



Long-Term Stewardship Assessment Report

Carpenter Technologies & Former Dana Corp

EPA ID #: PAD002344315/PAD002343630

Reading, PA

Assessment Date: May 11, 2022

Report Date: May 31, 2022

Introduction: Long-term stewardship (LTS) refers to the activities necessary to ensure that engineering controls (ECs) are maintained and that institutional controls (ICs) continue to be enforced. The purpose of the Environmental Protection Agency (EPA) Region 3 LTS program is to periodically assess the efficacy of the implemented remedies (i.e. ECs and ICs) and to update the community on the status of Resource Conservation and Recovery Act (RCRA) Corrective Action facilities. The assessment is conducted in twofold, which consists of a record review and a field inspection, to ensure that the remedies are implemented and maintained in accordance with the final decision.

Site Backgrounds: This LTS encompasses two facilities:

1. the former Dana Corporation PAD002343630 located at Robeson & Weiser Streets Reading, PA 19612 (Dana), and
2. the Carpenter Technology Corporation PAD002344315 located at 101 West Bern Street Reading, PA 19612 (CarTech).

The reason for this is that CarTech purchased the Dana property (with the exception of Lots 6&7 as shown on attached Reading Industrial Complex lot figure) and is the owner/operator of activities and use at both locations. Location maps can be found on EPA's CarTech RCRA Corrective Action website <https://www.epa.gov/hwcorrectiveactionsites/hazardous-waste-cleanup-carpenter-technology-corporation-reading>.

The combined acreage is approximately 144-acres (104-CarTech, 40-Dana). Dana operated as manufacturer of truck frames from around 1920 until 2000. CarTech has been in operation primarily as a specialty metal manufacturer since 1889 and consists primarily of office, manufacture, wastewater treatment, and maintenance buildings.

On September 29, 1998 EPA issued a Permit Modification for Corrective Action (CAP), which equated to a Final Decision, to CarTech selecting pumping and treating contaminated groundwater via a series of recovery and leachate collection systems. The EPA notified CarTech the CAP requirements would continue in effect until EPA issued new requirements or corrective action was completed via letter dated December 29, 2008.

On September 26, 2017 EPA issued a Final Decision and Response to Comments (FDRTC) for Dana selecting compliance with land and groundwater use restrictions.

Mapping: The EPA website maps are accurate and include the Facilities on their individual webpages (CarTech and Dana). Downloadable geospatial PDF maps are available on EPA's corrective action facility webpages under the "Reports, Documents and Photographs" section.

Current Site Status/Use: CarTech continues to operate as a specialty metal manufacturer. The facility use remains as it was during the assessments and permit issuance phases. Dana remains primarily unused except for some storage by CarTech.

Institutional Controls (ICs):

As per the 2017 FDTRC, the required ICs at Dana are:

Soils: compliance with and maintenance of land use restrictions to limit the use of the property for non-residential purpose only.

Groundwater: groundwater shall not be used for any other purpose than the operation, maintenance, and monitoring activities currently being conducted at the Facility and required by EPA, unless it is demonstrated to EPA that such use would not pose a threat to or adversely affect or interfere with the final remedy and the Facility obtains prior written approval by EPA for such use;

No new wells shall be installed on the Facility property unless it is demonstrated to EPA that such wells are necessary to implement the final remedy and the Facility obtains prior written approval from EPA to install such wells.

Additional: Whenever requested by EPA and/or PADEP, the then current owner shall submit to EPA and/or PADEP a written certification stating whether or not the groundwater and land use restrictions are in place and being complied with; EPA, PADEP and/or their authorized agents and representatives, shall have access to the Facility property to inspect and evaluate the continued effectiveness of the final remedy and if necessary, to conduct additional remediation to ensure the protection of the public health and safety and the environment upon the final remedy selection in the FDRTC.

ICs at CarTech include:

1. The CAP which is listed in the IC checklist as a type of IC, including the following reporting requirements to EPA:
 - a. Discovery of a release which is adversely affecting, or may adversely affect human health or the environment, which may need to include proposed interim measures;
 - b. Immediate reporting of emergencies;
 - c. Twenty-four hour noncompliance reporting to the Regional Administrator;
 - d. Reporting planned physical alterations and/or anticipated noncompliance.
2. Discharge permits are also listed in the IC checklist as a type of IC. As referred to in the CAP, CarTech requires a NPDES Permit for their industrial water treatment plant (WTP) which includes effluent from the CAP P&T and leachate collection system.

Engineering Controls (ECs):

The EC required at CarTech is pumping and treating contaminated groundwater via a series of recovery and leachate collection systems. These constitute groundwater control and barriers per the EC Checklist.

There are no ECs required at the Dana facility.

Reporting Requirements/Compliance: Groundwater monitoring at CarTech is performed semi-annually. Results are submitted in a semi-annual Corrective Action Groundwater Monitoring Results report, the most recent dated November 12, 2021 (*note EPA did not have on file results since November 2019 and CarTech resubmitted up-to-date results via email on 5/12/22). CarTech is in compliance with this requirement. Facility monitoring wells include:

89-01	92-04D
92-07	92-05D
89-07	

The CAP also requires evaluation of the selected remedy via a progress report on remedy performance every 3 years.

Per the CAP notification requirements to EPA, CarTech has most recently notified EPA of planned physical alterations on September 27, 2019. No other reporting requirements were identified that needed to be submitted. CarTech is in compliance with this requirement.

To date, EPA has no knowledge of IC required reporting submittals by Dana. Dana is in compliance with the reporting requirement.

Long-term Stewardship Site Visit: EPA performed an LTS field inspection with PADEP and CarTech representatives on May 11, 2022. EPA coordinated the LTS site visit with the PADEP GME spilt sampling event. An attendee list is attached. The visit started at approximately 9 AM and EPA completed around 1:30 PM. PADEP remained on-site for an unknown amount of time.

The LTS visit began with a meeting with introductions, a brief explanation of the LTS initiative, and questions/discussions. Two questions PADEP rose were the location/impact of supply wells on the P&T system (particularly supply well 7) and how is CarTech evaluating the P&T system.

Immediately after the brief meeting, a site walk occurred to view the monitoring and pumping wells while preparing for purging and sampling. During the site walk, all pumping and monitoring wells were visibly checked and no issues were identified. Additionally, CarTech inquired about the status of their petition under the CAP to revise the cleanup requirements.

Afterwards, EPA and PADEP personnel separated so PADEP could continue the split sampling for the GME with SSM and EPA reconvened with CarTech to discuss LTS information. The LTS IC/EC checklist questions were reviewed and pertinent items came up during the review and discussion are identified in the notes/discussion section below.

Upon completion of the discussion, all groups reconvened to provide updates. EPA, PADEP, and CarTech toured the supply wells to address PADEP's question. It did not appear that based on location of supply well 7 that there would be an impact on the P&T system. EPA will discuss with PADEP to determine if additional follow up by CarTech is required to confirm. During this, the Dana property was pointed out and explained that it remains primarily unused except for some storage by CarTech. The site visit concluded afterwards.

Notes/Discussion: The LTS IC/EC checklist questions were reviewed and the following pertinent items came up during the review and discussion (and email follow up afterwards on 5/12/22):

1. EPA explained the desire to implement the required ICs at Dana in addition to recommending similar ICs be enacted at CarTech (primarily non-residential use and groundwater use restrictions).
 - a. CarTech could not locate EPA's FDRTC documents for Dana in their files. Project Management changeover has likely resulted in incomplete file retention.
 - b. A possible issue exists with applying the groundwater use restriction wording at Dana to CarTech, since CarTech uses water from supply wells for operational activities.
2. EPA noted missing semi-annual Corrective Action Groundwater Monitoring Results reports. Project Management changeover has likely resulted in incomplete files. Switching to electronic submissions was agreed to be possible.
3. EPA and CarTech agreed on the status of the following ICs/ECs:
 - a. The P&T system was operating (noted by CarTech to be 55 gpm – 11 gpm/well) and piped to WTP
 - b. The leachate collection trench is operating and piped to WTP
 - c. CarTech adheres to the requirements of the CAP and NPDES Permits
4. CarTech's IC/EC summary mentioned additional IC/ECs including:
 - a. Soil cover, macadam cover, buildings, impermeable clay layer
 - i. These are not required ECs per the EPA CAP, but EPA will determine if the Administrative Record has implied maintenance of these ECs not clarified in the CAP.
 - b. Site fencing (noted to not completely encompass Facility)
 - i. EPA agrees this IC is beneficial but clarified it is not a required IC per the EPA CAP
5. CarTech reasons that previous project managers meant to utilize the semi-annual reports to satisfy both the media cleanup requirements and evaluation of selected remedy requirements in the CAP. EPA does not agree the information submitted in the semi-annual Corrective Action Groundwater Monitoring Results reports satisfies the evaluation of selected remedy requirement in the CAP.

Conclusions and Recommendations: EPA has determined that the remedy ICs have not yet been fully implemented and completion of additional activities are necessary to eliminate or reduce exposure of potential receptors to known contamination.

The following course of action is recommended to address incomplete activities for LTS:

1. CarTech should provide EPA with current semi-annual Corrective Action Groundwater Monitoring Results reports (completed via email on 5/12/22)
 - a. EPA will request future submittals be sent electronically with copies to PADEP
2. EPA should Provide Dana FDRTC and CarTech permit documents to CarTech for review (completed via email on 5/12/22)
 - a. CarTech should review and plan path forward to complete FDRTC required ICs
 - b. CarTech should research and understand ownership relationship between the Dana and CarTech properties to determine if ICs required at Dana could be recorded under a single covenant encompassing both properties
 - c. EPA will research PAD ID# status of Dana
3. EPA will research the status of CarTech's petition under the CAP to revise the cleanup requirements
4. EPA and CarTech should perform a more thorough correspondence file review to fill gaps to determine if the CAP every 3-year progress report on remedy performance requirement was modified during previous project management oversight or if has not been submitted in accordance with the CAP