RESPONSE TO EPA/NHDES COMMENTS ON THE 2007 DRAFT 100% OSD REMEDIAL DESIGN SUBMISSION – AS MODIFIED/SUPPLEMENTED THROUGH JULY 2011

On September 30, 2011, the United States Environmental Protection Agency (EPA) submitted a letter to the General Electric Company (GE) providing comments on GE's December 2007 draft *Final (100%) Design Report for the OSD Remedy* (Final Design Report), as supplemented by several subsequent design-related submittals to EPA. Representatives of EPA, the United States Army Corps of Engineers (USACE), New Hampshire Department of Environmental Services (NHDES) and GE met on November 8, 2011 to discuss EPA's September 30, 2011 letter and other topics related to submitting a Final Design Report and the initiation of the Remedial Action phase of the Off-Site Disposal (OSD) remedy. During that meeting, it was agreed that GE would identify certain elements of the remedy that could be performed prior to the full-scale implementation of the OSD remedy (along with a Supplemental Design Data Collection [SDDC] Work Plan and an updated Remedial Design Schedule for Operable Unit 1 [OU-1]). GE identified six accelerated Remedial Action items (ARAIs) to EPA for consideration on December 22, 2011 and EPA subsequently approved five of the six ARAIs in a letter to GE dated March 28, 2012. On July 6, 2012, GE submitted a Technical Scope of Work (TSOW) to implement the EPA-approved ARAIs. As part of that submittal, GE provided responses to those comments from EPA's September 30, 2011 letter related to the ARAIs. The responses to those comments are presented again here for ease of reference.

EPA Comment 1: *Introduction and General Comment: The Introduction (and remainder of the report) shall be modified to include and/or reflect the changes contained in the 2009 Amended Record of Decision and 2010 Explanation of Significant Differences as well as the 2010 modification to the 2001UAO.*

Response: The Final Design Report has been revised to incorporate references to the 2009 Amended Record of Decision (AROD), 2010 Explanation of Significant Differences (ESD) and 2010 Second Modification to the Unilateral Administrative Order (UAO).

* * * * *

EPA Comment 2: *Introduction, Page 2, top paragraph: The Town of Milford submits comments on the Draft Remedial Designs to facilitate discussion, consideration from the EPA and response from General Electric. This has been the on-going procedure throughout the remedial design. EPA reviews and considers the Towns comments prior to finalizing our own comments and GE has responded to the Town's comments throughout this design period.*

Response: No response required.

* * * * *

EPA Comment 3: *Introduction, Section 1.2: Please include updated information relative to the Final Pre-Remedial Design Report.*

Response: Section 1.2 has been revised to include references to the April 2009 final Pre-Design Report, as well as numerous design-related documents provided to EPA since submittal of the December 2007 draft Final Design Report.

* * * * *

EPA Comment 4: *Section 1.4 – Site History and Description: please insert the following language into the first paragraph: (taken from 2009 AROD) "Spills, leaks, manufacturing operations, and dust suppression activities led to the current contamination of the soils at the Site. As a result, PCBs and other contaminants were released to the environment and are found at concentrations in Site soils, sediments, and groundwater at levels that pose an unacceptable risk to human health and the environment. Additional details on the Site history and the characterization of the contamination at the Site can be found in the 1998 ROD and the 2009 Pre-Design Investigation Report."*

Response: The requested text has been added to Section 1.4.

* * * * *

EPA Comment 5: *Section 1.4.4 Summary of Site Characteristics – page 9 – please update to include findings of DNAPL and report DNAPL concentrations and summarize current findings in groundwater.*

Response: Section 1.4.4 has been revised to include a summary of the groundwater elevation monitoring, groundwater quality sampling, and the monitoring and sampling of dense non-aqueous phase liquids (DNAPLs) performed during: 1) the quarterly monitoring events under the April 2008 Surface Water and Groundwater Monitoring Plan (WMP) since the submittal of the December 2007 Final Design Report; and 2) the hydraulic testing activities under the May 2012 SDDC Work Plan.

* * * * *

EPA Comment 6: *Section 1.5.1 EPA's Description of the ROD Remedy: Please update per the 2009 AROD.*

Response: Section 1.5.1 has been revised to reflect the remedy description provided in the 2009 AROD.

* * * * *

EPA Comment 7: *Section 1.5.1 Soil SCLs: EPA does not believe an ESD would be required to address GE's concerns that the arsenic and PAH's [sic] in surface soils would need to be addressed beyond areas where PCBs exceed 1 mg/kg PCB. To highlight EPA's continued position on this I have included language below from both the 2009 AROD and AROD Responsiveness Summary summarizing the respective remedy components:*

2009 AROD: Elm Street:

- *Excavation of surface soils at the Elm Street area to a depth of 1 foot, wherever PCB concentrations are greater than 1 mg/kg PCB.*

2009 AROD Mill Street

- *Excavation of surface soils (0 to 1 foot) at the Mill Street area to a depth of 1 foot, wherever PCB concentrations are greater than 1 mg/kg PCB.*

Responsiveness Summary 2009 AROD, in response to GE comment:
"This ROD amendment does not address changes to any cleanup level. Cleanup levels were set in the 1998 ROD, and amended in the 2001 ESD to account for practical quantitation limits for the PAHs and background concentrations of arsenic in NH soils.

EPA does not expect to change these cleanup level requirements, as the 1998 ROD established that surface soils would be excavated to a depth of 1 foot, wherever PCB concentrations are greater than 1 mg/kg PCB. EPA acknowledges it has approved remedial designs that allow for the cleanup of arsenic and PAHs only where PCBs are in excess of its cleanup level."

Response: The OU-1 Unilateral Administrative Order (UAO, as modified) purports to require GE to certify the achievement of all of the Performance Standards and Soil Cleanup Levels (SCLs) specified in the ROD, as amended. There is no exemption to this requirement for arsenic and PAHs at concentrations exceeding the SCLs that are not co-located with PCBs at concentrations exceeding the applicable SCLs. Specifically, Section IX.C, Paragraph 99 of the UAO requires that GE provide certification "…that the Performance Standards and cleanup levels for Site soils ha[ve] been met in full satisfaction of the requirements of this Order." Paragraph VI.J.3 of EPA's June 2010 Second Modification to the RD/RA Statement of Work for the UAO (SOW, Attachment C to the Unilateral Administrative Order) also requires that the Final Remedial Construction Report include "[d]ocumentation that the Performance Standards have been met for the Site soils including, but not limited to: sampling locations and procedures to confirm excavation of all soils contaminated above cleanup levels". The UAO and the OU-1 SOW must be amended to be consistent with EPA's intention reflected in this comment to eliminate the requirement to address soils containing arsenic and PAHs at concentrations above an SCL that are not co-located with PCBs greater than the SCL of 1 ppm. Additional information regarding the requirement that GE certify the achievement of the Performance Standards/SCLs specified in the UAO and SOW is provided in the Response to EPA Comment 14 below.

* * * * *

EPA Comment 7 (*sic*): *Section 1.5.2.2 ICL's for Groundwater: Please revise this section to match the 2010 ESD. Also include language describing GE's estimate of the time to reach groundwater ICLs given the current understanding of groundwater contamination in the overburden and bedrock. Include details from the river bottom drilling event. Please discuss the potential for groundwater to sediment and surface water migration which presents an issue with establishing the boundaries of the GMZ and is a concern for future OU2 activities.*

Response: Section 1.5.2.2 has been revised to include references to EPA's 2010 ESD, as well as the revised Interim Cleanup Level (ICL) proposed for manganese and the new ICL proposed for arsenic in groundwater proposed in the 2010 ESD. This section has also been revised to reference GE's October 25, 2010 letter to EPA which indicated that the ICL for manganese should be further revised to the ambient groundwater quality standard adopted by New Hampshire Department of Environmental Services (840 ug/L). That letter also indicated that the ICL for arsenic in the 2010 ESD (10 ug/L) should not have been established for the Site as EPA's own ESD indicated that "currently, arsenic levels in groundwater are not in exceedance of the 10ug/L drinking water standard." Finally, Section 1.5.2.2 has also been revised to reference GE's July 30, 2007 letter regarding groundwater cleanup timeframe estimates.

With regard to "river bottom drilling event", GE has provided details on the supplemental geotechnical investigation activities performed at the Site in Section 2.4 of the revised Final Design Report. Also, potential groundwater to sediment and surface water migration are not addressed in the revised Final Design Report for OU-1. As agreed with EPA and documented in the SDDC Work Plan, this topic and EPA's ROD for OU-2 groundwater under Keyes Field (requiring No Action) will be incorporated into the conceptual site model for Site groundwater that will be included in the report on SDDC activities.

* * * * *

EPA Comment 8: *Section 1.6: Bottom of page 19: Per EPA's approval with modification of this Draft 100% Remedial Design, these remaining documents will require submission as noted in the cover letter and as allowed in the modified UAO/SOW or as otherwise agreed, with the exception of mylar drawings which EPA previously agreed was no longer required.*

Response: URS has prepared a Constructability Review Report and GE has prepared final bid documents, both of which are being submitted concurrently with the revised Final Design Report. As agreed by EPA, the mylar drawings and a correlation of design plans and specifications referenced in the SOW will not be provided.

* * * * *

EPA Comment 9: *Section 1.7 Constructability Report: GE indicates that URS had completed most of the constructability review on the Draft Final Design Report. GE shall complete this review and incorporate the findings and recommendations of this review in the Final 100% Remedial Design Report. The final Constructability Review shall be submitted along with the Final 100% Remedial Design.*

Response: URS has completed the Constructability Review Report, incorporating the results of the activities performed under the SDDC Work Plan. Where appropriate, GE has incorporated the findings and recommendations of the Constructability Review Report in the revised Final Design Report. The Constructability Review Report is being submitted concurrently with the revised Final Design Report.

* * * * *

EPA Comment 10: *Section 2.6 Development of limits of Excavation: Please update, as needed, any text, table or design relative to any modifications to the design which also modifies limits of excavation and associated volumes, etc. relative to changes and modifications of the remedial design.*

Response: Section 2.6 and the remainder of the Final Design Report (i.e. text, tables, figures and appendices) have been revised to incorporate the soil and groundwater data collected under the SDDC Work Plan and the WMP since submittal of the December 2007 Final Design Report.

* * * * *

EPA Comment 11: *Section 2.6 Development of limits of Excavation: Page 31, Limits of Excavation cell DD: The design notes that a portion of the 1 foot excavation of cell DD includes the removal of the asphalt surface swale. Please provide more detail as to how deep this swale would be excavated, whether the drainage piping would be removed (which connected that drainage swale to the storm sewer line under the Elm Street property), and why the two locations near the swale ESSR18E and ESSR-20N will not be addressed by this activity. Since this swale channeled water away from the stone wall – albeit from the former building-will any structural issues need to be considered in this area to ensure that the stone wall and the nearby graves are not impacted, eroded or such in the future with the change in drainage and potential erosion or freeze thaw issues?*

Response: Please note, the referenced excavation cell is now Excavation Cell FF. The drainage swale previously collected precipitation run-off from the roof of the former Fletcher's Paint building. Limited sampling was performed in the vicinity of the drainage swale during the Pre-Design Investigation to document PCB concentrations in surface soils adjacent to the drainage swale. As noted in Section 2.6 of the Final Design Report, soil from two Pre-Design Investigation sampling locations was determined to

contain PCBs at concentrations greater than the surface soil SCL of 1 mg/kg: ESSS-R18E (0.98 ppm, with a sample duplicate of 1.7 ppm) and ESSS-R20N (2.4 ppm). As discussed with EPA during the Pre-Design Phase of the project, no further sampling was performed in the area of these locations to avoid further disturbance to the cemetery.

For the Remedial Design, the limits of soil removal were developed such that one foot of soil would be removed up to a line connecting ESSS-R18E and ESSS-R20N (as well as other samples locations). Such removal will include portions of the drainage swale that are located within the proposed excavation limits up to a maximum depth of 1 foot below existing grade. No excavations will occur north of that line or to depths greater than one foot within the cemetery. While the proposed remediation will include removal of soils associated with these sampling locations (including the locations themselves), GE will not be able to certify achievement of the Performance Standards and SCLs for these two locations because no soil to the north of those sampling locations will be removed in order to prevent further disturbance to the cemetery. Further, as indicated in the Verification Sampling Plan (Appendix A of the revised Final Design Report), no verification sampling will be performed for the 1 foot excavations located within the horizontal limits of the cemetery.

Such remediation is not expected to impact the structural stability of the stone wall or result in any erosion within the cemetery for the following reasons: (1) EPA had demolished the former Fletcher's Paint building, eliminating future precipitation run-off from the roof of that structure to the drainage swale; (2) the drainage piping along the swale will be cut and capped or filled with grout to prevent future subsurface erosion; (3) the soil berm that EPA installed next to the stone wall will be reconstructed and covered with riprap as part of the site restoration to provide structural support for the stone wall following construction; and (4) the surface elevation of the cemetery is approximately 7 to 8 feet higher than adjacent portions of the Elm Street Area under post-construction conditions, such that precipitation run-off will flow from the cemetery to the Elm Street Area. Additional information regarding the requirement that GE certify the achievement of the Performance Standards/SCLs specified in the UAO and SOW as modified is provided in the Response to EPA Comment 14 below.

* * * * *

EPA Comment 12: *Section 2.6 Development of limits of Excavation: Page 31, Limits of Excavation cells CC and DD: Cells DD and CC either cross into or border the cemetery on Elm Street. GE has indicated that for the most part, these cells will stop at what is considered the current cemetery borders. Has GE considered and addressed any Health and Safety, Town requirements or other contingency matters for dealing with any accidental exposed graves or other grave materials during construction. Previous work on Elm Street indicates that not all records kept have been accurate as to burial locations and the Town history notes that the cemetery allowed "pauper graves" at night in unmarked locations.*

Response: Please note, the referenced excavation cells are now Excavation Cells FF and OO. As noted on Technical Drawing S-1, a soldier pile and lagging support of excavation wall will be constructed along the toe of the embankment for the adjacent cemetery (excluding the soil berm that EPA installed upon demolition of the former Fletcher's Paint building). All of the excavations to the east/cemetery side of this support of excavation structure are 1 foot removal areas. As indicated in the Response to Comment 11, no excavations within the cemetery will proceed to depths greater than 1 foot below existing grade. Based on the above, it is not expected that unmarked graves will be accidentally exposed during the performance of the Remedial Action. Nevertheless, the Remedial Action Contractor will be instructed to implement certain additional operational controls when performing excavations adjacent to the cemetery. Examples of such controls that the Remedial Action Contractor might elect to implement are to excavate test trenches, utilize a spotter, and/or scrape away soils in thin increments.

* * * * *

EPA Comment 13: *Section 2.6 Development of limits of Excavation: Page 32, Mill Street MSSB-C01: Please include the depths of the two samples at this location 4.4 mg/kg found at 11-13 feet and 9.5 mg/kg found at 23-25 feet.*

Response: Section 2.6 has been revised to include the requested depth information.

* * * * *

EPA Comment 14: *Section 2.6 Development of limits of Excavation: Page 32, Mill Street 30 samples from 19 locations identified in Table 10 of 2007 Design report, which GE has requested to exclude from excavation.*

According to GE's March 30, 2007 letter on Mill Street Excavation limits, the excavation limits as proposed do not address roughly 40 soil samples collected during pre-design in the Mill Street area with low levels of PCB contamination, but which all exceed the 1 ppm PCB SCL. GE notes that to excavate to these sample locations, which include exceedances of 1 ppm at depths and locations and in areas surrounded by soils with less than 1 ppm, would require an additional 3,600 cubic yards of soil to be excavated at the Mill Street Area. This volume represents would represent a 40% volume increase in the amount of soil requiring removal at Mill Street. These additional excavations of soil could decrease the short term effectiveness (worker safety issues, local impact, etc) and would increase the cost without changing or increasing the long term protectiveness or affecting the overall protectiveness of the remedy. These soil samples were collected at depth and therefore there is no direct exposure should these soils remain in the surface and should not affect the overall goal of attaining the MCL in groundwater of 0.5 ug/l.

To excavate to these sample locations would require the excavation of soil which contains PCBs less than 1 ppm. BBL/Arcadis estimated that the current excavation scenario (not including this material) removes 99.9% of the mass of PCBs at the Mill Street Area and the additional 3,600 cubic yards would only remove 0.1% of the PCB mass at the site. The subsurface soils are subject to a 1 ppm PCB cleanup level to protect groundwater, which must achieve an MCL of 0.5 ug/l PCB.

Paragraph 92 and 93 of the Unilateral Administrative Order (2001) require that the Work performed by Respondent shall, at a minimum, achieve the Performance Standards specified in the Record of Decision, ESD and in Section IV (Performance Standards) of the Statement of Work and (93) Notwithstanding any action by EPA, Respondent remains fully responsible for achievement of the Performance Standards in the ROD, ESD and Statement of Work. Nothing in the Order, or in EPA's approval of the Statement of Work, or in the Remedial Design or Remedial Action Work Plans, or approval of any other submission, shall be deemed to constitute a warranty or representation of any kind by EPA that full performance of the Remedial Design or Remedial Action will achieve the Performance Standards set forth in the ROD, ESD and in Section IV (Performance Standards) of the Statement of Work. Respondent's compliance with such approved documents does not foreclose EPA from seeking additional Work to achieve the applicable performance standards.

Cleanup levels at CERCLA sites must meet two criteria: (a) cleanups must comply with all ARARs; and (2) cleanups must be protective of human health and the environment. With respect to ARARs, the NCP sets for an expectation that usable aquifers will be restored where practicable, and that maximum contaminant level (MCLs) established under the Safe Drinking Water Act, shall be attained. The ROD, as

Amended includes three measures of protection: Enforcement of an ARAR (MCL); mass removal of PCBs to the SCL to protect human health exposure and to protect groundwater from potential leaching to facilitate attainment of the ARAR and finally, the use of institutional controls to restrict groundwater use until the ARAR is attained. The enforceable standard (ARAR) and the remediation cleanup goal in the ROD to measure protectiveness is the MCL of 0.5 ug/l PCB in groundwater. The remedy as proposed has no additional post closure care requirements because the hazardous substances in soils have been removed to sufficiently low levels that no further action is deemed necessary to be protective and engineering controls are not required. Future groundwater route of exposure is protected by addressing the soils to prevent leaching above the MCL and through groundwater use restrictions until the current concentrations in groundwater achieve the MCL.

EPA can accept GE's proposal to not excavate the significant, additional volume of soil to remove these specific, individual PCB soil samples, which are mostly just over the cleanup level of 1 ppm, and either in areas designated for SPTC wall installations or in areas removed from other elevated concentrations. In doing so, EPA is not changing the cleanup level which must be achieved, but rather indicating that the Agency has considered whether in doing so, the remedy overall is likely to achieve ARARs and maintain the ROD/AROD specified level of protectiveness and permanence over time. As noted above, the current excavation scenario will remove 99.9% of the mass of PCBs in soils at the Mill Street Area. GE has not indicated otherwise, nor does EPA believe that this residual contamination in isolated areas, just above cleanup levels will alter or affect the ability of the remedy to be protective of groundwater and will therefore provide long term protectiveness and permanence of the soil remedy.

The exception to this request is the locations and concentrations proposed by GE (MSSB B-13, B-17, B-13E and C18N) to remain at the completion of the remedy which are all situated within the surface (top one foot). For these locations, the remedy would not be protective for human health given the potential for unrestricted access, potential exposure scenarios and future recreational use of the adjacent properties. GE is therefore required to excavate these surface soils to remove all PCB concentrations greater than 1 ppm in the top foot per the ROD/AROD.

The remainder of the locations has been reviewed by EPA and are situated below the surface (one foot) and therefore will reduce protectiveness for human health given the future recreational use of the properties (direct exposure through dermal contact/ingestion of soils). While EPA has reviewed and could discuss with GE if requested each proposed location, EPA"s response in this approval letter considered whether the acceptance of this proposal (collectively, rather than as individual sample locations) will be protective of groundwater at the completion of the remedy. GE must meet the MCL for PCBs in groundwater at the completion of the remedy (or unless a TI waiver is granted in the future). GE has proposed that the removal of 99.9% of the PCB mass in soils at the Mill Street Area will meet this goal by preventing the leaching of PCBs from the residual soils into groundwater, above the MCL in accordance with the ROD/AROD.

EPA's assessment of this would not be complete without also acknowledging that the ability to measure the contribution to groundwater from the leaching of these residual PCBs into groundwater above the MCL in the future can only be assumed given the presence of DNAPL within the bedrock and the consistently elevated levels of PCBs in groundwater that currently exists. GE's estimated timeframes presented in the Pre-Design Report for current groundwater concentrations to meet the PCB MCL in the Mill Street Area is approximately 20 years for the overburden and over 100 years for the bedrock aquifer.

Response: GE acknowledges the comment that "EPA can accept GE's proposal to not excavate the significant, additional volume of soil" that would be necessary to address soil known to contain PCB concentrations greater than the SCL that are outside the soil excavation limits specified in the Final Design Report. However, the very paragraphs of the UAO cited by EPA in its comment undermine EPA's intention.

Paragraph 96 of the UAO as amended states, that: "[n]othing in th[e] Order, or in EPA's approval of the Statement of Work, or in the Remedial Design or Remedial Action Work Plans, or approval of any other submission, shall be deemed to constitute a warranty or representation of any kind by EPA that full performance of the Remedial Design or Remedial Action will achieve the Performance Standards set forth in the ROD, ESD, AROD and in Section IV (Performance Standards) of the Statement of Work. Respondent's compliance with such approved documents does not foreclose EPA from seeking additional Work to achieve the applicable performance standards."

Contrary to EPA's suggestion in the comment, the MCL for PCBs in groundwater is not the only Performance Standard subject to this provision of the UAO. Removal of all "surface soils" at the Mill Street and Elm Street Areas and all "subsurface soils" at the Mill Street Area that contain PCBs at a concentration greater than the applicable Performance Standards or SCLs, is also a requirement of the ROD (as amended), and UAO/SOW (as modified). *See, e.g.,* OU-1 Amended Record of Decision (6-15-09), pages 30-32 and 45 (Table 5); the OU-1 UAO with Second Modifications (6-11-10), Section II, Paragraphs 52a, 53a, 54a, and 95; and the OU-1 Remedial Design/Remedial Action Scope of Work (OU-1 SOW) with Second Modifications (6-11-10), Paragraphs III.A.1 and 2, II.B.3, IV.A.2, and VI.J.3.

Long before each of these documents was last modified, EPA approved excavation limits that would not achieve these SCLs. *See, e.g.,* EPA March 31, 2005 correspondence and EPA February 13, 2007 correspondence. EPA did this because it recognizes, as reflected by this comment, that completely achieving the SCLs "could decrease the short term effectiveness" of the remedy and "would increase the cost" "without changing or increasing the long term protectiveness or affecting the overall protectiveness of the remedy." *See, e.g.,* EPA Comments 7 and 14.

GE agrees. In fact, the design changes that would be necessary to certify completion of a remedy that would achieve these SCLs would result in a remedy that would certainly require an Amended Record of Decision owing to, among other things, as EPA recognizes in Comments 7 and 14, a significantly greater excavation volume and area with resulting increases in the time to implement, cost, and disruption including the need to completely interrupt rail service at the Mill Street Area, a longer term and potentially complete closure of Elm Street, and expansion of the limits of removal at the Mill Street Area.

When GE raised this issue in a meeting with EPA, the USACE, and the NHDES on November 8, 2011, EPA acknowledged that EPA's comment did not sufficiently address this issue and indicated that it would provide a further response. GE has heard nothing further on this topic since that meeting.

GE suggests that EPA and GE discuss the specific locations in which the SCLs will not be achieved by the OU-1 Remedial Action specified in the Final Design, and the locations in which GE knows that certification of achievement of the SCLs will be impossible so that appropriate amendments/modifications can be made to ROD and/or UAO/SOW.

As documented in GE's May 10, 2007 submittal to EPA, Guilford Transportation Industries, Inc. (Guilford, the owner of the rail lines adjacent to the Mill Street Area) has indicated that excavation activities must not be initiated within one foot of the southern edge of the railroad ties of the northern rail line and that any such excavation must have a maximum slope extending away from the tracks of

1.5H:1V. This requirement was incorporated in the revised figures provided in GE's May 10, 2007 submittal, as well as GE's June 12, 2007 *Interim (60%) Design Report for the OSD Remedy* and December 31, 2007 draft *Final (100%) Design Report for the OSD Remedy.*

The majority of the soils associated with sampling locations MSSB-B13, MSSB-B17, MSSS-B13E (inclusive of the physical sampling locations) and a portion of the soils associated with sampling location MSSS-C18N would be removed during the performance of the excavation activities at the Mill Street Area. However, due to the requirements to maintain at least one operational rail line throughout remedy implementation and to maintain the structural integrity and safety of that line, expansion of the limits of excavation to the north is not possible. As a result, post-construction verification soil sampling activities are also impossible.

* * * * *

EPA Comment 15: *Section3.2, page 39: Please clarify what is meant by "acceptable review of all required pre-mobilization submittals" in the last paragraph.*

Response: Please note, the referenced section is now Section 3.3. A response to this comment was provided as part of the Response to Comment document submitted concurrently with GE's July 2012 TSOW for the EPA-approved ARAIs. The selected Remedial Action Contractor will be required to make several submittals to GE/ARCADIS prior to mobilizing to the Site to implement the Remedial Action. Each such submittal will be subject to review and approval by GE and ARCADIS prior to the Remedial Action Contractor mobilizing the applicable equipment/material to the Site. The Technical Specifications included in Attachment C of the Final Design Report specify the required submittals associated with implementation of the Remedial Action.

* * * * *

EPA Comment 16: *Section 3.3.1 Elm Street Area, page 41: I believe a citizen asked if the Elm Street work could be done at night to decrease the traffic burden thinking that during the day – the traffic lane would be open. The Town/public needs to clearly understand that even if the work was performed at night – based on GE's section 3.3.1 – the lane itself would not be available until the excavation and backfilling work was complete.*

Response: Please note, the referenced section is now Section 3.4.1. As indicated therein, there are two separate activities that will impact vehicular and pedestrian traffic on Elm Street and require the implementation of traffic control measures: (1) the removal of soils beneath the northern, west-bound traffic lane that contain PCBs at concentrations greater than the applicable SCLs; and (2) the replacement of the storm sewer along portions of Cottage Street and across both lanes of Elm Street. As also noted in the Final Design Report and Technical Drawing T-3, it is intended that both activities will be completed while maintaining two-way, one lane traffic along Elm Street through the use of barricades and flag personnel or signaling devices to direct traffic. GE, ARCADIS, and the selected Remedial Action Contractor will review T-series technical drawings provided in Appendix B and the results of the traffic analysis provided in Appendix E of the Final Design Report to determine the methodology and schedule for the above-listed activities that minimizes (to the extent possible) the impacts to traffic and the community. Nighttime, non-peak working hours will be considered as part of this evaluation.

* * * * *

EPA Comment 17: *Section 3.3.1: Update this last section to note that the details of the Keyes Field Alterative Access arrangements and Mill Street access arrangements.*

Response: Please note, the referenced section is now Section 3.4.1. A partial response to this comment was previously provided as part of the Response to Comment document submitted concurrently with GE's July 2012 TSOW for the EPA-approved ARAIs. Specifically, Technical Drawing 2 of the TSOW presented the Keyes Park alternate access/parking area design. The Town of Milford subsequently provided comments on that design and a revised version of Technical Drawing 2 was included in GE's letter to EPA dated August 27, 2011, which provided responses to EPA's comments on the July 2012 TSOW. In addition, GE has previously submitted letters to EPA on April 21 and December 2, 2010 providing details on alternate access for certain residential properties adjacent to the Mill Street Area. Section 3.4 of the Final Design Report has been revised to include details regarding the alternate residential access and alternate access/parking area submittals that have been made since the December 2007 draft Final Design Report. In addition, a new Section 3.2 of the Final Design Report has been added to discuss the design and schedule for the performance of the ARAIs.

* * * * *

EPA Comment 18: *Section 3.5.1 Exclusion Zone and Section 3.5.2 Contaminant Reduction Zone: It is unclear how the transition from EZ to CRZ will occur within the work areas given the potential for personnel and equipment decon to be on opposite sides of the work area, and the suggested movement of donning/decon with activities etc. Consider using the Keyes Field staging area just inside the gated area, and where the personnel protection equipment and safety equipment will already be stored, for the donning of PPE (as noted for this support zone in Section 3.5.3), and an area just within the working limit for the conducting of decon (with mobility for the performance of work in that area). The current schedule/mobility issues offer concerns since the EZ is the working area limits – then one has to enter the EZ (physically enter the Elm Street property) to get to the CRZ to don PPE.*

Response: Please note, the referenced section is now Section 3.6.1. The locations and layout of the support zone, contaminant reduction zone, and exclusion zone specified in the draft Final Design Report were conceptual only. While it is known that the Support Zone will be located near the current entrance to Keyes Park, the exact locations of each Contaminant Reduction Zone (CRZ) and Exclusion Zone (EZ) will be determined with the Remedial Action Contractor prior to implementation of the Remedial Action, as indicated in the Final Design Report. In the Final Design Report, the entire Elm and Mill Street Areas are shown as EZs due to the fact that the majority of each area will be subject to excavation. As a result, the Remedial Action Contractor will be required to limit access to these areas to only those personnel possessing the proper health and safety training and wearing the appropriate personal protective equipment. During performance of the Remedial Action, site access will likely be handled in the following manner: (1) access to the Elm and Mill Street Areas will continue to be restricted by the perimeter fencing; (2) smaller EZs where active excavation, material handling/loading, and restoration activities will be demarcated by construction fencing with access/egress points for personnel and transportation vehicles; (3) separate CRZs for personnel and vehicles will be constructed within the perimeter fencing for each site at the perimeter of the active ES(s); and (4) clean access paths/walkways or roads (constructed of geotextile, woodchips, and/or gravel, etc.) will be constructed over portions of each site that have not yet been subject to remediation so that personnel and vehicles can access the CRZs from openings in the perimeter fencing. In this manner, contractor personnel and vehicles can access the active EZs without coming into contact with impacted site soils and minimizing the amount of personnel/vehicle cleaning that is required. This will also enable the Remedial Action Contractor to move the locations of the active EZ and CRZ as the remediation activities progress across each Site. Section 3.5 and Appendix D of the Final Design Report has been revised to reflect this approach.

* * * * *

EPA Comment 19: *Section 3.6 Utilities: Storm sewer trenching across Elm Street: This activity (excavation, trench box, backfill) was not detailed to the public at the time of the proposed plan as another time period of road disruption/closure/detour. Since road disruption is of major importance to the Town of Milford it would be helpful to understand details of this activity such as: Will this require total road closure of Elm Street? How long will this activity take to accomplish through backfill? Is this an activity that can be accomplished at night to reduce the impact on the local traffic?*

Response: Please note, the referenced section is now Section 3.7. See Response to EPA Comment 16. As noted therein, it is intended that the replacement storm sewer activities will be completed while maintaining two-way, one lane traffic along Elm Street through the use of barricades and flag personnel or signaling devices to direct traffic. Therefore, total closure of Elm Street is not anticipated during this work. To minimize the overall duration of lane closure for the northern, west-bound lane of Elm Street, it is also anticipated that the replacement of the storm sewer utility across this lane of traffic will be performed concurrently with the remedial excavation activities proposed for the northern, west-bound lane of traffic such that both activities can be performed during one lane closure event. As also noted in Section 3.7, additional actions that will be taken to minimize the impacts to the flow of vehicular traffic along Elm Street include: (1) the replacement storm sewer and remedial excavations within Elm Street will be temporarily restored with backfill, gravel materials, and/or road plates such that all restoration paving activities can be performed once all excavation activities have been completed; and (2) notifications will be made to the appropriate Town of Milford and emergency services personnel prior to the initiation of any activities that will disrupt normal traffic flow along Elm Street.

This exact duration of this work will be determined in conjunction with the Remedial Action Contractor; however, it is currently anticipated that the active excavation, replacement of storm sewer piping, backfilling and repaving activities could be performed in a few weeks. However, due to the likely phasing of this work, there may be periods of normal traffic flow interspersed with periods of lane closure. Finally, as noted in Response to EPA Comment 16, GE, ARCADIS, and the selected Remedial Action Contractor will review T-series technical drawings provided in Appendix B and the results of the traffic analysis provided in Appendix E of the Final Design Report to determine the methodology and schedule for the above-listed activities that minimizes (to the extent possible) the impacts to traffic and the community. Nighttime, non-peak working hours will be considered as part of this evaluation.

* * * * *

EPA Comment 20: *Section 4.5.2 Influent Characteristics of Temporary Water treatment System: Will the influent characteristics be modified (potentially) to also reflect the groundwater concentrations collected during the semi-quarterly monitoring?*

Response: The maximum influent design parameters listed in Section 4.5.2 have been updated where necessary to include the results of groundwater sampling events that have occurred since submission of the December 2007 draft Final Design Report. This includes quarterly monitoring events under the WMP, as well as the pre- and post-hydraulic water quality sampling performed under the SDDC Work Plan.

* * * * *

EPA Comment 21: *Section 9.0: remedy Implementation Construction Cost Estimate: The Final Design Report shall include a construction cost estimate for EPA review.*

Response: Section 9 has been updated to include the requested construction cost estimate.

* * * * *

EPA Comment 22: *Section 9.0 Schedule: EPA would like to discuss the project construction schedule at the meeting EPA requested in its cover letter, to be held within 60 days from the date of the approval letter.*

Response: A response to this comment was provided as part of the Response to Comment document submitted concurrently with GE's July 2012 TSOW for the EPA-approved ARAIs. As noted therein, the Remedial Action Construction Schedule was discussed during the November 8, 2011 meeting between representatives of GE and EPA. As agreed during that meeting, GE provided an updated Remedial Design Schedule to EPA on December 22, 2011. That schedule covered anticipated Remedial Design, SDDC, and ARAI activities that would be performed prior to the start of the Remedial Action. EPA provided comments to that schedule on March 28, 2012 and a revised schedule was submitted to EPA on May 2, 2012. An updated Project Construction Schedule has also been included in Appendix G of the revised Final Design Report.

* * * * *

Comments on Drawings

EPA Comment 1: *Drawing G-4:*

Note 6: Add a note to highlight the protection of the oak tree to be saved along the western edge of the cemetery.
Note 7: Consider including language which may allow consideration for support areas/materials to remain, be reused elsewhere as appropriate or be reused by the Town following cleanup, per our June 13, 2011 conference call.
Note 13: Prior to Work within the Elm Street right-of-way the Town, Police and Fire should be notified and traffic control measures should be discussed.

Response: With respect to Note 6, a note is already provided on the drawing at the location of the oak tree. Notes 7 and 13 have been revised accordingly.

* * * * *

EPA Comment 2: *Drawing G-5: Site preparation plan – Keyes Park. The area by the trailers and length of Keyes drive prior to work or staging areas is accessible to children while visiting the park. (Fencing is along both sides of the road but not cutting off access) Consider fencing along the northwestern portion of the work area (connecting the fence in existence on the western side of the road to the edge of the river-along the proposed field trailer area) to prevent children from accessing this area during construction and if not, what form of security/safety/flaggers will be there be there to prevent children from entering these areas when cars/trucks are moving about?*

Response: A response to this comment was provided as part of the Response to Comment document submitted with GE's July 2012 TSOW for the EPA-approved ARAIs. As noted therein, additional temporary fencing and gates will be installed to completely enclose the Support Zone. Specifically, additional fencing and/or gates have been added at two locations: (1) connecting the fencing on either side of Keyes Drive, immediately northwest of the proposed field trailer location; and (2) across the gravel drive south of the baseball field, connecting the existing fencing on the west side of Keyes Drive with the proposed new fencing to be installed around the perimeter of the clean materials and equipment staging areas. The gates will limit public access to the support zone and the Elm Street Area.

* * * * *

EPA Comment 3: *Drawings G-7 and G-8: Phase 1 and 2: Please note how the trucks will enter/exit the Work Zone and approach the excavated vehicle stockpile, should one be constructed. Section 4.7.6 notes that the trucks would be then be routed through an equipment decontamination area. Phase 1: How would trucks exit the Site having gone through this fairly narrow decon area. The truck routes have them going back west along Elm Street which would mean they would need to turn around at the Elm Cottage intersection or drive up cottage, down Mill, and out West Street to get back to Elm Street. Phase 2 – Drawing G-8 has potential equipment decon with personnel decon and again within a narrow area for truck movement.*

Response: See Response to EPA Comment 18 for details regarding the location of CRZs and EZs. Similar to the CRZs and EZs, the locations of the vehicle loading areas shown on Technical Drawings G-7 and G-8 were conceptual only. As also noted therein, the locations of these areas will be decided by the Remedial Action Contractor and will likely require relocation, as the remediation activities progress. As such Technical Drawings G-7 and G-8 of the December 2007 draft Final Design Report were eliminated. However, Appendix D of the revised Final Design Report still provides conceptual details regarding how the excavation activities might progress at the Elm and Mill Street Areas and where the miscellaneous equipment/materials staging and cleaning areas could be located. Regardless, access to the exclusion and contaminant reduction zones for transportation vehicles will be through Keyes Drive such that loaded trucks can exit the Elm Street Area and proceed west on Elm Street along the truck route specified in Appendix E of the revised Final Design Report.

* * * * *

EPA Comment 4: *Drawing G-15, and Detail 2 of Drawing G-28: Drawing G-5 Note 2 indicates the mixing of excavated dry and wet soils to augment dewatering. Detail 2 in Drawing G-28 indicates that the mixing/dewatering occurs on a liner covered with twelve inches of crushed stone or gravel. How will the mixing occur without incorporating those bottom drainage materials?*

Response: The intent of the design is that mixing of wet impacted materials with drier impacted materials will occur adjacent to active excavations and within areas that are subject to future excavation such that there are no impacts to underlying clean materials or soils that are not subject to future excavation. In such instances, any runoff from the mixing operations will be directed back to the open excavations. For such instances where it is required to construct a material mixing pad in clean areas or areas not subject to future excavation, the 12 inches of stone or gravel is meant to be both a protective layer for the underlying liner material and a demarcation layer indicating that the equipment operator is within 12 inches of the liner. The majority of the mixing operations will occur within the stockpiled materials, above the gravel layer. If the gravel layer or the sacrificial geotextile above the HDPE liner is encountered during mixing operations, the mixing equipment (typically the bucket of an excavator or front end loader) will be raised and mixing will continue. It is possible that a small amount of the

sacrificial gravel layer may be mixed in with the excavated materials; however the Remedial Action Contractor will be responsible for monitoring and maintaining the thickness of the sacrificial gravel layer and geotextile prior to and during mixing operations. Finally, the Verification Sampling Plan provided in Appendix A of the Final Design Report includes post-construction verification sampling for any areas that are not subject to excavation that will be used for staging of impacted equipment or materials, to document those areas were not impacted during the performance of the Remedial Action. The notes on Drawing G-15 and G-28 have been revised accordingly to reflect the approach described above.

* * * * *

EPA Comment 5: *Drawing G-18: This drawing will change for the new final cover system and reuse of the site. Please indicate the new utility plans and indicate if the water line noted in G-12 (Contractor shall temporarily support or relocate water main as necessary to excavate area) will be placed within the "new" utility corridor if relocated during excavation.*
The drawing notes that a sprinkler water line is capped off. Will this water line be removed (if left in place, it would be inaccessible under the 40 inch cover)? If not entirely removed would you cap this water line at the edge of the sidewalk during site preparations?

Response: Technical Drawing G-18 has been modified to incorporate the new final cover system and site reuse plan. Due to the change in site usage, the utility corridor previously proposed along Keyes Drive is no longer required. Instead, the only utility corridor required along Keyes Drive is for the existing water line. A review of the existing soil sampling data in the vicinity of this corridor indicates that there are no soils containing PCBs at concentrations between 25 mg/kg (the utility corridor SCL) and 100 mg/kg (the subsurface SCL at the Elm Street Area). As a result, no soil removal is required for this utility corridor beyond that proposed to achieve the surface and subsurface SCLs applicable to the Elm Street Area. Further, a review of the revised limits of soil removal provided on Technical Drawing G-12 indicates that no excavations are proposed to depths greater than three feet below grade in the vicinity of the existing water line. As a result, that water line should not be encountered during the performance of the Remedial Action. Nevertheless, the Remedial Action Contractor will be required to take the necessary precautions to protect the existing water line during the performance of the Remedial Action. Finally, with regard to the water line that previously serviced the former Fletcher's Paint building, that line will be cut and capped at the southern edge of the excavation area, as identified on Technical Drawing G-12 (see circled area on drawing and reference to Note 14).

* * * * *

EPA Comment 6: *Drawings G-22, 24: Mill Street Site Restoration: Has GE determine (in consultation with the Railroad Company), the final grade or any structural support changes resulting from the removal and relocation of the Southern Line? If so - please note these changes. If not, please note that the southern line will not be replaced during restoration and note any remaining issues or considerations for remedial action restoration.*

Response: As noted in Section 3.2 of the revised Final Design Report, the relocation of the southern rail siding adjacent to the Mill Street Area was identified as one of the ARAIs addressed by the TSOW. As noted in the TSOW, Guilford has elected to remove the southern rail siding and relocate that siding west of the Mill Street Area to facilitate the future performance of the remediation activities at the Mill Street Area. As such, Guilford will design and perform the relocation of the southern rail siding. Guilford has not provided any recent feedback related to the Remedial Design. Additional details regarding the relocation of the southern rail siding and the other ARAIs are provided in Section 3.2 of the revised Final

Design Report. In addition, Technical Drawing G-24 has been revised to reflect the fact that the southern rail siding will not be reconstructed adjacent to the Mill Street Area.

* * * * *

Comments on Verification Sampling Plan

EPA Comment 1: *The Final 100% Remedial Design Verification Sampling Plan should address and incorporate any modifications to this plan resulting from any changes to excavation and/or over excavation, changes in utility, tree corridors, etc resulting from the incorporation of the hybrid cap into the Final Design. These changes should be incorporated subject to the four conditions noted on page 5 of the VSP in the Draft 100% Remedial Design.*

Two other areas which may require modification in the Final design is GE's proposal for no confirmation sampling near the southern railroad line and cell V should the removal and relocation of the southern line alter in any way this proposal.

4.2.3: Mill Street Area: The Mill Street verification plan shall follow the Elm Street plan and the language in the top bullet on page 25 shall be modified to state "…If the mean is greater than 1 mg/kg, then additional analysis, sampling and or remedial action is necessary." The second bullet on page 25 from the top shall be modified to match the Elm Street plan and shall state "If one or more confirmation sample results are greater than 2 mg/kg total PCBs then additional analysis, sampling and/or remedial action is necessary."

Response: The Verification Sampling Plan (VSP) has been revised to incorporate several changes to the scope of the remediation activities at the Elm Street Area, including: (1) the revised limits of soil removal; (2) the elimination of several utility corridors and the revisions to the storm sewer utility corridor; and (3) the revisions to the final surface restoration (i.e., soil cover and parking areas).

Excavation Cell V (and certain portions of Excavation Cells A and U adjacent to the northern rail line) at the Mill Street Area will not be subject to confirmation sampling due to constructability concerns and limits on further excavations by Guilford.

Finally, with regard to EPA's comments on Section 4.2.3 of the VSP, see the Responses to EPA Comments 7 and 14 on the Final Design Report. For the reasons noted therein, the requested edit is not appropriate.

Comments on Appendix C: Technical Specs

EPA Comment 1: ***MP02208- Restoration of Surfaces:*** *MP -2208-05: 3.07 Maintenance: The text does not specify any need for or reference to a maintenance plan or schedule for the one year of maintenance requirement. Will such a plan be required for inspections, etc?*

Response: A response to this comment was provided as part of the Response to Comment document submitted with GE's July 2012 TSOW for the EPA-approved ARAIs. As noted therein, the Technical Specifications provided in Appendix C will become a component of the Remedial Action Contract between GE and the selected Remedial Action Contractor. Hence, the requirements listed in the specifications will be applicable to the Remedial Action Contractor not only during implementation of the remediation activities, but also during the one year maintenance/warranty period. The maintenance

activities contemplated by the specification include items such as watering seeded areas, repairing areas affected by erosion or settlement, and product warranty repairs or replacements.

Post-construction inspections and maintenance requirements are covered by two documents. Specifically, the scope of the investigation and monitoring activities associated with the Groundwater Management Zone (GMZ) for the Site were summarized in the April 2008 Environmental Monitoring Plan. These activities will be performed by representatives of GE. The requirements for post-construction maintenance and monitoring activities for the Remedial Action components will be covered in the forthcoming Long-term Monitoring Plan (LMP), which is to be submitted at the 75% completion milestone for the Remedial Action. Following the one-year warranty period, post-remediation inspections, monitoring, and maintenance will be performed by the Town of Milford, as required by the February 8, 1999 Consent Decree entered into by EPA and the Town of Milford. Details regarding the scope, schedule, and responsibilities for the post-remediation monitoring and maintenance activities that will be performed by the Remedial Action Contractor and the Town of Milford will be provided in the LMP. As such, a separate maintenance plan and schedule is not required for the Remedial Action Contractor.

* * * * *

EPA Comment 2: ***Section 13602 – Temporary Water Treatment System:***
NHDES Comment: The MTBE, TBA and TAME discharge limits in the attached table should be revised to reflect current New Hampshire Ambient Groundwater Quality Standards of 13, 40 and 140 ug/L respectively.

Because there have been gasoline related releases in the vicinity of the site it is important to not only monitor for TBA and TAME, but to set discharge limits as well at NH Ambient Groundwater Quality Standards. The value that was listed in the draft for MTBE is an old out-dated standard.

Response: The requested edits are not necessary as the discharge limits identified in the Substantive Requirements for Water Discharge Table 1 in Section 13602 are appropriately based on the Remediation and Miscellaneous Contaminated Site General Permit (NPDES Permit No. NH6910000) and are not New Hampshire Ambient Groundwater Quality Standards.

* * * * *

Comments on Appendix E: Truck Route and Traffic Analysis Report- Revised October 30, 2008

EPA has no comment on the revised truck route and traffic analysis plan except for stressing continued communication on any revisions to this plan with the Town concerning the use of the former Police Station property given the potential sale of this land and to stress the need for communication of all future schedule and traffic details to the public during construction (including the alternative access to the Keyes Field –as detailed in GE's October 14, 2008 letter). EPA suggests that GE request that the Town post the traffic activities on the Town's web site, just as the Town itself does when performing its own road work, so as to reach the public with the latest traffic issues during construction.

Response: Appendix E of the Final Design Report has been revised to incorporate the use of the former Police Department property as the primary staging area for transportation vehicles traveling to and from the Site. As the former Police Department property is located on Elm Street west of the Site, the use of this property requires no modification to the truck routes specified in Appendix E. GE agrees on the need

for routine communications between GE, the Remedial Action Contractor, the Town of Milford and emergency services personnel to enable all project stakeholders to remain informed regarding the schedule and status of elements of the Remedial Action that will impact pedestrian and vehicular traffic in the vicinity of the Site.

* * * * *

Comments on Appendix J: Contingency Plan – Revised April 15, 2011

Please note Appendix J of the December 2007 draft Final Design Report is now Appendix I of the revised Final Design Report.

EPA Comment 1: ***Section 1.2:*** *Include the second ESD, Amended ROD and second modification to the UAO to this section.*

Response: A response to this comment was provided as part of the Response to Comment document submitted with GE's July 2012 TSOW for the EPA-approved ARAIs. As noted therein, Section 1.2 has been revised to include these items, as requested.

* * * * *

EPA Comment 2: ***Section 2.1:*** *Define SC.*

Response: The abbreviation SC stands for Supervising Contractor and is defined at its first use in Section 2.1 and on the abbreviations page.

* * * * *

EPA Comment 3: ***Section 3.2:*** *Fencing/gates are also located (or will be added) in the Keyes Drive area to secure the clean operations and general site access.*

Response: See the Response to EPA Comment 2 in the Comments on Drawings section. As noted therein, additional gates will be installed to restrict public access to the Support Zone and the Elm Street Area.

* * * * *

EPA Comment 4: ***Table J-6:*** *The number for the National Response Center should be listed: 1800-424-8802. The NRC is the sole federal contact for reporting oil and chemical spills. The NRC operates 24 hours per day, 7 days a week, and 365 days per year.*

Response: Please note, the table in question is now Table I-7 of the revised Final Design Report. A response to this comment was provided as part of the Response to Comment document submitted concurrently with GE's July 2012 TSOW for the EPA-approved ARAIs. As noted therein, contact information for the National Response Center has been added to Table I-7.

* * * * *

EPA Comment 5: ***Figure J-2A****: This Figure indicates that one of the primary personnel emergency gates is at the back of the site along the steep bank (before crossing the ditch to the cemetery) and in the area of significant remedial work (deep excavations, tank pulls, support installation, materials staging, etc). Please consider whether another personnel gate (for emergency exit only) near the Korean War area would be easier or safer (or as an alternative during certain remedial construction phases of support installation and deep cell excavation). Also is there a location designated for any on-site vehicles exiting in an emergency. It is also confusing that the designated decon/drum storage area and emergency response center appears to be located where the Stage 1 clean backfill staging area has also been designated.*

Response: Please note, the figure in question is now Figure I-2A. An additional personnel emergency gate has been added to drawing J-2A at the requested location. See also the Responses to EPA Comment 18 on the Final Design Report and EPA Comment 3 in the Comments on Drawings section. Based on EPA's comments and those responses, modifications have been made to the appropriate Technical Drawings provided in Appendix B, as well as the appropriate figures in Appendices D and J of the Final Design Report, to better reflect the anticipated progression of the remediation activities and the staging of certain areas/items at the Elm and Mill Street Areas. However, as also noted therein, the selected Remedial Action Contractor will be ultimately responsible for proposing the phasing approach for the implementation of the Remedial Action. The Remedial Action Work Plan will provide additional details regarding the Remedial Action Contractor's proposed approach for implementing the Remedial Action.

* * * * *

Comment on Dewatering Plan

EPA Comment 1: *Phase 1 Drawdown is targeted at 3 feet below the excavation depths. Deep wells are 8 in wells, screened just above and/or into shallow bedrock. Deep wells collectively are to manage 150 gpm flux into the excavation.*

Will the 150 gpm max rate of the temporary treatment system cause erosion within the drainage ditch at discharge, will the discharge be channeled further down the ditch into the new storm sewer section and if not what protective measures will be sued to prevent erosion issues in the open portions of the ditch?

Response: As indicated above, 150 gpm is the maximum anticipated instantaneous discharge rate and may not be representative of the discharge rate during normal treatment operations. Nevertheless, additional notes have been added to Technical Drawings G-7 and M-1 indicating that the Contractor must install rock armoring or energy dissipaters at the treatment system discharge location(s) to prevent any erosion that might occur during treatment operations.

* * * * *

Comments on Mill Street Relocation Plan

It appears that all issues with the Mill Street realignment are resolved at this point.

The utility poles are shown at their existing locations, but will be relocated so not within the new street alignment. There is a note on Drawing T-7 to that effect, but the new locations are not shown, and work needs to coordinate with the utility. It is our understanding that these poles will be located 5 feet off the new road, subject to not being on the railroad property (unless the railroad grants approval to the town and/or utility for that on a long-term basis).

EPA understands that GE's design includes that the width of the new road is to be the same as the existing road, excluding the roughly 7-10 foot apron that was installed in the mid 1990s at the direction of EPA. While GE states that this apron was requested by the EPA for reasons unrelated to traffic flow, EPA disagrees in that it was actually traffic and terrain issues which subsequently let to the erosion of the edges of the Mill Street roadway, causing the soil cover and liner of the temporary cap to become damaged and allowed PCB contaminated soils to be exposed. Please indicate whether Milford has a current required width for road re-paving activities that must be complied with, and 1) if there is, will this requirement be met at the completion of the remedial action and/or 2) if not, how will the edging of the pavement on the new Mill Street address surface runoff.
and control erosion.

Drawing T-7 should have shown the actual profile line along the road alignment. It will be included in the final design drawing. The longitudinal profile that is shown by the small circles on Drawing T-7 (if you connect the dots manually) follows the existing grade, and therefore should be quite similar to the current road (as depicted in the cross sections on subsequent T-series drawings).

Response: Regarding the overhead utilities at the Mill Street Area, the relocation of such utilities was identified as an ARAI in the July 2012 TSOW. As indicated in Sections 3.2 and 3.6 of the revised Final Design Report, GE has had extensive discussions with Fairpoint Communications and Public Service of New Hampshire regarding the relocation of the overhead utilities along Mill Street and Keyes Drive. Based on those discussions, GE anticipates that the utility relocation work will be completed in 2013. At this time, neither utility has provided comments on the proposed utility relocation plans, which are provided as Technical Drawings G-4B (Keyes Drive) and G-6B (Mill Street). As noted on Technical Drawing G-6B the easternmost utility pole at the Mill Street Area is currently located on railroad property. GE is currently in discussions with the railroad regarding access to the property for the performance of the remediation activities and the proposed relocation of the easternmost utility pole on railroad property.

The design of realigned Mill Street presented in the revised Final Design Report meets New Hampshire Department of Transportation (NHDOT) requirements. The roadway reconstruction for Mill Street will be in accordance with applicable Town of Milford and NHDOT standards, to the extent that such standards can be accommodated given the current limitations associated with the Mill Street Area (e.g., the proximity of the residence at the corner of Mill and Cottage Streets, the proximity to the Mill Street Railroad crossing, etc.). With regard to drainage for reconstructed Mill Street, Technical Drawing T-6 indicates that a pipe underdrain will be installed during reconstruction. The underdrain will aid in the drainage of the subbase minimizing the undermining of the roadway. The flatter terrain slopes adjacent to the roadway shown on Technical Drawings G-24 and T-8 will minimize the need for additional erosion controls. Finally, with regard to the profile of reconstructed Mill Street, Technical Drawing T-7 does depict the profile line along the proposed realignment - it is very close to the profile for the existing roadway. The referenced circles indicate the changes in grade between the existing roadway and the reconstructed roadway, as proposed.

* * * * *

Corps of Engineers Comments (Dec 2007 100% Design Report)

Corps of Engineers Comments on Appendix B

Corps of Engineers Comment 1: *Appendix B: Technical Drawings -Drawing S-1*

Legend: last legend solid line: Soil removal cell limits based on figure 11 by ARCADIS BBL dated December 2007. Provide a reference to a document that is part of Final 100% report.

Response: The requested reference to the Final Design Report has been added to the legend.

* * * * *

Corps of Engineers Comment 2: *Appendix B: Technical Drawings - Drawing S-2*

Legend: last legend solid line: Soil removal cell limits based on figure 11 by ARCADIS BBL dated December 2007. Provide a reference to a document that is part of Final 100% Report.

a) Note 1: Identify drawing nos. by ARCADIS that are included in the Final 100% report.
b) The construction surcharge of 300 PSF as stated in the note is not same as calculations. Calculations consider a construction surcharge of 0.15 ksf which is less.

Response: The requested reference to the Final Design Report has been added to the legend. In addition, a reference to Figure 11 of the Final Design Report has been added to Note 1. Finally, the 300 pounds per square foot (psf) construction surcharge is an assumed vertical pressure. It is standard practice to convert this vertical pressure to a horizontal pressure on the back of the wall. Such an approach results in an approximate reduction of 50 percent of the vertical load (to 150 psf horizontal), which is the value used in the design calculations.

* * * * *

Corps of Engineers Comment 3: *Appendix B: Technical -Drawings -Drawing S-3*

a) Cell V & Cell Q Bracing Layouts: Detail 3/S-7 shown at two locations do not match with detail 3/S-3 shown on drawing S-7

Response: Please note, the referenced excavation cells are now Excavation Cell W and S, respectively. As previously indicated, the limits of soil removal at the Elm Street Area were revised based on the results of the pre-construction verification soil sampling activities performed under the SDDC Work Plan. As a result, the support of excavation design for Excavation Cell W, including any references to the detail sheets, has been revised accordingly.

* * * * *

Corps of Engineers Comment 4: *Appendix B: Technical Drawings -Drawings S-4, S-5, S-6*

Soldier Pile HP 14X 102 are spaced at 6 feet. However, design calculations consider 5 feet spacing. Show spacing same as design calculations. Show construction surcharge value where surcharge is shown.

Response: The soldier pile spacing shown on the above-referenced drawings ranges from 5 to 6 feet on center depending on the cell. The cells with 6 feet spacing are Excavation Cells S and W, all other cells with soldier piles on the drawings are spaced at 5 feet on center. The design calculations accurately represent the cell spacing shown on the drawings. Specifically, pages 39 of 58 and 43 of 58 indicate that the soldier piles for Excavation Cells S and W were designed to be installed every 6 feet on center.

* * * * *

Corps of Engineers Comment 5: *Appendix B: Technical Drawings -Drawing S-7*

Section 3/S-3: See comment for drawing S-3

Response: See the Response to Corps of Engineers Comment 3 on Appendix B. The details presented on Technical Drawing S-7 have been revised accordingly based upon the revisions to the limits of excavation for the Elm Street Area.

* * * * *

Corps of Engineers Comment 6: *Appendix B: Technical Drawings -Drawing S-13*

a) Section A-A/S-9: The bracing orientation does not match as shown on drawing S-10.

Response: The support of bracing shown in the section A-A has been revised to be consistent with Technical Drawing S-10.

* * * * *

Corps of Engineers Comments on Appendix C

Corps of Engineers Comment 1: *Appendix C: Technical Specifications - Specification Section 02160 - Page 22 of 30*

Part 3 – Execution, para. 3.04 Steel sheet Piling: Include requirements for sheet piles about submittals, delivery, storage and handling, material tests, inspection and verification, pile driving equipment, placing and driving, cutting off and splicing, inspection of driven piling, pulling and redriving.

Response: Technical Specification 02160 has been revised to include the requested information.

* * * * *

Corps of Engineers Comment 2: *Appendix C: Technical Specifications –Specification Section 02400 - Page 23 of 30*

Part 1 – General, para.1.03 Definitions and Reference standards, sub-para. A, B, C, D, E, F & G: Identify particular referred standard specification using numbers, year of revision etc. and not just providing standard organization names.

Response: Technical Specification 02400 has been revised to add the appropriate specification numbers and years, where applicable.

* * * * *

Corps of Engineers Comment 3: *Appendix C - Technical Specifications: Specification Section 02160, Page 22 of 30*

Part 3 – Execution, para. 3.04 Steel sheet Piling: Include requirements for sheet piles about submittals, delivery, storage and handling, material tests, inspection and verification, pile driving equipment, placing and driving, cutting off and splicing, inspection of driven piling, pulling and redriving.

Response: See Response to Corps of Engineers Comment 1 on Appendix C.

* * * * *

Corps of Engineers Comments on Appendix F

Corps of Engineers Comment 1: *Appendix F: Design Calculations -Elm Street Calculations*

a) Provide a reference for the 25-year storm data and corresponding loading considered in the design.

b) Pages 52 and 53 (numbered 58 incorrectly) are not legible. Provide a 11X17 copy that is legible.

Response: A reference for the 25-year storm data has been provided and the pages have been and printed on 11" x 17" sheets to increase legibility.

* * * * *

Corps of Engineers Comment 2: *Appendix F*

Additional survey must be conducted on the bank into the river before a final design can be developed for the protection of the river bank, including the toe and the end protection. Typical sections and sections along the baseline, showing existing ground location, slopes and proposed construction should be included.

Response: Bathymetric and topographic surveys of a portion of the river and the adjacent riverbanks were performed on October 26 through 28, 2009. The information collected during the survey was transmitted to EPA in a letter dated October 21, 2010, along with revised versions of: Technical Drawings G-21, G-23, and G-27; Technical Specifications 02270 and 02280; and the applicable design calculations. Revised versions of Technical Drawing S-2 and Technical Specification 02160 were subsequently submitted to EPA in a letter dated October 29, 2010. The revised technical drawings, specifications, and design calculations have been incorporated into the revised Final Design Report.

* * * * *

Corps of Engineers Comment 3: *Appendix F*

The riprap layer thickness and stone size should be checked for vandalism susceptibility (see page 3-6 of EM 1110-2-1601, which states that need d50=80 lbs for urban areas).

Response: Potential vandalism of riprap materials was considered during the design process. Due to the steepness of the slopes and the difficulty of access from the river's edge, vandalism was not considered to be a significant concern. The potential for riprap vandalism will be addressed as part of the site-wide, long-term maintenance program. Under that program, riprap slopes will be monitored on a regular basis for potential vandalism in addition to other potentially adverse conditions. Should such conditions be identified, appropriate repairs will be made on an as-needed basis.

* * * * *

Corps of Engineers Comment 4: *Appendix F: Design Calculations - Mill Street Calculations*

a) Provide a reference for the 25-year storm data and corresponding loading considered in the design.

b) Pages 59 and 60 are not legible. Provide a 11X17 copy that is legible.

Response: See the Response to Corps of Engineers Comment 1 on Appendix F. A reference for the 25-year storm data has been provided and the pages have been and printed on 11" x 17" sheets to increase legibility.

* * * * *

Corps of Engineers Comments on Drawings

Corps of Engineers Comment 1: *Drawing: G-6*

Does the containment section apply to the entire water treatment staging area? If so where will the gravel access ramp be provided?

Response: No, the containment section applies only to the water treatment system itself, plus some additional area around the system that is necessary for access and maintenance.

* * * * *

Corps of Engineers Comment 2: *Drawing: G-20*

The notes indicate the storm sewer to be constructed and sized according to Milford Requirements; Requirements are not noted in the appendices. It would seem to be simpler to specify the size, materials and specs. in accordance with town requirements, rather than provide the entire requirements.

Response: The Consent Decree entered into between the Town of Milford and EPA requires the Town to provide the storm sewer piping, including all appurtenances (i.e., manholes, fittings, etc.). Therefore, the Town will determine the diameter, material of construction and manufacturer for these materials, as indicated in Note 1 on Technical Drawing G-20. The Town's Infrastructure Design, Construction & Administration Standards were provided as Section 17001 of the Technical Specifications in Appendix C. For the purposes of the Final Design Report, it was assumed that the replacement storm sewer will be constructed using 18-inch diameter piping. Technical Drawing G-20 provides the route and elevations for the replacement storm sewer pipeline (again, assuming an 18-inch diameter pipe will be supplied by the Town).

* * * * *

Corps of Engineers Comment 3: *Drawing G-20*

Where will storm flows go while the new outfall is being constructed?

Response: See the Response to EPA Comment 19 on the Final Design Report. As noted therein and illustrated on Technical Drawing G-20, the replacement storm sewer will be installed in two sections, including: (1) the portion from existing catch basin CB-1 to a temporary manhole intersecting the existing storm sewer; and (2) the portion from the temporary manhole to the new outfall. Storm water flows will be maintained during the performance of the excavation activities at the Elm Street Area via the portion of the replacement storm sewer installed between existing catch basin CB-1 and the temporary manhole to the existing outfall. Upon completion of the remedial excavation activities, the portion of the replacement storm sewer from the temporary manhole to the new outfall will be constructed as part of the site restoration activities for the Elm Street Area. Once this portion of the replacement storm sewer is completed, it will be connected to the temporary manhole and the existing storm sewer will be filled in and removed from service.

* * * * *

Corps of Engineers General Comment

Corps of Engineers General Comment:

Please provide tabs and titles for each appendix and other substantial items in the submittal.

Response: Tabs and titles for each appendix have been provided in the revised Final Design Report. Sub-appendices are denoted using colored flysheets.

* * * * *

Corps of Engineers Comments on Specifications

Corps of Engineers Comment 1: *Specification Section 02201 & 02203*

Both of these sections make use of the term "suitable fill." This term should be defined in the definitions section of each specification section.

Response: A response to this comment was provided as part of the Response to Comment document submitted with GE's July 2012 TSOW for the EPA-approved ARAIs. As noted therein, the term "suitable fill" has been defined and/or clarified in Technical Specifications 02201 and 02203.

* * * * *

Corps of Engineers Comment 2: *Spec General Comment*

A separate section for "Stone Protection" should be included which describes the riprap material and construction requirements. An example of what is required can be found in the USACE guide specifications at http://www.wbdg.org/ccb/DOD/UFGS/UFGS%2035%2031%2019.pdf .

Response: Technical Specification 02370 - Riprap (included in Appendix C of the revised Final Design Report) provides details regarding stone protection.

* * * * *

Corps of Engineers Comment 3: *Spec General Comment*

The 100% Final Design shall incorporate the October 21, 2010 modifications

Response: See the Response to Corps of Engineers Comment 2 on Appendix F. As noted therein, the revised Technical Drawings, Technical Specifications, and design calculations associated with GE's October 21 and 29, 2010 submittals to EPA have been incorporated into the revised Final Design Report.

* * * * *

Corps of Engineers Comment 4: *Drawing G-27, Gabion Gravity Wall:*

The non-woven geotextile should be extended under the gabion wall, to act as a separation barrier against bedding layer intrusion and subsequent settlement. Additionally, demonstrate how the gabion baskets will be protected against rupture when subjected to ice and debris attack during higher flows.

Response: The non-woven geotextile has been extended beneath the gabion wall as shown on Technical Drawing G-27. Additionally, as shown on the Gabion Gravity Wall Detail on Technical Drawing G-27, protection at the base of the wall will be provided by the steel sheetpile demarcation wall and riprap installed on the river side of the sheetpile demarcation wall. The revised design features oversized riprap to provide additional protection from floating debris and ice. Finally, the gabion wall will be subject to monitoring under the Long-term Monitoring Plan.

* * * * *

Corps of Engineers Comment 5: *Specifications, MP-02201-6, 3.06 (D) (1&2)*

Reference is made to both ASTM D 698 and ASTM D 1557.
Which standard will be used?

Response: A response to this comment was provided as part of the Response to Comment document submitted with GE's July 2012 TSOW for the EPA-approved ARAIs. As noted therein, Technical Specification 02201 has been revised to indicate that moisture-density relationships of backfill material will be determined by ASTM D 1557.

* * * * *

Town's Comments to the 2007 100% OSD Design

The Town of Milford (Town) is concerned that the 100% design does not adequately consider the Town's technical ordinances regarding Town infrastructure, water supply, and sewer design.

The 100% design Volume II-Appendices included an edited version of the Town's ordinances in Division 17-Specifications Provided By Others. The edited Town ordinances included administrative sections which the 100% design deleted (and the Town understands is consistent with Superfund site work) and technical sections which were also removed (which the Town does not agree is appropriate). While some technical sections may not apply to the proposed work, the removal of these sections does not present a potential problem unless the design is changed or modified to include these technical elements. If that is the case, then the Town would like the removed technical ordinances included in any design modification. The deleted ordinances that should be considered if the design is modified include the following:

1. *Infrastructure Design, Part B Roadway and Trenching Construction, B-28 and B-29, Roadway Stabilization Fabric*
2. *Infrastructure Design Part B Roadway and Trenching Construction B-41 and B-42, Steel Beam Guardrail*
3. *Infrastructure Design Part B Roadway and Trenching Construction B-50 through B-53, Trees and Shrubs*
4. *Infrastructure Design Part C Blasting and Explosives*
5. *Infrastructure Design Part D Fire Cistern Specifications*
6. *Water and Sewer Part B General Construction Standards, General Pump Station Technical Requirements*
7. *Water and Sewer Part C Sewer System, Sewer Pump Station technical Requirements*
8. *Water and Sewer Part D Water System, Water Cross-Connection Control Program, Water Construction Design Details*

There are other Town technical requirements that were removed that appear to apply to the 100% design. These applicable requirements include the following deleted Town ordinances:

1. *Infrastructure Design Part B Roadway and Trenching Construction, B-25, fertilizer and lime application*
2. *Infrastructure Design Part B Roadway and Trenching Construction, B-43, fertilizer and lime materials*
3. *Infrastructure Design Part B Roadway and Trenching Construction, B-44, loam placement*
4. *Infrastructure Design Part B Roadway and Trenching Construction, B -45, fertilizer and lime application*
5. *Infrastructure Design Part B Roadway and Trenching Construction, B-46, fertilizer and lime materials, delivery and storage*
6. *Infrastructure Design Part B Roadway and Trenching Construction, B-48 and B-49, fertilizer spreading and application rates*
7. *Water and Sewer Part B General Construction Standards, B-15 and B-17, fertilizer and lime materials, delivery and storage*
8. *Water and Sewer Part D Water System, Water Cross-Connection Control Program, Water Construction Design Details, Fire Hydrant Assembly Detail*

The Town has indicated their willingness to work with GE on making reasonable appropriate revisions to the Town's technical ordinances once the Town's technical requirements are formally included in the 100% design.

Response: A response to this comment was previously provided as part of the Response to Comment document submitted with GE's July 2012 TSOW for the EPA-approved ARAIs. As noted therein, this comment is too vague to respond to specifically. As noted in the Final Design Report, the Town of Milford's technical ordinances were reviewed and the portions of those ordinances that were determined to be relevant were incorporated into the Remedial Design and the Technical SOW.

* * * * *