

Interim Removal Work Plan - TCE and Cr(VI) Surface Soil Removal

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Prepared for: RTX Corporation

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Project Number: UTAS Union City Interim Removal Work Plan - TCE and Cr(VI) Surface Soil Removal Introduction



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1 Introduction

On behalf of RTX Corporation (RTX), Stantec Consulting Services Inc. (Stantec) has prepared this Interim Surface Soil Removal Work Plan (Work Plan) for the removal of trichloroethylene (TCE) and hexavalent chromium [Cr(VI)] surface soil impacts at the former United Technologies Automotive Systems (UTAS) facility located at 1425 West Oak Street, Union City, Randolph County, Indiana (Site) (refer to Figure 1). This work is being performed under the Indiana Department of Environmental Management (IDEM) Voluntary Remediation Program (VRP). RTX and IDEM entered into a Voluntary Remediation Agreement (VRA) on May 20, 2021, and the Site has been assigned IDEM VRP Site Number 6201001.

1.1 Site History

The Site is the location of a former UTAS manufacturing facility (Plant) and is in a mixed commercial/industrial and residential section of Union City, Indiana. The Site is comprised of two separate properties, the "Plant Property" and the "Field Property" (refer to Figure 2) both currently owned by RTX.

The Plant Property was used by UTAS to house its primary manufacturing operations (Plant) and occupies approximately 11.74 acres of property in the southwestern quadrant of Union City, Indiana. Much of the Plant Property is fenced, including the former building's concrete floor on the southern half of the property. RTX maintains an office trailer and storage building in the north central portion of the Plant Property. The Plant Property cannot be accessed by local residents except for the northwest corner, which was historically used for parking space and remains unfenced. A portion of the Plant Property is used by Frank Miller Lumber to stage / store their product (i.e., rough sawn lumber for air drying).

The Field Property is approximately 12 acres of fenced grass land with no structures. It is adjacent to the southwest corner of the Plant Property, west of Jackson Pike and south of the abandoned Penn Central Railroad right of way. The Field Property was once used for ancillary plant functions, including virgin paint and hazardous waste storage, a Wastewater Equalization Basin, gas cylinder storage, equipment storage, and two deep water production wells. All prior structures on this property have been removed, except for two former water production wells. Excavated areas, as well as the former Wastewater Equalization Basin (VRP #6940901), have been backfilled with clean material. The Field Property is fenced and cannot be accessed by local residents and is intermittently used by Frank Miller Lumber to stage / store their product (i.e., rough sawn lumber for air drying).

Refer to the Remediation Investigation Plan (RIP) dated July 16, 2021 (VFC# 83184414) and Supplemental Characterization Report (SCR) dated October 27, 2023 (VFC# 83644088) for additional detail on Site history.



1.2 Project Background and Objectives

In October 2022, February 2023 and July 2023, surface and subsurface soil investigations were conducted at the Site to further refine and delineate primary Site contaminants of concern as defined in the IDEM approved RIP. The results of this investigation were provided in the Supplemental Characterization Report dated October 27, 2022 (VFC# 83644088). This investigation identified surface soil samples for TCE and Cr(VI) above the IDEM applicable Long Term Commercial (LTC) and Short Term Excavation (STE) published screening level on the Plant Property. Refer to Figure 3 and 4, respectively.

Based on these results, surface soil excavation has been selected to address these areas of elevated TCE and Cr(VI) concentrations in soil. The objective of this interim removal is:

- Excavate impacted surface soil from the area of soil borings SS-222 (370,000 ug/kg) and SS-243 (120,000 ug/kg) for TCE and SS-7 (1,170 mg/kg) and SS-255 (1800 mg/kg) for Cr(VI).
- Collection of confirmation soil samples from the limits of the excavation to meet the Site remedial objective of soil concentrations below the applicable published screening level.
 - TCE objective: STE 1,000,000 ug/kg (Note, there is no LTC screening level for TCE).
 - Cr(VI) objective: LTC 60 mg/kg
- Restoration of the excavation areas.



2 Scope of Work

The scope of work for the surface soil excavation includes the following project tasks:

- Utility Location and Coordination.
- Mobilization and Site Preparation.
- Traffic Control (as needed).
- Excavation and Backfill of surface soil.
- Transport and Disposal of Impacted Soil.
- Restoration of Surface.

Descriptions for each task along with anticipated quantities and scopes of work are provided in the sections below.

2.1 Utility Locate

Prior to mobilizing to the field, the selected excavation contractor will issue a request for utility location services for the work area through Indiana 811. A private utility locator will be used to locate the excavation areas within the Site boundary using ground penetrating radar (GPR) and electromagnetic (EM) locating. Previous utility locates have not identified utilities within in the excavation areas,

Should a utility be identified within an identified work area, Stantec and the selected excavation contractor will coordinate with operations personnel for the identified utility present within the work area prior to starting excavation activities. All excavations will maintain a minimum offset of five feet from all identified and located utilities unless the operators require more stringent guidelines.

2.2 Mobilization and Site Preparation

Initial field activities will include mobilization of personnel, equipment, and temporary facilities to the Site along with Site preparation for excavation activities.

Site preparation activities are anticipated to include identification of parking, on-site traffic flow of disposal trucks, equipment staging area, and decontamination areas (if required). These areas may be moved, constructed, and/or dismantled at different times throughout the course of the project.

Due to the topography, surface treatments, and limited footprint of the excavation area, no erosion controls are anticipated for this project. Stantec and the selected excavation contractor will manage the excavation area such that storm water is contained with the work zone footprint.



2.3 Traffic Control and Site Logistics

The excavation areas are within the Site boundary and security fencing. However, the excavation areas will be controlled with delineators or orange construction fencing to limit access and identify the area to prevent Frank Miller Lumber operations (forklift and foot traffic) from entering the work zone.

During off-work hours, the excavations will be barricaded, and the Site security fence will be secured to prevent entry by unauthorized personnel from entering the work zone.

2.4 Excavation and Backfill

Excavation of TCE and Cr(VI) impacted surface soil and concrete will be accomplished using a back hoe excavator or similar equipment to a depth of approximately 2-feet below ground surface (bgs). The soil will either be "live loaded" into trucks and or staged in lined roll-off boxes for transportation to an RTX approved disposal facility for hazardous waste disposal.

Once the excavation objectives have been met, clean low permeability backfill (i.e., fine grained) will be imported and placed into the excavation to within 0.5-feet of the ground surface. The anticipated area of excavation is presented on Figures 5 and 6, respectively.

2.5 Soil Sampling Activities

Grab soil samples will be collected from the sidewalls of the excavation for field and laboratory analysis. Following 329 IAC 9-6-2.6b – *Underground Storage Tanks* - *Site Assessment Sampling Requirements* as a guidance, sidewall soil samples will be collected from undisturbed soil at the limits of the excavation. Soil samples will be collected at a rate of 1 per 20 feet of perimeter distance. Sidewall samples will be collected at the midpoint of the surface and base of the excavation.

TCE excavation samples will be field screened using a Photoionization Detector (PID). The PID field readings will be used as a guidance to estimate the limits of the excavation. Soil samples will be collected using U.S. EPA SW-846 Method 5035A and submitted to the laboratory for analysis by U.S. EPA SW-846 Method 8260.

Cr(VI) excavation samples sidewall samples will be collected on 20 foot intervals along the limits of the excavation and submitted to the laboratory for analysis by U.S. EPA SW-846 Method 7199.

Additionally, discrete grab samples will be collected from the base of the excavations. These data will be used to inform the Site Soil Management Plan (to be prepared prior to submittal of the Remediation Closure Report) and not for excavation delineation purposes.

Soil samples will be collected following the IDEM approved Quality Assurance Project Plan and Sampling Analysis Plan (RIP – Appendix I, VFC# 83184414) and submitted to Eurofins in Barberton, OH.



2.6 Soil Management, Transport and Disposal

As presented in section 2.4, excavated surface soils will be live-loaded for transportation and disposal at an approved RTX hazardous waste receiving facility The impacted soils may be managed in road haul trucks and/or roll-off boxes, depending on transportation logistics.

In the event that temporary staging or stockpiling of all soil is necessary, the soil will be managed within lined roll-offs boxes and covered at the conclusion of each workday to prevent contact with precipitation.

The Site waste generation status will be changed to Large Quantity Generator prior to the start of excavation activities and will return to Small Quantity Generator or Very Small Quantity Generator status at the completion of the excavation work.

2.7 Surface Restoration

The excavations will be restored to pre-excavation conditions or with gravel and graded with to match surrounding contours at the conclusion of excavation and backfill activities.

2.8 Health and Safety

The existing site-specific health and safety plan (HASP) will be reviewed and updated (as applicable) to cover the field activities described herein. The HASP will outline potential hazards to field personnel and subcontractors during the field activities.

Health and safety tailgate meetings will be held each morning to discuss work activities and associated hazards. Additional safety breaks will be held anytime work activities change or deviate from the planned scope of work or significant changes to site logistics are required. These meetings will be utilized to promote awareness of health and safety concerns and to help promote incident-free operations throughout the duration of the project.

2.9 Field Documentation

Oversight and documentation services will be conducted for the entirety of the project. Personnel will be present at the Site every day of field operations and will provide daily updates of work activities, quantities of material, and forecasted scheduling.

Field documentation will include:

- Daily activity logs and field notes describing work activities.
- Estimated quantities of impacted soil removed from the excavation.
- Site photographs.



- Soil transport and disposal information, including waste manifests, driver logs, and/or weight tickets.
- Material bills of lading.



3 Project Schedule

Upon IDEM approval of this Work Plan the excavation activities will be scheduled. IDEM will be notified once the schedule for field work has been set.



Figures













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Legend

- Soil Sample (2022 to 2023)
- Soil Sample (2013 to 2022)
- Soil Sample (Pre 2013)
- - UTAS / RTX Property Boundary
- VRP and Property Boundary
- Closed VRP Areas
- ----- Pearl Street Excavation
- - Hexavalent Chromium Removal Surface Soil Estimate

