |
|---|------------------------------------|--|---|
| Building 3A and Associated Satellite Accumulation Areas | Waste jet fuel<br>Waste oil        | Constructed in 1942  | <p>Building 3A was used for engineering and chemical laboratories, a machine shop, a heat treatment area, and office space. Activities conducted within Building 3A have released VOCs to underlying soil. Analytical results from soil samples collected beneath the building floor indicate fuel-related contamination. Concentrations of TPH in soil exceed RSR criteria.</p> <p>In addition, waste solvents (1,1,1-TCA), waste jet fuel, waste oil, and acid wastes were stored in 55-gallon drums in satellite accumulation areas within the building (CDM FPC, 1992), although there is no evidence of a release from these activities.</p> <p>Results of the 2004 soil vapor survey identified that TCE and PCE concentrations were above soil vapor RES and I/C VC in Building 3A. In groundwater beneath Building 3A, concentrations of PCE exceed RES VC, and cVOC concentrations exceed both RES and I/C VC.</p> |
| 6 Former USTs   | Fuels<br>Oil<br>Diesel<br>Gasoline | Two 550-gallon tanks removed in 1989. Two 5,000-gallon tanks initially abandoned in place in 1979 and removed in 1998. | Four former USTs were used to store fuel and oil for operations conducted in Building 6. There were two 550-gallon fuel USTs, a 5,000-gallon fuel UST, and a 5,000-gallon oil UST (CDM FPC, 1992). Other storage tanks were identified in the vicinity of Building 6. A 1986 fire map (FIA, 1986) depicts two 250-gallon diesel oil tanks west of the central portion of Building 6, and a 250-gallon gasoline tank. A release has occurred. During removal of one 5,000-gallon tank in 1998, petroleum-contamination was visually identified in surrounding soil. No remedial actions have been taken.   |



| Building Number  | Name of Petroleum Product(s)             | Date of Storage, Release, or Disposal   | Remedial Actions  |
|--|--|---|---|
| Building 72 and Associated Petroleum Storage Tanks   | Diesel<br>Jet fuel                       | 1965 - 1998   | Building 72 served as a pumping station for fuel storage tanks. The building serviced two 10,000 and four 20,000-gallon diesel and jet fuel ASTs. Two 20,000-gallon tanks were installed in approximately 1965; the other four tanks were installed in the early 1980s (W-C, 1991). Petroleum-contaminated soils were identified during closure of the adjacent sludge drying lagoons in 1986; the contaminated soils were not removed (CDM FPC, 1992). Concentrations of PAHs in soil exceed RSR criteria. |
| Research and Development Area in Northern Building 3, Building 3A, and Building 4  | Fuels<br>Oils                            | Constructed in 1930.  | A release has occurred. Fuel-related contaminants and nickel were detected in soil. Chlorinated solvent and fuel-related contaminants were detected in groundwater, and chlorinated solvents were detected in soil vapor. Concentrations of arsenic, nickel, and TPH in soil, cVOCs in groundwater, and TCE and PCE in soil vapor exceed RSR criteria.  |
| Building 4 Drum Storage Area   | Machining oil<br>Engine oils             | Storage began in 1981.  | This area was used to store 55-gallon drums of machining oil and engine oils used in engine testing and development at the facility (ABB-ES, 1996). There is no evidence of a release. No concentrations of contaminants exceed RSR criteria in samples from SB27E2-1.  |
| Building 6A Waste Oil Rags (Satellite Accumulation Area) and Building 6A Waste TPC and Oil (Satellite Accumulation Area) | Waste Oil<br>TPC (aliphatic hydrocarbon) | Building 6A was built in 1966<br>Storage in satellite accumulation areas began in 1991. | Waste oil rags and waste TPC and oil were stored in 55-gallon drums in satellite accumulation areas located throughout the building. Fuel and solvent-related contamination were detected in soil at Building 6A. Concentrations of cVOCs in soil exceed RSR criteria.  |

| Building Number   | Name of Petroleum Product(s)     | Date of Storage, Release, or Disposal   | Remedial Actions  |
|---|----------------------------------|---|---|
| Building 53 and Associated Fuel Storage Areas           | Fuels                            | Building 53 was constructed in 1961. Open storage occurred in this area since at least 1943.                                    | A 1962 drawing depicts two fuel USTs beneath the southern end of Building 53. Additionally, a plan from 1964 (AVCO Lycoming, 1964) depicts four temporary mobile tankers immediately south of Building 53. Following the construction of Building 6 in 1944, stains and/or tanks are identified in aerial photographs (USEPA, 1990). There is no evidence of a release from this area.  |
| Building 19 Dry Well                                    | Waste fuels<br>Oils              | Disposal to the dry well reportedly ceased in 1987; it is unknown when disposal to the dry well may have begun (CDM FPC, 1992). | There is no evidence of a release. The exact location or existence of the dry well could not be determined based on a review of records and a site inspection conducted in October 2003.  |
| Building 34 and Associated Satellite Accumulation Areas | Waste oil<br>Filters<br>Jet Fuel | Constructed in 1953   | Building 34 served as the pumphouse for the Former Jet Fuel Tank Farm. Accumulation areas at Building 34 contained 55-gallon drums of waste oil, filters, and jet fuel (CDM FPC, 1992). Based on available information, there is no evidence of a release within the footprint of the building or its perimeter.  |
| Building 5 and Associated Satellite Accumulation Areas  | Waste jet fuel                   | Constructed in 1954   | Reportedly, waste jet fuel was stored within 55-gallon drums in satellite accumulation areas located throughout the building (CDM FPC, 1992). A 1986 fire insurance map identifies a 600-gallon fuel oil tank located in Building 5A (FIA, 1986).<br><br>There is no evidence of a release, based upon the historical use of this area and analytical results from the associated boring. No concentrations of analytes were greater than RSR criteria. |
| Building 19 and Associated Satellite Accumulation Areas | Filters                          | Unknown   | The satellite accumulation areas at Building 19 contained 55-gallon drums of waste filters (CDM FPC, 1992). The locations of the satellite accumulation areas are unknown and likely changed over time. Building 19 was used for jet engine testing and turbine engine research and development. No concentrations of analytes were greater than RSR criteria.  |

| Building Number   | Name of Petroleum Product(s)               | Date of Storage, Release, or Disposal | Remedial Actions   |
|---|--|---------------------------------------|--|
| Building 43 and Associated Satellite Accumulation Areas | Fuels<br>Filters                           | Constructed in the early 1940s        | Building 43 was constructed in the early 1940s to serve as a pumping station for a fire suppression tank located adjacent to the building (AFM FIC, 1943). Building 43 was modified in approximately 1986 to serve as the fuel pumping station for two 60,000 gallon ASTs that supplied the Building 19 jet engine testing and turbine research (FIA, 1986). Waste fuel and filters were stored in 55-gallon drums located in satellite accumulation areas in the building (CDM FPC, 1992). There is evidence of a release   |
| Building 19 Former USTs                                 | Fuels                                      | Tanks removed in 1987                 | Four former fuel USTs, located in the vicinity of Building 19, were used in support of testing activities within the building. The USTs included two 550-gallon tanks, a 1,000-gallon tank, and a 2,000-gallon tank (CDM FPC, 1992). Reportedly, all four USTs were removed in 1987 (W-C, 1991). There is no evidence of a release.  |
| Jet Fuel Tank Farm Former USTs                          | Jet Fuel<br>Diesel<br>Waste Fuel<br>Varsol | In use from 1953 - 1989               | <p>Eighteen former USTs were located at the Former Jet Fuel Tank near Building 34, including five 20,000-gallon jet fuel tanks, and one 20,000-gallon diesel tank, a 4,000-gallon waste fuel tank, a 5,000-gallon Varsol tank, a 1,000-gallon fuel tank, and nine 300-gallon fuel tanks (CDM FPC, 1992).</p> <p>During tank removal, approximately 2,000 cubic yards of fuel-contaminated soil, containing levels of toluene and xylenes up to 5,500 ppm (CDM FPC, 1992) were excavated. Soil samples taken following excavation of contaminated soil indicates residual fuel and chlorinated solvent-related contamination. Concentrations of arsenic, benzene, and TPH in soil exceed RSR criteria. Concentrations of vinyl chloride in groundwater exceed RSR criteria.</p> |

| Building Number   | Name of Petroleum Product(s)              | Date of Storage, Release, or Disposal | Remedial Actions   |
|---|---|---------------------------------------|--|
| Building 16 and Associated Satellite Accumulation Areas                   | Waste oil<br>Fuel<br>Filters<br>Oily rags | Unknown                               | Building 16 was used for production and development of engines in test cells, and various satellite accumulation areas that previously stored waste oil, fuel, filters, and oily rags in 55-gallons drums.<br><br>Fuel-related contamination was detected in soil north of the central portion of Building 16, along the Dike. Concentrations of TPH exceed RSR criteria.  |
| Drum Storage Area East (North) of Building 19                             | 1,1,1-TCA<br>PCE<br>Solvents              | Unknown                               | There is documentation of a release of chlorinated solvents and fuel related to drum storage. An additional spill of diesel fuel into this area from overfilling of the adjacent ASTs resulted in the ultimate removal of approximately 120 cubic yards of soil that was sent off-site for disposal. Results of soil and groundwater samples indicate residual fuel and chlorinated solvent contamination in soil and groundwater and cyanide in soil at the drum storage area. Concentrations of 1,1,2,2-TCA in soil exceed RSR criteria<br>Concentrations of cVOCs and arsenic in groundwater exceed RSR criteria. |
| Scrap Metal Yard North of Building 16                                     | Scrap metal<br>Oils<br>Greases            | Unknown                               | This area was used to store scrap metal that was reportedly covered in oils and greases. Fuel-related contaminants and PCBs were detected in soil at concentrations of 5 mg/kg or less, and black, tar-like material was noted during soil sampling at one of the soil boring locations. Concentrations of PCBs in soil at SB17A3-4 exceed RSR criteria.   |
| Building 7 Waste Oil Satellite Accumulation Area and Building 7/7A Drains | Petroleum Fuels<br>Waste oil              | Constructed in 1943                   | The drains associated with Buildings 7/7A handled waste petroleum product. Fuel and solvent-related contaminants and cyanide were detected in soil near the buildings. Concentrations of antimony, arsenic, cadmium, lead, and cVOCs in soil exceed RSR criteria.  |

| Building Number                           | Name of Petroleum Product(s)     | Date of Storage, Release, or Disposal                   | Remedial Actions   |
|---|----------------------------------|---|--|
| Building 19 ASTs<br>North of Building     | Diesel<br>JP-5                   | Installed in 1953 and removed in 1998. Release in 1990. | Three ASTs, including a 2,000-gallon diesel fuel #2 tank, a 1,000-gallon diesel fuel #2 tank, and a 1,000-gallon JP-5 tank were located to the north of Building 19. The tanks were reportedly occasionally overfilled (W-C, 1991). In June 1990, one of the diesel tanks was accidentally overfilled and 150 gallons of fuel was spilled to the ground surface. Approximately 100 gallons of this was collected by facility personnel and the remaining 50 gallons was removed along with contaminated soils from an open excavation west of the concrete pad, in the area of the drum storage area (AOC 57). The excavated soils were stockpiled in the bermed tank area, sampled, and sent off-site for disposal (Textron Lycoming Memo, July 2, 1990). Analytical results from samples collected underlying and south of the concrete pad indicate that no contaminants exceed RSR criteria. |
| Building 19 ASTs<br>Northwest of Building | Jet-A jet fuel<br>JP-4 jet fuel  | Installed in 1986 and removed in 1998.                  | Two 60,000-gallon jet fuel ASTs were located northwest of Building 19. Prior to installation of the fuel tanks, a 400,000 gallon fire suppression tank was located in the area (FIA, 1956 and USEPA, 1990). Analytical results from boring BR-1 located approximately 10 feet northwest of these tanks indicated that analytes did not exceed RSR numerical criteria.  |
| Building 9 Floor Drain                    | Oil<br>Grease<br>Hydraulic fluid | Constructed in 1943                                     | Batteries, oil, grease, and hydraulic fluid were stored in 55-gallon drums in Building 9. The floor drains lead to the OATP via pump station Building 64-1 (W-C, 1991). Soil boring SB13E1-1 was completed adjacent to the storm drain line from Building 9. No concentrations of detected analytes at sample location SB13E1-1 are greater than RSR criteria.   |

| Building Number                             | Name of Petroleum Product(s) | Date of Storage, Release, or Disposal  | Remedial Actions   |
|---|------------------------------|--|--|
| ASTs Southeast of Building 16               | Engine oil<br>Diesel         | 1953 - 1998  | Four 3,000-gallon engine oil tanks were originally located in this area, likely since construction of Building 16 in 1953 (FIA, 1956). These tanks were removed between 1980 and 1984, and replaced by two 40,000-gallon #2 Diesel ASTs (W-C, 1991). The diesel tanks were removed in 1998 (IPM, 2002). There is no evidence of a release.   |
| Building 16 Floor Drains, Sumps, and Piping | Fuels                        | Used from 1953 until 1991  | Documentation indicates that VOCs and fuels were released to the drainage system in Building 16. Detections of VOCs in soils collected along the drainage system and downgradient groundwater suggest that a release has occurred. Other potential contributing sources of VOCs and fuel include prior usage of this area in the 1940s for open storage of containers and documented releases from the Building 34 Jet Fuel Tank Farm. Concentrations of TPH and lead in soils at SB17A2-6 and PCBs at SB17A2-1 exceed RSR criteria. No concentrations of analytes detected in groundwater exceed RSR criteria. In soil vapor, TCE was detected slightly above RSR criteria in SG-99-32. |
| OATP in Building 64-2                       | Oil and grease               | The OATP was constructed in 1976. Releases were documented in 1978 and 1981. | This area contains an oil skimmer in Building 64-2, the 200,000-gallon surge tank adjacent to B64-2 and the 10,000-gallon sodium hydroxide (NaOH)/Alum tank at B64-2. Following the construction of the waste transfer system and closure of the wastewater collection lines in the early- to mid-1980s, the OATP continued to receive wastewater in the form of supernatant pumped from waste oil tanks at the former Oil House Tank Farm. The continuous or intermittent presence of oil, copper, 1,1,1-TCA, and ammonia discharge to the OATP was noted in the early 1990s (W-C, 1991). No samples have been collected.   |

| Building Number   | Name of Petroleum Product(s) | Date of Storage, Release, or Disposal | Remedial Actions   |
|---|------------------------------|---------------------------------------|--|
| Facility Outfalls-001 through -006 and the Intertidal Flats | Waste oils<br>Fuels          | Constructed in 1953                   | Solvent, PCBs, and fuel-related contaminants were detected in sediment samples located adjacent to the six facility outfalls associated with the stormwater system. As there are no RSR criteria for sediment, no comparisons were performed. It should be noted however, that these samples are located off the main portion of the SAEP property within the tidal flats, in an area of the Housatonic River that likely has been contaminated as a result of the numerous industrial operations upstream. Furthermore, the current SAEP shoreline is a result of several expansions, most notably in 1943, which utilized both river sediments and fill from offsite.  |
| Soil Pile, South Parking Lot                                | Fuels<br>Metals              | 1989 - 1990                           | <p>In September 1989, an estimated 3,000 cubic yards of contaminated soil, discovered during removal of USTs at the Jet Fuel Tank Farm were excavated and stockpiled at the South Parking Lot. Toluene and xylene were detected at levels up to 5,500 mg/kg in these soils (CDM FPC, 1992). Additional samples collected just outside the area of removal identified soil containing TPH at concentrations up to 5,500 mg/kg (Zecco, 1990).</p> <p>In 1990, Buildings 52 and 55 were demolished in order to construct Building 65. During excavation for the Building 65 foundation, contaminated soils contained petroleum hydrocarbons and inorganics including cadmium, chromium, lead and copper distributed throughout much of the Building 65 area (Textron 1991). An estimated 12,000 cubic yards of contaminated soil was excavated to the low-tide water level and added to the soil pile at the South Parking Lot (W-C, 1991).</p> <p>The soils were aerated on-site to reduce contaminant levels and then placed in the South Parking Lot. Concentrations of 1,1,2,2-TCA, PAHs, SVOCs, and cadmium exceed RSR criteria for samples from borings completed in the final placement location of this soil.</p> |

| Building Number  | Name of Petroleum Product(s) | Date of Storage, Release, or Disposal   | Remedial Actions  |
|--|------------------------------|---|---|
| Building 65 Area;<br>Previous Location of<br>Buildings 52 and 55 | Petroleum                    | Unknown   | <p>In 1990, Buildings 52 and 55 were demolished in order to construct Building 65. Buildings 52 and 55 had previously been used for production material warehousing. During excavation for the Building 65 foundation, contaminated soils were discovered that contained petroleum hydrocarbons and inorganics including cadmium, chromium, lead and copper distributed throughout much of the Building 65 area (Textron, 1991). This contamination was believed to partially be the result of disposal of zinc-chromate undercoat used in aircraft painting processes conducted in Building 2 in the 1940s, and/or from fill obtained from contaminated river sediments. An estimated 12,000 cubic yards of paint- and petroleum-contaminated soil was excavated to the low tide water level and placed in a soil pile in the South Parking Lot (W-C, 1991).</p> <p>Soil samples were collected outside the footprint of the excavated soils. The concentration of TPH in soil at SB06A2-2 exceeds RSR criteria.</p> |
| Building 58 and<br>Associated Satellite<br>Accumulation Areas    | Waste jet fuels              | Constructed in 1967   | Waste 1,1,1-TCA and waste jet fuels were stored in satellite accumulation areas located in the building. Oil was reportedly observed in subsurface soil during pile driving for construction of the building (W-C, 1991). This area was used for open storage in the 1950s and 1960s.   |
| Building 9 Former<br>USTs  | Gasoline                     | Shown on maps as early as 1931. Four tanks removed in 1989 and two tanks removed in 1995. | Fire maps indicate gasoline USTs in the area southeast of Building 9 and north of Building 10 (AFM FIC, 1931). A total of six tanks were located in this area: two 2,500-gallon unleaded gasoline tanks, two 3,000-gallon gasoline tanks, and two 3,000-gallon unleaded gasoline tanks (ABB-ES, 1996). Sampling determined that no concentrations of contaminants exceed RSR criteria.  |



| Building Number  | Name of Petroleum Product(s)              | Date of Storage, Release, or Disposal | Remedial Actions   |
|--|---|---------------------------------------|--|
| Building 52 Former UST                                 | Oil                                       | Abandoned in place in 1969            | A 1,000-gallon oil UST was located beneath Building 52 until it was sand filled and abandoned in 1969 (W-C, 1991). One soil boring (SB08J1-1) adjacent to the UST found no concentrations of detected analytes greater than the RSR numerical criteria.  |
| Building 17  | No 4. fuel oil                            | 1952 – late 1980s                     | A 10,000-gallon aboveground storage tank that contained No. 4 fuel oil was used to supply fuel to a boiler located in this building. No concentrations of detected analytes in soil are greater than the RSR numerical criteria.   |
| ASTs near Building 44                                  | Oil-alum<br>Methanol<br>Fuel Oil #6       | Unknown                               | Three ASTs were located in this area: a 10,000-gallon oil-alum tank was transferred from its location near Building 13 in 1988; a 5,000-gallon methanol AST; and a 400,000-gallon Fuel Oil #6 AST. There is no evidence of a release.  |
| Fuel, Lubricating, and Hydraulic Oils near Building 69 | Fuels<br>Lubricating oil<br>Hydraulic oil | 1980 - 1991                           | Fuels and lubricating and hydraulic oils were stored near former Building 69. Reportedly, less than 13,750 gallons (at any given time) of these fluids were stored in 55-gallon drums in this area (ABB-ES, 1996). There is no evidence of a release.  |
| Former Pits or Lagoons - North Parking Lot             | Fuels                                     | 1940s                                 | Aerial photography from 1943 (USEPA, 1990) indicates the presence of possible pits or small lagoons in the North Parking Lot. In 1944, Building 2 was expanded to the northwest, and during the expansion this area was likely filled. No disposal history for this area is available. Analytical results from samples collected in this area indicate fuel-related contaminants. Concentrations of arsenic and TPH in soil exceed RSR criteria. |

| Building Number                                  | Name of Petroleum Product(s)    | Date of Storage, Release, or Disposal | Remedial Actions  |
|--|---------------------------------|---------------------------------------|---|
| Shed North of Building 12 Used to Store Cuttings | Metals cuttings<br>Machine oils | 1990s                                 | A shed located to the northwest of Building 12 was used to store metal cuttings in the 1990s. A former building was located in this area during the 1940s, and was used as a test house (AFM FIC, 1941) and as a mould shop (AFM FIC, 1943) Machining oils were stored in an adjacent portion of Building 12 (AFM FIC, 1943). Aerial photography from 1970 and 1980 show open storage in this area (USEPA, 1990). No concentrations of detected analytes at sample locations are greater than the RSR numerical criteria. |

**Acronyms:**

|   |   |
|---|---|
| 1,1,1-TCA = 1,1,1-trichloroethane                       | NRC = National Research Council                       |
| AST = Aboveground storage tank                          | OATP = Oil Abatement Treatment Plant                  |
| Bgs = Below ground surface                              | OF = Outfall  |
| BTEX = Benzene, toluene, ethylbenzene, and xylene       | PAH = Polynuclear aromatic hydrocarbon                |
| CDF = Cyanide Destruction Facility                      | PCB = Polychlorinated biphenyl                        |
| cis-1,2-DCE = cis-1,2-dichloroethene                    | PCE = Tetrachloroethene                               |
| Cr(VI) = Hexavalent chromium                            | RCRA = Resource Conservation and Recovery Act         |
| cVOCs = Chlorinated volatile organic compounds          | RSR = Remediation Standard Regulation                 |
| CWTP = Chemical Waste Treatment Plant                   | SAEP = Stratford Army Engine Plant                    |
| ECM = Electrochemical machining                         | SVOC = Semi-volatile organic compound                 |
| I/C = Industrial/commercial                             | TCE = Trichloroethene                                 |
| LNAPL = Light non-aqueous phase liquid                  | TPH = Total petroleum hydrocarbons                    |
| mg/kg = Milligrams per kilogram                         | USEPA = United States Environmental Protection Agency |
| NaOH = Sodium hydroxide                                 | UST = Underground storage tank                        |
| NPDES = National Pollutant Discharge Elimination System | VOC = Volatile organic compound                       |
|   | VC = Volatilization Criteria                          |

## ATTACHMENT 6

### CERCLA NOTICE, COVENANT, AND ACCESS PROVISIONS AND OTHER DEED PROVISIONS

Pursuant to the requirements for a "covenant deferral" under Section 120(h)(3)(C) of the Comprehensive Environmental Response, Compensation and Liability Act, 42 USC § 9601 *et seq.* (CERCLA), as amended by Section 334 of the 1997 National Defense Authorization Act, the following covenants, conditions, and restrictions apply to the Property. This Property has been determined to be environmentally suitable for conveyance under the Army Finding of Suitability for Early Transfer so long as the use of the Property comports with the use restrictions contained herein. The following CERCLA Notice, Assurances, Warranty, and Access Provisions, along with the Other Deed Provisions, will be placed in the deed in a substantially similar form to ensure protection of human health and the environment and to preclude any interference with ongoing or completed remediation activities.

#### 1. CERCLA NOTICE

For the Property, the Grantor provides the following notice, description, and covenant:

A. Pursuant to CERCLA section 120(h)(3)(A)(i)(I) and (II), available information regarding the type, quantity, and location of hazardous substances and the time at which such substances were stored, released, or disposed of, as defined in section 120(h), is provided in Table 2, attached hereto and made a part hereof. Additional information regarding the storage, release, and disposal of hazardous substances on the property has been provided to the Grantee, receipt of which the Grantee hereby acknowledges. Such additional information includes, but is not limited to, the following documents:

- Environmental Baseline Survey (1996)
- Remedial Investigation Report (2004)
- Administrative Record (See Attachment 2)

B. Pursuant to Section 120(h)(3)(A)(i)(III) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. §9620(h)(3)(A)(i)(III)), a description of the response actions taken, if any, on the Property is provided in Table 2, attached hereto and made a part hereof. Additional information regarding the remedial action taken, if any, has been provided to the Grantee, receipt of which the Grantee hereby acknowledges. The additional information is provided in the documents listed above in Subparagraph A.

## **2. CERCLA COVENANTS**

The Property has been conveyed prior to completion of all necessary environmental investigations, remediation and/or response actions. In accordance with the provisions of CERCLA section 120(h)(3)(C)(iii), upon the Army's, or its cleanup agent's, completion of all response actions on the Property and regulatory closure, the Army shall issue the warranty in satisfaction of CERCLA Section 120(h)(3)(A)(ii)(I). The Army, in consultation and coordination with the Grantee and the Connecticut Department of Environmental Protection (CTDEP), reserves the right to set forth any additional covenants, conditions or restrictions, as a condition to the CERCLA covenant, in accordance with applicable laws and/or regulations. In addition, the Army covenants that it shall perform any additional remediation found to be necessary after the date of the transfer.

## **3. RIGHT OF ACCESS**

A. Pursuant to CERCLA section 120(h)(3)(A)(iii), the United States retains and reserves a perpetual and assignable easement and right of access on, over, and through the property, to enter upon the property in any case in which an environmental response action or corrective action is found to be necessary on the part of the United States, without regard to whether such environmental response action or corrective action is on the Property or on adjoining or nearby lands. Such easement and right of access includes, without limitation, the right to perform any environmental investigation, survey, monitoring, sampling, testing, drilling, boring, coring, test-pitting, installing monitoring or pumping wells or other treatment facilities, response action, corrective action, or any other action necessary for the United States to meet its responsibilities under applicable laws and as provided for in this instrument. Such easement and right of access shall be binding on the Grantee, its successors and assigns, and shall run with the land.

B. In exercising such easement and right of access, the United States shall provide the Grantee or its successors or assigns, as the case may be, with reasonable notice of its intent to enter upon the Property and exercise its rights under this covenant, which notice may be severely curtailed or even eliminated in emergency situations. The United States shall use reasonable means, but without significant additional costs to the United States, to avoid and to minimize interference with the Grantee's and the Grantee's successors' and assigns' quiet enjoyment of the property. Such easement and right of access includes the right to obtain and use utility services, including water, gas, electricity, sewer, and communications services available on the Property at a reasonable charge to the United States. Excluding the reasonable charges for such utility services, no fee, charge, or compensation will be due the Grantee nor its successors and assigns, for the exercise of the easement and right of access hereby retained and reserved by the United States.

C. In exercising such easement and right of access, neither the Grantee nor its successors and assigns, as the case may be, shall have any claim at law or equity against the United States or any officer, employee, agent, contractor of any tier, or servant of the United States based on actions taken by the United States or its officers, employees, agents, contractors of any tier, or servants pursuant to and in accordance with this covenant. In addition, the Grantee, its

successors and assigns, shall not interfere with any response action or corrective action conducted by the Grantor on the Property.

#### **4. "AS IS"**

A. The Grantee acknowledges that it has inspected or has had the opportunity to inspect the Property and accepts the condition and state of repair of the subject Property. The Grantee understands and agrees that the Property and any part thereof is offered "AS IS" without any representation, warranty, or guaranty by the Grantor as to quantity, quality, title, character, condition, size, or kind, or that the same is in condition or fit to be used for the purpose(s) intended by the Grantee, and no claim for allowance or deduction upon such grounds will be considered.

B. No warranties, either express or implied, are given with regard to the condition of the Property, including, without limitation, whether the Property does or does not contain asbestos or lead-based paint. The Grantee shall be deemed to have relied solely on its own judgment in assessing the overall condition of all or any portion of the Property, including, without limitation, any asbestos, lead-based paint, or other conditions on the Property. The failure of the Grantee to inspect or to exercise due diligence to be fully informed as to the condition of all or any portion of the Property offered, will not constitute grounds for any claim or demand against the United States.

C. Nothing in this "As Is" provision will be construed to modify or negate the Grantor's obligation under the CERCLA Covenant or any other statutory obligations.

#### **5. HOLD HARMLESS**

A. To the extent authorized by law, the Grantee, its successors and assigns, covenant and agree to indemnify and hold harmless the Grantor, its officers, agents, and employees from (1) any and all claims, damages, judgments, losses, and costs, including fines and penalties, arising out of the violation of the NOTICES, USE RESTRICTIONS, AND RESTRICTIVE COVENANTS in this Deed by the Grantee, its successors and assigns, and (2) any and all claims, damages, and judgments arising out of, or in any manner predicated upon, exposure to asbestos, lead-based paint, or other condition on any portion of the Property after the date of conveyance.

B. The Grantee, its successors and assigns, covenant and agree that the Grantor shall not be responsible for any costs associated with modifications or termination of the NOTICES, USE RESTRICTIONS, AND RESTRICTIVE COVENANTS in this Deed, including, but not limited to, any costs associated with additional investigation or remediation of asbestos or lead-based paint.

C. Nothing in this Hold Harmless provision will be construed to modify or negate the Grantor's obligation under the CERCLA Covenant or any other statutory obligations.

## **6. ENVIRONMENTAL PROTECTION PROVISIONS**

The Environmental Protection Provisions (EPP) are at Attachment 7, which is attached hereto and made a part hereof. The Grantee shall neither transfer the property, lease the property, nor grant any interest, privilege, or license whatsoever in connection with the property without the inclusion of the CERCLA Deed Provisions contained herein and the EPP at Attachment 7, and shall require the inclusion of the CERCLA Deed Provisions and the EPP in all further deeds, easements, transfers, leases, or grant of any interest, privilege, or license.

## **7. POST-TRANSFER DISCOVERY OF CONTAMINATION**

A. If an actual or threatened release of a hazardous substance or petroleum product is discovered on the Property after the date of conveyance, Grantee, its successors or assigns, shall be responsible for such release or newly discovered substance unless Grantee is able to demonstrate that such release or such newly discovered substance was due to Grantor's activities, use, or ownership of the Property. If the Grantee, its successors or assigns believe the discovered hazardous substance is due to Grantor's activities, use or ownership of the Property, Grantee will immediately secure the site and notify the Grantor of the existence of the hazardous substances, and Grantee will not further disturb such hazardous substances without the written permission of the Grantor.

B. Grantee, its successors and assigns, as consideration for the conveyance of the Property, agree to release Grantor from any liability or responsibility for any claims arising solely out of the release of any hazardous substance or petroleum product on the Property occurring after the date of the delivery and acceptance of this Deed, where such substance or product was placed on the Property by the Grantee, or its successors, assigns, employees, invitees, agents or contractors, after the conveyance. This paragraph shall not affect the Grantor's responsibilities to conduct response actions or corrective actions that are required by applicable laws, rules and regulations, or the Grantor's indemnification obligations under applicable laws.