## REVISIONS TO SEDIMENT REMEDIAL ACTION PLAN TO WHICH EXIDE HAS AGREED, AS DEVELOPED BY FACILITATED MEETINGS BETWEEN EXIDE, TOWN OF FAIRFIELD AND DEEP

## JUNE 21, 2013

As developed by a series of facilitated meetings among the Town of Fairfield, Exide and DEEP, Exide will perform, or require its contractor to perform, additional tasks by amending the Sediment Remedial Action Plan (RAP) as follows:

- Revise SedRAP drawings to include sediment core sample F17 exceedance in Area V. Section 3.2
- Hydraulic dredging will be used. The primary choice for the dredging system will be hydraulic cutter head removal. However, in Area IV and Area II, Cell 2, diver assisted suction will be employed. Use of other hydraulic dredging techniques will be subject to DEEP and Exide authorization and/or approval. <u>Section 5.7</u>
- 3. All sediment remediation (dredging) will be completed to avoid vertical cuts such that shallow and gradual slopes remain (except in areas where such techniques are not practical, not implementable or otherwise already exist, i.e., deep "holes" or steep slopes). Section 5.7
- 4. Geotubes will be used for dredge slurry dewatering. <u>Section 6.1 and 6.6</u>
- The terms and conditions of the NPDES permit to be issued will be incorporated by reference into the RAP. <u>Section 7.5</u>
- 6. Bacterial sampling, if deemed necessary by DEEP and The Department of Agriculture, will occur under a memorandum of understanding between such agencies. <u>Section 7.5</u>

- The following Quality Controls/QAPP have been included in the RAP and, as applicable, will be followed by the Contractor. <u>Section 8.0</u>
  - a. Daily volumetric quantity calculations;
  - b. As-built bathymetric, sediment thickness and coverage area drawings;
  - c. Debris locations;
  - d. Critical structures location and delineation;
  - e. Dredge monitoring system and data analysis;
  - f. High accuracy project tracking;
  - g. O&M Plan for ensuring integrity of dredge slurry line
- 8. Large woody debris will be retained in the river and be moved only temporarily in order to remove contaminated sediments <u>Section 8.0</u>
- 9. Turbidity curtains will be designed to allow free flow of water through cells using the maximum amount of large breathing windows possible. Section 8.1.2
- 10. The turbidity curtains will be anchored to the bottom of the river. <u>Section 8.1.2</u>
- 11. An inspection program to confirm the impact dredging has on the migratory fish corridor will be prepared and will include periodic inspections by DEEP. <u>Section 8.1.2</u>
- 12. After consultation with DEEP, the following three locations will not be dredged during the river herring spawning migration period from April 1 to June 30: (1) Area II Dredge Cell #2, (2) Area III Dredge Cell #1 and (3) Area IV. Section 8.1.2
- 13. A two hour inspection interval will be established to evaluate the turbidity curtain function, and a log book created to document the inspection schedule and results, and responsive actions taken (if deemed necessary). <u>Section 8.2</u>

- 14. Background monitoring for turbidity will be initiated one week before the start of dredging, and terminate within five working days after the end of dredging for the season occurs, and all turbidity curtains have been removed. <u>Section 8.2.2</u>
- 15. To evaluate flow reversal of the river and therefore determine which meters represent background, a system will be developed using established methods including mechanical metering, charts and observations, and the flow direction recorded and logged. <u>Section 8.2.2</u>
- 16. An additional turbidity monitoring buoy will be installed for a total of two upstream and two downstream (at 100' and 200' each direction from the dredge cell, located appropriately to capture representative potential releases from the project area). <u>Section 8.2.2</u>
- 17. 24/7 turbidity monitoring will be performed during dredging operations (i.e. none during winter months when no river operations are occurring), with changes to the RAP to reflect a response and communication procedure <u>Section 8.2.3</u>
- 18. During daily turbidity buoy calibration, checking, or maintenance, a section on the log sheet will be created to include observations related to fish or other water dependent creatures in the vicinity. <u>Section 8.2.5</u>
- Dredging will be halted in response to observation of a visual plume from the active dredge cell. <u>Section 8.2.5</u>
- 20. The Project Operations and Maintenance Plan will include a procedure for dredge barge fueling to prevent and respond to accidental releases. This component will be made a requirement of the contractor and be subject to Exide's review and approval. <u>See Section 8.6</u>
- 21. DEEP will coordinate the Oil and Chemical Spills Unit's 24-hour hotline and the individual programs involved in this project to respond to any emergency problems or complaints received. Section 8.7

- 22. For final verification sampling, the surface weighted average concentration ("SWAC" an environmental dredging industry standard protocol) will be used to determine if an exceedance of the remedial standard has occurred. <u>Section 10.1 (also Sections 2.3 & 8.3)</u>
- 23. Should exceedance of the established remediation standard for lead be determined by final verification sampling, Exide will work with the DEEP to develop an appropriate response plan that is protective of human health and the environment. Potential response actions may include, but are not limited to, natural recovery of the systems, thin layer covers, and additional sediment removal. Section 10.1 (also Sections 2.3 & 8.3)
- 24. The preferred dredge sequence will be (in order of first to last) V, I, II, III, IV, subject to change with prior approval of DEEP. <u>Section 12.0</u>
- 25. A separate "Performance Standards" document will be added to the RAP as an <u>Appendix VII.</u>