

14496 Sheldon Road, Suite 200, Plymouth, MI 48170 Telephone: (734) 453-5123 Facsimile: (734) 453-5201 www.CRAworld.com

May 8, 2012

Reference No. 058516

Transmitted via E-mail

Mr. Chris Black U.S. Environmental Protection Agency, Region 5 Land and Chemicals Division 77 West Jackson Blvd., DE-9J Chicago, IL 60604-3590

Dear Mr. Black:

RE: Response to USEPA Technical Review of the Sampling and Analysis Plan and Fundamental Quality Assurance Project Plan RCRA Corrective Action Performance-Based Voluntary Agreement Van Buren Township Landfill, Van Buren, Michigan

Based on discussions between the U.S. Environmental Protection Agency Region 5 (USEPA) and the Revitalizing Auto Communities Environmental Response Trust (RACER), and on behalf of RACER, please find a Response to USEPA's April 2, 2012 Technical Review of the draft Sampling and Analysis Plan and Fundamental Quality Assurance Project Plan dated February 2012. USEPA's comments are provided for reference followed by RACER's response.

Please contact Dave Favero or myself if you would like to discuss this matter further. Thank you.

Yours truly,

Christopher J. Meincke, P.E.

CJM/KTA/ds/Rpt-2D/Det. Attachment A: Response to USEPA Comments on SAP/QAPP

cc: Grant Trigger, RACER Dave Favero, RACER



ATTACHMENT A

RESPONSE TO USEPA TECHNICAL REVIEW OF SAP/QAPP RCRA CORRECTIVE ACTION PERFORMANCE-BASED VOLUNTARY AGREEMENT VAN BUREN TOWNSHIP LANDFILL, VAN BUREN, MICHIGAN

USEPA GENERAL COMMENT

As detailed in the Performance Based Corrective Action Agreement (Agreement), an investigation should be performed to identify the nature and extent of any releases of hazardous waste and/or hazardous constituents at or from the site. It is unclear how collection of soil and groundwater samples from seven locations will allow this objective to be met. It is acknowledged that the SAP/QAPP identifies the proposed scope of work as an initial effort designed to confirm potential releases, determine the size of the landfill site and characterize the wide range in types of suspected (and potentially unknown) wastes disposed. However, several data gaps were identified and the following information was not presented in the SAP and QAPP: 1) disposal locations and practices; 2) the geology and hydrogeology of the site; 3) groundwater uses in the area; and, 4) whether contamination is migrating offsite. Therefore, a more extensive multi-media sampling effort is likely warranted to address these numerous data gaps. The data resulting from the proposed initial scope of work should help in formulating subsequent investigations. Specific concerns are discussed in the following comments.

RACER General Comment

As previously discussed with USEPA, RACER is participating in RCRA Corrective Action per the Performance-based Voluntary Agreement for this Site to adequately characterize and select a remedy suited to protecting human health and the environment while recognizing the limited funds available as set forth in the Environmental Response Trust Consent Decree and Settlement Agreement Among Debtors, the Environmental Response Trust Administrative Trustee, the United States, and the Saint Regis Mohawk Tribe, Case No. 09-50026 in the United States Bankruptcy Court for the Southern District of New York (Consent Decree) to accomplish those goals. The March 2011 Remediation Cost Estimate Summary (RCES), which was the basis for funding for this project as identified in the Consent Decree, identified a remedy consisting of perimeter monitoring and capping the portion of the Site where disposal activities were believed to have occurred. RACER, in discussions with USEPA beginning in 2011, has proposed an approach where the extents of the historical disposal cells would be investigated to evaluate if any releases from the disposal cells have occurred by characterizing on-site soil and groundwater, likely in multiple stages, as necessary. As previously discussed with USEPA, RACER's goal is to work with USEPA to streamline the standard RCRA process in order to focus limited funds on the substance of the investigation and remedial activities, rather than significant reporting, administrative, and documentation efforts that may not improve the understanding, quality of results, or protectiveness of the remedy. Due to the historical nature of the disposal activities (prior to 1970), any ongoing releases to on-site soil and groundwater should be detectable in on-site groundwater if migration is a potential concern.

The Scope of Work (SOW) identified in the Sampling and Analysis Plan and Fundamental Quality Assurance Project Plan is the first stage of the field investigation and will be supplemented as appropriate in future stages. (1) The approximate disposal locations and practices were described in the draft Current Conditions Report dated October 11, 2011 (CCR) and identified as Areas of Interest (AOIs). (2) Known information regarding the regional/site geology and hydrogeology where presented in the CCR. Additionally, site-specific geology and hydrogeology information from RACER's nearby Willow Run Powertrain Site will be incorporated when designing sampling strategies. (3) Nearby groundwater uses were discussed in the 2007 Phase I Environmental Site Assessment (ESA) previously provided to USEPA and included as an appendix in the CCR. (4) The monitoring wells proposed in this first stage of investigation will be used to determine site specific groundwater flow directions, and additional monitoring wells may be installed in future stages to further characterize groundwater quality and flow.

Specific comments from USEPA are presented below followed by a response from RACER:

Comment No. 1

According to the SAP/QAPP, seven areas of interest have been identified at the site, and are the focus of the proposed investigation. Based on review of the Phase I Environmental Site Assessment (ESA) dated February 13, 2007, it appears that disposal of materials/wastes at the site was wide-spread, and the potential for migration of contamination from disposal areas is unknown. Further, several areas of disposal in addition to the seven areas of interest were identified in review of the Phase I ESA (including 1,500 to 1,800 gallons of sludge generated from treatment of crankcase oils potentially disposed on a daily basis at unspecified locations; seeping leachate along Michigan Avenue; incinerator waste in a peripheral ditch along the north side of the site; processed and unprocessed incinerator waste disposed in an unlined trench east of the entrance road; incinerator residue and domestic waste deposited into trench water on the far northwest corner of the site; etc.), and it is unclear whether these areas/sources were considered in development of the SAP. Based on these apparent data gaps, additional sampling will likely be necessary (at this time or as part of a subsequent investigation) to allow for a site-wide characterization that identifies the nature and extent of potential releases of hazardous waste and/or hazardous constituents at or from the site in accordance with the Agreement.

In addition, the SAP/QAPP includes several statements regarding the preliminary nature of the investigation and the potential need for additional data. However, triggers for these additional investigation components, beyond general statements regarding data review and proposals for new data collection activities (e.g., first paragraph of Section 2.1, Soil Boring and Monitoring Well Installation; first paragraph of Section 2.2, Test Pit Activities) are not included. Revise the SAP/QAPP to include specific criteria (e.g., "if/then" statements) that will trigger the need for additional investigation.

RACER Response

The seven AOIs identified in the CCR and presented on the SAP/QAPP sample matrix represent the approximate areas of historical disposal activities, including five disposal cells identified in the Phase I ESA, miscellaneous potential disposal areas identified during the geophysical survey, seeping leachate along the US-12 right-of-way (ROW) and other disposed of materials identified in Comment No. 1. While specific Disposal Cell references were not available for the potential disposal of sludge from crankcase oils and other miscellaneous wastes, if they were disposed of regularly, they most likely were disposed of in one or more of the five disposal cells. Additional potential miscellaneous disposal areas are identified as AOI 6 and AOI 7. These areas will all be investigated as part of the first stage of field investigation either through the physical inspection of disposal cell construction materials or sampling analysis of soil, groundwater and/or surface water samples. The results will be presented to

and discussed with USEPA and additional sampling will be proposed to USEPA, as appropriate.

No current or historical on-site soil or groundwater data is available for review, and thus, any assumptions on what results might be observed would be premature. Rather than developing numerous possible scenarios and corresponding actions for additional delineation, RACER proposes to perform the first stage of field investigation, present the results to, discuss the results with, and propose next steps to USEPA.

Comment No. 2

Based on review of the types of wastes disposed at the site as documented in the SAP/QAPP and Phase I ESA, it appears that a full suite of laboratory analyses are warranted to fully determine the nature of contamination at the site. At a minimum, the following analyses appear warranted in addition to those proposed:

• Dioxins/furans in soil samples to address incinerator waste and waste burning activities;

• Pesticides/herbicides in soil and groundwater samples given the unknown nature of materials disposed at the site.

Revise the SAP/QAPP to propose the aforementioned analyses or clarify why they are not necessary.

RACER Response

Based on discussions between USEPA and RACER on November 21, 2011, we understood that we were in agreement that any potential remedy would most likely not include digging up materials included in the disposal cells for off-site disposal. As removal actions are not anticipated, it is not cost effective to characterize the material contained in the disposal cells at this time. Characterization of this material may be warranted in the future. Soil and groundwater sample analysis was also discussed on November 21, 2011, and it was identified that dioxins/furans in soil and pesticides/herbicides in soil and groundwater would not be analytical parameters at this time. The increased costs associated with the additional analysis are not warranted at this time. However, the SAP/QAPP will be revised to indicate that if incinerator ash or other burned materials are identified during soil boring installation activities outside of the approximate disposal cell areas, additional samples will be collected for analyses of dioxins/furans. Additionally, groundwater samples from downgradient monitoring wells may be analyzed for additional parameters in the future once groundwater flow directions are established to determine if impacted groundwater is migrating off-site.

Comment No. 3

As discussed briefly in Section 2.1, the SAP/QAPP indicates that shallow monitoring wells will be screened to straddle the water table and that additional deeper wells may be proposed and installed based on the conditions encountered in the field (i.e., visual, olfactory, screening with a photoionization detector [PID]). It is also indicated that these wells will be sampled quarterly to evaluate seasonality. However, little additional detail is provided regarding groundwater characterization.

It is unclear how the groundwater component of the conceptual site model will be completed in the absence of additional data. It is also unclear how the potential for migration, both laterally and vertically, will be evaluated should data resulting from the initial characterization activities indicate potential groundwater impacts. The installation of additional shallow and deep monitoring wells during a

subsequent effort may be necessary to characterize the lateral and vertical extent of potential contamination and to evaluate vertical hydraulic gradients.

RACER Response

RACER acknowledges that it is likely that additional monitoring wells and groundwater sampling will be required in future stages. RACER also plans to incorporate subsurface information from the nearby Willow Run Powertrain Facility which has comprehensive soil boring and monitoring well information. Once site groundwater depth and flow directions are determined during this first stage, additional monitoring wells may be required to further evaluate groundwater quality and flow.

Comment No. 4

The SAP/QAPP discusses in several sections the use of a PID for screening of soils prior to sample collection. However, it is unclear how the screening will be performed and how the screening results will be used (e.g., to bias the sample collection interval). Revise the SAP to clarify the PID screening process and use of the results.

RACER Response

As the groundwater is anticipated to be at approximately 5 to 6 feet below ground surface (bgs) and soil samples are to be collected from 0 to 2 feet bgs, and the two-foot interval immediately above the water table. If PID results are detected at higher concentrations than identified in an interval not planned for sampling, an additional sample may be collected if there is evidence of impact. The SAP will be revised and associated SOPs will be added to reflect the above change.

Comment No. 5

The SAP/QAPP proposes the installation and development of groundwater monitoring wells in several sections. However, monitoring well installation and development protocols are not provided. Revise the SAP/QAPP to include detailed monitoring well installation and development protocols.

RACER Response

A field method guideline for monitoring well installation and development will be included in the Revised SAP/QAPP.

Comment No.6

Section 2.2, Test Pit Activities, of the SAP/QAPP lacks sufficient detail regarding the test pit procedures. The following are examples of information that should be provided in the SAP/QAPP to facilitate evaluation and implementation of the activities by the field team:

- The proposed size of the test pits (lateral and vertical);
- Criteria for potential test pit expansion based on observations during the initial excavations, and the size of step-out excavations;

• How the potentially hazardous waste encountered during excavation will be "temporarily staged" so as to minimize potential for cross-contamination (i.e., standard operating procedure for staging);

• How it will be determined whether additional sampling or characterization activities are necessary (i.e., "if/then" statements); and,

• How results of the test pit activities will be used.

In addition, it is unclear why soil samples will not be collected from the test pits which presumably serve as sources of contamination. It appears that collection of soil samples from these areas will assist in determining the nature and extent of contamination as well as contaminant migration potential at the site. Revise the SAP/QAPP to provide the information specified above. In addition, clarify why collection of soil samples from the test pits is included as only a potential supplemental activity.

RACER Response

Test pit size and shape details are not available at this time. Test Pits will be exploratory in nature and will be installed to determine the edges of the former disposal cells and visually characterize the contents of the former disposal cells and are also dependent upon the equipment used. Once the edge of a former disposal cell is located, the test pit may extend up to 10 feet in any direction to determine the consistency of disposal cell sidewall construction and determine if material was buried outside the limits of the disposal cell. During installation of the test pits, surficial soil will be removed and placed adjacent to the point of generation. Spoils and waste removed from the test pit will be staged temporarily on poly tarping and placed back into the test pit from which it was removed. The test pit will not extend below any water identified in the disposal cells. Field observations of material removed from and observed in the test pit (elevated PID results, staining, significant debris/foreign material) will be identified and documented.

In future stages, investigation of the disposal cells may be supplemented with soil boring installations to determine the bottom depth and depth to the confining clay layer beneath the disposal cells. The SAP will be revised to reflect the details above.

As discussed above, at this time the likely potential remedies do not include removal of the disposed materials, and due to the heterogeneous nature of the materials, sampling of disposal cell contents would not generate useful information for determining future remedies. The investigation of soil and groundwater on the Site is more appropriate to evaluate if there has been a release from the disposal cells/areas and if there is a continuing source contributing impacting groundwater quality.

Comment No. 7

Section 3.3, Groundwater Sampling, provides details associated with groundwater sample collection. It is noted that the proposed procedures are inconsistent with EPA's 1996 Low-Flow (Minimal Drawdown) Groundwater Sampling Procedures (low flow guidance). For example, the SAP/QAPP proposes the collection of volatile organic compound (VOC) samples using a peristaltic pump. Use of vacuum-based sample collection equipment can cause degassing which may resulted in altered pH and alkalinity data, as well as the loss of VOCs, and is discouraged. Revise Section 3.3 to include the use of equipment appropriate for the collection of VOC samples (e.g., bladder pump) and to otherwise match the procedures identified in EPA's low-flow guidance. It is also noted that this section does not specify the depth(s) of the intake for the groundwater sample collection device. While it is understood that the depth to groundwater is uncertain, revise the SAP/QAPP to specify the procedure that will be followed to determine the depth of the sample intake. In addition, it is noted that Section 3.3 indicates that each groundwater monitoring well will be developed prior to the first sample collection event. However, no specification regarding the minimum time between well development and sampling is provided. It is recommended that the monitoring wells be sampled a week or more following development to allow for equilibration and collection of representative groundwater samples.

RACER Response

The EPA's 1996 Low-Flow guidance states that peristaltic pumps can be used for low-flow sampling, but should be limited to shallow groundwater. For groundwater less than 25 feet bgs (shallow groundwater), use of a peristaltic pump is generally accepted for sample collection for VOC analysis (including other EPA Region V Corrective Action Sites). The water table is anticipated to be less than 10 feet bgs at this Site.

Notwithstanding the response above, the use of bladder pumps will be specified in the SAP for this stage of the investigation.

The monitoring wells are to be constructed using a maximum of 10-foot screens and the depth of the intake for the groundwater sample collection device will be set at the middle of the saturated thickness of the screened interval. The well screens will be set into the underlying clay layer and straddle the water table, if possible. The SAP will be updated to specify this procedure.

The SAP will also be revised to specify that the monitoring wells will be sampled a minimum of 1 week following well development.

Comment No. 8

Section 3.7, Spoils/Investigative Derived Waste Management (Page 8) states that following completion of the investigations and receipt of laboratory results, the soil cuttings and fluid will be characterized for offsite disposal. It is not clear if sample from the investigative derived waste (IDW) containers will be sampled and analyzed for waste characterization or if waste will be characterized based on the project sample results. Revise the SAP/QAPP to clarify this. If samples will be collected directly from the IDW, revise the SAP/QAPP to indicate what parameters the samples will be analyzed for and to indicate what procedures will be used to sample the IDW.

RACER Response

The SAP will be revised to state that composite samples of IDW will be collected and analyzed for TCLP VOCs, TCLP SVOCs, TCLP metals, and PCBs as required by the disposal facility. If investigation samples show potential concentrations of concern for disposal purposes, discrete samples may be collected from the select containers to determine if alternative disposal methods are required.

Comment No. 9

Section 6.0, Reporting, indicates that data resulting from the proposed activities will be compared to Michigan Department of Environmental Quality Operational Memorandum No. 1 tables (Part 201 Criteria). In addition to these criteria, ensure that the data are compared to EPA's Maximum Contaminant Levels (MCLs) and Regional Screening Levels (RSLs). Also, ensure that the laboratory reporting limits are capable of meeting all screening criteria. Finally, ensure that the report includes an assessment of all data and recommendations for follow-on activities, as necessary.

RACER Response

The SAP/QAPP will be revised to state that in addition to the Part 201 criteria, the data will be compared to EPA's MCLs and RSLs.

Comment No. 10

The SAP/QAPP does not provide the level of detail as required by EPA Requirements for Quality Assurance Project Plans (EPA QA/R-5), dated March 2011. For example:

• The SAP/QAPP does not provide sufficient rationale for the sampling design. It should be explained why the number of samples to be collected, the depths at which they are collected, the proposed analyses are sufficient to meet project goals. [QA/R-5 Section 3.3.1]

- The SAP/QAPP does not specify the acceptance criteria for field and laboratory quality control samples. [QA/R-5 Section 3.3.5]
- The SAP/QAPP does not discuss any assessments that will occur or what types of reports will be submitted to management. [QA/R-5 Section 3.4]
- The SAP/QAPP does discuss in detail how data will be reconciled with the project objectives. Methods to analyze the data and determine if there are possible outliers or anomalies with the data should be specified. [QA/R-5 Section 3.5.3]

While it is noted that the QAPP/SAP is not intended to meet all QA/R-5 requirements, revise the SAP/QAPP to briefly address each component and substantially meet QA/R-5 requirements.

RACER Response

The SAP/QAPP will be revised to briefly address QA/R-5 requirements, however, the intent of the SAP/QAPP was to provide necessary QA without preparing an extensive plan and to address each data collection event individually, amending/supplementing the SAP/QAPP as necessary for additional stages of work, or analysis of parameters not previously considered.

Comment No. 11

An analytical laboratory is not specified. Therefore laboratory specific information is not provided (e.g., standard operating procedures, laboratory specific method detection and reporting limits). This information is necessary to ensure that the resulting data are suitable to support future evaluations. Revise the SAP/QAPP to specify the laboratory that will be used and to provide all related laboratory specific information.

RACER Response

RACER intends to use ALS Holland for analytical services for the Van Buren Landfill Site. The SAP/QAPP will be updated with laboratory-specific SOPs, method detection and reporting limits.

Comment No. 12

Table 2.2, Summary of Sampling and Analysis Program, does not include trip blanks for water samples. A trip blank should be included in each cooler containing water samples for VOC analysis. Revise the table to include trip blanks.

RACER Response

Acknowledged. Table 2.2 will be updated with a trip blank included in each cooler containing water samples for VOC analysis.