

Response to NJDEP Conditions for Approval Dated April 1, 2013
Remedial Investigation Report - March 2013
Site 16; Linden Avenue East, Jersey City, New Jersey

Tetra Tech, on behalf of PPG Industries, Inc. (PPG) and Shaw Environmental (a CB&I company), has prepared the following responses to the NJDEP comments for the Site 16 Remedial Investigation Report conditions for approval letter received on April 1, 2013. A response to each of the comments has been provided below each comment in bold text.

Tetra Tech understands that the RIR is administratively complete and is approvable pending the following conditions is met:

1. PPG/Tetra Tech will finalize and resubmit the RIR to include the below listed corrections and submit the final RIR to the Department consistent with the timeframes established in the Master Schedule. Items to be addressed in the final RIR include:

- a. Submittal of an updated Case Inventory Document stating that additional remedial investigation is being conducted;

Response: Tetra Tech will update the Case Inventory Document to say “Additional remedial investigation is being conducted” in the current status column for both soil and groundwater.

- b. Submittal of an updated RIR form consistent with the delineation limitations identified below;

Response: Pending clarification of the delineation items listed in the NJDEP letter below, Tetra Tech will update the RIR form.

- c. Inclusion and identification of the asphalt cap interim remedial measure (IRM) located on the north side of the warehouse building on a figure in the report;

Response: Tetra Tech will identify the asphalt cap IRM on the appropriate figures within the RIR and will include a sentence regarding this IRM in Section 1 of the RIR, such as “The first IRM conducted at Site 16 included fencing and paving of the access road to the north of the Site in 1992 to reduce potential exposure to CCPW-impacted soils.”

- d. Identification of COPR in boring 016_K013 on Figure 7A;

Response: Tetra Tech has reviewed Figure 7A and the map appears too accurately to identify COPR within boring 016_K013. Tetra Tech and CB&I requests further clarification from NJDEP on this comment.

- e. Identification of the vanadium exceedance in monitoring well 016_MW07 on Figure 9;

Response: The vanadium values of 2U and 84.1 ug/L will be added to the tag for 016_MW07 on Figure 9.

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- f. Submittal of full data deliverable packages and electronic data deliverables pursuant to N.J.A.C. 7:26E-1.6(a)5.

Response: Tetra Tech provided the full data deliverable package as Appendix F for the March 5, 2013 submission. Tetra Tech will provide the electronic data deliverables with the final RIR submittal in accordance with N.J.A.C. 7:26E-1.6(a)5 and Site Remediation Program Electronic Data Interchange Manual updated February 21, 2013.

2. Since PPG indicated during a February 19, 2013 meeting that the remedial action beyond the building footprint would be comprised of full excavation, the following needs to be completed during the pre-design phase of the remedy. The results of the pre-design investigation (PDI) must be incorporated into the Remedial Action Workplan/remedial design and submitted to the Department consistent with the timeframes established in the Master Schedule.

- a. **Soil:** Refine via pre-excavation or pre-design sampling the remedial limits to the south of boring 016_H016 (vanadium, hexavalent chromium, and visible CCPW), to the south/southeast of boring 016_J020 (vanadium), and to the south, east and west of boring 016_L020 (visible CCPW). Additional pre-excavation soil sampling may also be required to refine the soil excavation limits to the north and east of soil borings 016_K007 and 016_K009, since visible CCPW is present within these borings;

Response: Shaw will address the pre-excavation/pre-design sampling in the Remedial Action Work Plan (RAWP) currently being completed by Shaw.

- b. **Impact to Groundwater (IGW):** Develop site-specific IGW standard for thallium and antimony, or incorporate the remediation of IGW exceedances into the RAWP/remedial design;

Response: The IGW exceedances are collocated with the residential direct contact exceedances at Site 016. Shaw will incorporate the remediation of IGW exceedances into the RAWP/remedial design.

- c. **Ecological Evaluation:** The Department disagrees with the conclusion stated within the March 2013 RIR that an ecological risk assessment is not required. PPG/Tetra Tech shall collect surface water and sediment samples within Claremont Creek/Ditch, pursuant to the Department's June 4, 2012 RIR comment letter and the Department's *Ecological Evaluation Technical Guidance* dated August 2012, to determine whether a pathway to the identified Environmentally Sensitive Natural Resources exists.

Response: Tetra Tech conducted the baseline ecological evaluation in accordance with the requirements of New Jersey Administrative Code 7:26E

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in addition to the New Jersey Department of Environmental Protection (NJDEP) Ecological Evaluation Technical Guidance with assumptions as stated in the RIR. We request further clarification on the disagreement with the conclusion stated in the ERA.

CB&I and PPG also wish to discuss the requirement of collecting surface water and sediment samples from within Claremont Creek/Ditch. The ditch (along with Site 112A) was remediated prior to the construction of the Liberty National Golf Course (lined with geotextile fabric and filled with rip-rap) and received NFA determinations from the NJDEP on August 3, 2004. A copy of the NJDEP NFA letter dated August 3, 2004 is provided in the RIR in Appendix A. Appendix A also includes drawings showing the location of post excavation samples collected and the results.

3. Since groundwater contamination has been confirmed, additional groundwater remedial investigation is required. The finding may be reported in a groundwater RIR addendum. The groundwater delineation may be completed following implementation of the soil remedy. During the investigation of groundwater, PPG must determine the locations and invert depths of all utilities in the vicinity of impacted groundwater and compare those data to the horizontal and vertical limits of the impacted plume to determine if there is a potential for contaminant migration along utility bedding and/or infiltration into utilities.

Response: An additional groundwater investigation will be completed by PPG following the implementation of the soil remedy. This groundwater investigation will include the determination of locations and invert depths of the utilities in the vicinity of the impacted groundwater in order to determine if there is the potential for contaminant migration along utility bedding and/or infiltration into utilities.