STATE OF CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION

RESPONSES TO PUBLIC COMMENTS ON THE REMEDIAL ACTION PLAN FOR LEAD IMPACTED SEDIMENTS MILL RIVER STUDY AREAS I-V THE FORMER EXIDE BATTERY FACILITY PROJECT FAIRFIELD, CONNECTICUT



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PUBLIC COMMENT LETTERS (1 THROUGH 45)

This Response to Public Comments Document (Document), prepared by the Connecticut Department of Energy and Environmental Protection (DEEP), with considerable technical input from Exide Group Incorporated (Exide), is in response to comments received from the public relating to Exide's *Remedial Action Plan for Lead Impacted River Sediments, Mill River Study Areas I-V, The Former Exide Battery Facility Project, 2190 Boston Post Road, Fairfield, Connecticut,* dated April 2012 (herein referred to as April 2012 SedRAP). The April 2012 SedRAP was available for public comment from December 18, 2012 to February 28, 2013. Several of the comment letters received also contained comments on the draft National Pollutant Discharge Elimination System (NPDES) permit. The NPDES permit process is a separate and distinct process from the SedRAP approval process. As such, detailed responses to the comments related to the NPDES permit are not included in this Document. Detailed responses to public comments regarding the NPDES permit will be provided by DEEP in a separate letter following the approval of the SedRAP. The responses to comments regarding the NPDES permit included in this Document address issues that are pertinent to the SedRAP and the overall plan to remediate lead-impacted sediment in the Mill River.

Many of the public comments received by DEEP contained similar concerns and, therefore, are combined into general categories in order to enhance readability by eliminating redundancy in DEEP's responses. A list of the general categories and a matrix listing all public comment letters received and the general category of the comments are provided in Tables 1 and 2. Some of the lengthy public comments have been summarized for brevity. Copies of the comment letters received by DEEP are included as attachments to this Document and can be reviewed on the project website at:

http://www.ct.gov/deep/cwp/view.asp?a=2719&q=517076&deepNav_GID=1654.

Given the complex and technical nature of issues raised during the public comment period, DEEP initated a series of faciltated discussions involving representatives from the Town of Fairfield, a local advocacy group (FairPLAN), Exide, and DEEP to reach a consensus on the cleanup approach. The facilitator for these discussions was paid for by Exide yet remained objective and impartial. The facilitated discussions included the concerns related to both the SedRAP and the NPDES permit. The topics for discussion at these facilitated meetings, which were developed based on the general categories of the public comments received, included the following:

- Sediment removal technology comparison;
- Suspended sediment control;
- Impacts of resuspended sediment on fish and shellfish;
- Shellfish and migratory fish protection;
- Monitoring and contingency plan for dredge cells and NPDES discharge;

- Sequencing of the dredging by study area;
- Post-remediation monitoring;
- River bottom restoration and recovery;
- Status of tide gate structure;
- Detail necessary or required in SedRAP;
- Chromium impacted sediment;
- Local jurisdiction;
- Ownership of river bottom; and
- Railroad and Department of Transporation stormdrains.

The results of the facilitated discussions were used to form the basis of DEEP's responses to the public comments and modifications to the SedRAP and NPDES Permit. The group agreed that they shared a common interest in removing the lead-impacted sediment from the Mill River, minimizing the short-terms impacts to the river during the cleanup, and completing the remediation as soon as possible. During the facilitated discussions, the group developed consensus revisions to the SedRAP that:

- Ensured state-of-the-art technology would be used to control suspended sediments during dredging;
- Expanded the turbidity monitoring program;
- Strengthened measures to protect migratory fish and shellfish;
- Clarified and strengthened the project's performance standards;
- Clarified and strengthened the response plan, in the event that the suspended sediments are released; and
- Provided for on-going communication throughout the remediation work.

Attachments VII and VIII to this Document were prepared by Exide as a result of the facilitated discussions and provide a summary of the revisions to the SedRAP, as agreed to by the parties involved in the facilitated discussions, as well as a summary of the key performance standards which were added as an appendix to the SedRAP. The revisions to the SedRAP are included in the July 2013 version of the SedRAP on file with the Town and DEEP.

Concurrently with this Document, DEEP is issuing an Approval Letter for the *Remedial Action Plan for Lead Impacted River Sediments, Mill River Study Areas I-V, the Former Exide Battery Facility Project, 2190 Boston Post Road, Fairfield, Connecticut*, dated July 2013 (herein referred to as July 2013 SedRAP) as a separate document.

Response Category 1. Re-suspended Sediments

[Pertains to Public Comment Letters #1, 2, 3, 7, 8, 10, 11, 12, 13, 14, 17, 20, 22, 23, 26, 27, 37, 38, & 44]

a. <u>Concern:</u> *Questions regarding turbidity curtain design and setup.*

<u>Response</u>: Based on follow-up discussions with DEEP's Fisheries Division and the facilitated discussions, Exide has revised the design of the turbidity curtains. Turbidity will be mitigated with a more advanced barrier than that indicated in the April 2012 SedRAP. A "GeoComposite" filter barrier comprised of polypropylene/polyester fabric will be used, and will extend to full water depth, anchored by a ballast chain (additional anchors may be used if necessary) and suspended by flotation billets. The floating barrier allows water to pass while retaining/excluding particles as small as 10 microns. The barrier will be constructed using the maximum amount of breathable fabric feasible, to allow free passage of water and to prevent ballooning of the barrier. The barrier will be designed for the project specific conditions.

b. <u>Concern:</u> What is the calculated volume of sediments that will be lost during dredging? <u>Response:</u> Proper dredge operation will prevent undue generation of resuspended sediment. In the event that any resuspended sediment is generated, it will be contained inside the dredge cell and discovered through daily confirmation testing and subsequently removed as dictated by results. Navigational dredging studies by Nakai (1978), Hayes and Wu (2001), Hayes et al. (2000), and Pennekamp et al. (1996), show a conservative characteristic resuspension factor of 0.5 percent (99.5 % solids capture), as summarized in the 2008 ACOE document Technical Guidelines for Environmental Dredging. As also stated in that document, "Resuspension data from environmental dredging projects is minimal. However, navigational dredging has been studied much more extensively and, because resuspension is driven by the same processes, it is relevant to the environmental dredging experience." (Section 7.1.1 of the ACOE Technical Guidelines).

The same section goes on to state: "Since these data were collected primarily from navigation maintenance dredging where limited quantities of debris were present, the characteristic resuspension factors should be increased by a factor of two or three for environmental dredging sites when significant quantities of debris are encountered."

Since a bathymetric survey performed on river study areas I, II, III, and V did not identify any significant debris in the planned dredge area, and any large debris will be moved or removed prior to dredging, the navigational dredging conservative resuspension factor of 0.5% will be multiplied by 2, rather than 3, resulting in a resuspension factor of 1%. 1% of the conservative estimate of 27,600 cubic yards of total dredged sediment is 276 cubic yards. However, it must be emphasized that this is a conservative estimate, and any possible "*loss*" of contaminated sediments during dredging will be mitigated by containment within the filter barrier cells, which will contain resuspended sediments until settled, at which point confirmation sampling will map any further need for sediment removal.

c. <u>Concern:</u> How does optically measured turbidity equate to TSS?

<u>Response</u>: While they are related, there is no direct way to convert turbidity to total suspended solids (TSS). TSS measures the total solid/sediment load in a volume of water and turbidity measures the clarity. Clarity can be affected by algae and other factors; however, in dredging projects, suspended sediment (which would increase TSS readings) is the most likely factor to increase turbidity readings. Turbidity monitoring is a practical and commonly used method to measure increased sediment load in the water column during dredging projects.

d. <u>Concern:</u> Define contaminants associated with, and acute toxicity of, resuspended sediment.

<u>Response:</u> Exide has evaluated the characteristics of the in-place sediments as presented in the July 2013 SedRAP and supporting documents. Contaminants in the sediments would be the same whether sediments are settled or resuspended. The July 2013SedRAP includes state of the art design and technology to minimize resuspension of sediments and improve containment of any resuspended sediments within the isolated dredge cells, thereby mitigating any potential for toxicity,) as agreed upon during the facilitated discussions.

<u>Concern</u>: Will "mud waves" or waves of semi-fluid mud break free of the dredge cells and require supplementary dredging result in 100% of the river bottom being dredged?
 <u>Response</u>: Project controls will be put in place that will prevent discharge from the dredge cells and contain any resuspended sediment within the dredge cell. See also Response Category #23 of this Document (p.15).

f. <u>Concern:</u> Request for an additional turbidity measuring point at depth at some monitoring *locations.*

<u>Response:</u> The July 2013 SedRAP (p. 57-58) prescribes that in locations where water depths of greater than 10 feet are encountered, the need for monitoring at two depth intervals will be evaluated as follows:

"This evaluation will be performed both visually and by taking spot turbidity measurements at different points in the water column to determine if there is an appreciable difference (noted cloudy water at a certain depth or greater than twenty percent difference in turbidity measurement) in turbidity at depth in these deeper water areas. If an appreciable difference is noted, turbidity monitoring (at the two downstream locations and the background station) will be performed at two points for each monitoring station - one point one third of the water column below the surface of the water, and one point two thirds of the water column below the surface."

The only portion of the Mill River to be dredged that exceeds 10 feet in water depth (with the possible exception Area IV at high tide only) is the upper part of Area V where CTDOT had mined gravel and created a deep hole. Exide will employ the same procedure as detailed above to evaluate the need for a third turbidity monitoring point, at depth, at the monitoring stations setup in that area.

g. <u>Concern:</u> Will resuspended sediment escaping from the dredge cells result in artificial upward creep of the background turbidity measured in the river?

<u>Response</u>: There will be minimal resuspended sediment and it will be isolated within the dredge cell in the immediate vicinity of the dredge intake because of the suction created by the dredge. Therefore, dredging is not anticipated to create an artificial creep in background turbidity caused by resuspended sediments beyond the immediate vicinity of the dredge intake. During remediation activities, the "background" turbidity value will be a moving target due to changing river conditions partially in response to ever changing weather conditions. For this reason, there will be upstream turbidity monitoring locations to generate daily real time background levels. Also, active dredging is anticipated to take place for only 6-hours/day, giving any theoretical creep 18-hours/day to settle before dredging resumes. In addition, background turbidity monitoring will be initiated one

week prior to any in-river dredging activities to assist in evaluating background conditions during the project.

h. <u>Concern</u>: Why has the revised SedRAP removed the stop work response due to turbidity exceedences?

<u>Response</u>: During the DEEP's review of the Draft October 2011 SedRAP, DEEP requested specific turbidity action levels for the response protocol. Based on the facilitated discussion, a prescriptive response plan and corrective measures were established. The July 2013 SedRAP requires dredging to stop immediately if a visual turbidity plume is seen leaving the dredge cell. An exceedence of the electronic turbidity monitoring standard sets forth a series of response protocols which are designed with an increasing level of response based on the duration of the exceedences detected. These protocols call for verifying turbidity measurements and operational corrections in the dredging process when increased turbidity levels are encountered. Evaluation of the cause of these increases includes inspection of the cutterhead for clogs/debris, moving/removing objects from the river bottom, checking the turbidity monitoring equipment, taking additional turbidity measurements using hand-held equipment, and/or inspecting the turbidity curtain for damage. If the electronic exceedence cannot be eliminated within 120-minutes via the series of checks, dredging will be stopped until the cause can be positively identified and eliminated.

i. <u>Concern:</u> Request that water quality in the harbor be monitored for a range of parameters during dredging.

<u>Response</u>: Project controls, including turbidity monitoring, will be in-place to prevent negative impacts to water quality. Any water quality monitoring performed in the harbor will be unrepresentative of impacts from dredging activities and are more likely to serve to document normal variations in water quality parameters due to weather, tides, and run-off rather than impacts from upriver dredging activities. It is important to remember also that the Mill River is tidally influenced and the harbor will only be functionally downstream of work areas for a portion of any work day. DEEP initiated a program to monitor bacteria levels in the Mill River and Southport Harbor to establish background conditions and to evaluate whether dredging significantly increases these background levels. Sampling will continue as needed to evaluate risks. The information collected will be carefully evaluated given the many sources of bacteria in the watershed unrelated to Exide's dredging activities.

Response Category 2. Potential for adverse effect on anadromous fish populations/shellfish populations.

[Pertains to Public Comment Letters #1, 2, 3, 4, 7, 9, 11, 12, 13, 17, 22, 23, 38, 41, & 44]

<u>Response</u>: As a result of the facilitated discussions, the group established measures to protect migratory fish and shellfish. The measures were incorporated into the July 2013 SedRAP and include the following:

- Control of resuspended sediment through state of the art hydraulic dredging technology (video camera, GPS location devices, and flow monitoring) installation of turbidity curtains, and implementation of real-time and visual turbidity monitoring program;
- Restriction of dredging activities in certain areas and time periods to protect fish and shellfish spawning; and
- Provisions to ensure that a corridor will be maintained for anadromous fish migration.

Response Category 3. Explain the apparent 30% increase in dredge volume from that noted in the SedRAP.

[Pertains to Public Comment Letters #1, 2, 3, 17, 19, 23, 37, & 38]

<u>Response:</u> The volume of Mill River sediment presented in the April 2012 SedRAP (21,440 cu. yd.) is the volume of material that Exide has identified (based on the 2008/2009 sediment sampling effort) as exceeding DEEP approved cleanup criteria and requiring removal. The higher volume (27,600 cu. yd) of material presented in the permit applications takes into account some anticipated over-dredging to insure that all of the impacted sediment is removed. This conservative approach of allowing the contractor the leeway of going beyond the mapped impacted boundaries results in an increased dredging volume.

Response Category 4. Question over habitat destruction (removal of sediment, sticks, rocks and related materials) during dredging, potential sumps/pits, and proposed restoration of structural elements and clean fill to re-grade bottom contours.

[Pertains to Public Comment Letters #1, 4, 11, 12, 13, 18, 19, 26, 27, 28, 37, 38, 41, 43, & 44]

<u>Response:</u> DEEP is not requiring restoration of bottom contours or structural elements. As indicated during the public information meeting, DEEP's experience at this location and elsewhere suggests that the Mill River ecology (biota) will re-establish itself naturally. E^x ponent (Exide's ecological risk assessor) expects that aquatic vegetation and benthic organisms will be reestablished in 1-3 years and that fish and other mobile wildlife will be unaffected by the project directly due to their mobility. As agreed to by Exide during the

facilitated discussions, any large woody debris will be retained in the river and moved only temporarily in order to remove sediments. In regards to the issue of sumps/pits, the dredging will be performed in such a way that vertical cuts are avoided and to allow shallow and gradual slopes in the dredged bottom profile. These two items were added as performance standards in the July 2013 SedRAP.

Response Category 5. Request for pre-dredge baseline survey of biota

[Pertains to Public Comment Letters #1, 2, 3, 13, 23, & 38]

<u>Response</u>: Habitat surveys of the river were conducted and flora and fauna were catalogued during the 2001 ecological risk assessment field program. The benthic invertebrate assemblages within the various parts of the Mill River were also characterized during the 2001 ecological risk assessment and during the 2004 supplemental sediment investigation. Copies of the reports are available in the DEEP's File Room. Information collected in these studies would serve as a baseline measurement for post-remediation monitoring work, if necessary

Response Category 6. Question over potential archeological artifacts encountered during dredging.

[Pertains to Public Comment Letters #1 & 38]

<u>Response</u>: It is not anticipated that any archeological artifacts will be encountered during dredging. During the 1983 Mill Pond dredging project no such artifacts were discovered and the dewatering method used during that project allowed close-up inspection of the dredged sediment. Likewise, no such artifacts have been discovered during excavation of the upland site including the excavation work that has progressed along the riverbank. If any large artifacts (such as sunken vessels or pieces of vessels) are encountered during this dredging project, they will not be taken up by the dredge and will remain in the river for any future archeological study.

Response Category 7. Concerns over Chromium in the Mill River from Superior Plating

[Pertains to Public Comment Letters #6, 7, 10, 11, 12, 18, 19, 22, 23, 28, 37, 38, 40, 42, 43, & 44]

a. <u>Concern</u>: How sufficiently is chromium mapped in the Mill River and what level of certainty is there that all chromium will be removed with the lead?
<u>Response</u>: Exide performed limited mapping of chromium in the river sediments while mapping the lead distribution for treatment and disposal options for the removed sediment. DEEP has tabulated this data and is working with Superior Plating to address chromium from their operations. Based on the data collected, it appears that the majority of the elevated levels of chromium is co-located with the lead-impacted sediment that is proposed to be removed by Exide and only a small area (approximately 2% of the study)

area) requires further investigation to determine if additional chromium-impacted sediment must be removed.

<u>Concern</u>: Will Exide test for chromium in their filtrate discharge?
 <u>Response</u>: The NPDES permit will require Exide to periodically test the filtrate for a range of heavy metals, including chromium.

Response Category 8. Concern over structural integrity of the tide gates along the east side of Tide Mill Dam.

[Pertains to Public Comment Letters #1, 2, 3, 7, 23, & 38]

<u>Response</u>: Exide and the owner of the tide gates have reached an agreement that will allow Exide to make improvements to these structures.

Response Category 9. Question over potential abutter ownership in-river and how it affects the project. Town requests that Exide provide assessors maps, with lot numbers and deed descriptions of all river adjoiners.

[Pertains to Public Comment Letters #1, 2, 3, 17, 23, 38, & 43]

<u>Response</u>: Survey maps are provided as Attachment VI and show no private ownership of the river bottom (either by deed or determination by DEEP or Connecticut Law) by any abutters. In Connecticut, private property ends at the mean high water line and the submerged lands and waters waterward of the mean high water line is held in public trust.

Response Category 10. Request for mapping the Coastal Jurisdiction Line and supplementing the project drawings with sufficient additional detail to allow the Conservation Department/Wetlands Agency to make a determination on whether or not Inland Wetland regulated areas will be impacted and therefore require an IWPA. Request that Exide ask for a Declaratory Ruling from Wetlands Agency on the IWWC Issue.

[Pertains to Public Comment Letters #1, 4, 17, 18, 26, 27, 38, & 43]

<u>Response:</u> The River bottom ownership survey is included as Attachment VI. The Coastal Jurisdiction Line (CJL) for Fairfield is 5.2 feet above sea level. All in-river work will be waterward of the CJL and therefore not subject to local IWWC jurisdiction.

Response Category 11. Explain the lack of sediment samples under the I-95 overpass.

[Pertains to Public Comment Letters #1 & 38]

<u>Response</u>: This area was evaluated during sediment sampling activities conducted in 2008 and 2009 and determined to be scoured of fines (cobble bottomed), likely due to this area being the first constriction point downstream of Area V, where the river is at its widest and deepest. Note that this observation was included in the SedQAPP Implementation Report by noting that sampler refusal was reported at the sample locations closest to this overpass on both the upstream and downstream ends on the drawings provided.

Response Category 12. Explain why there is no additional study required for the Railroad Drain.

[Pertains to Public Comment Letters #1, 2, 3, 4, 17, 23, 30, 38, 41, & 43]

<u>Response:</u> There is no physical evidence that Exide connected to the railroad storm drain which is not located on Exide's property and conveys road runoff from North Pine Creek Road to Mill River Area II (passing under the active Metro-North rail lines). Exide removed all buildings, foundations, and subsurface piping to its terminus on their property and found no evidence of a connection to the railroad storm drain. Recent testing of water exiting this drain by DEEP and Exide shows that the drain is not a source of lead contamination to the Mill River (lead was not detected in the samples). DEEP has no evidence that indicates further investigation of the railroad storm drain can be justified. DEEP has confirmed this conclusion to the Town of Fairfield in writing (letters dated May 20, 2009, October 12, 2012, July 16, 2013, and July 25, 2013) and at the public meetings on January 10, 2013 and August 1, 2013.

Response Category 13. Justify chosen dredge and dewatering methods.

[Pertains to Public Comment Letters #1, 2, 4, 8, 17, 18, 19, 26, 27, 28, 37, 38, 41, & 43] <u>Response</u>: In preparing the SedRAP, Exide identified all possible and feasible sediment removal technologies and methods. Each technique was evaluated and results were provided in the SedRAP.

Based on their review, Exide recommended hydraulic dredging as the preferred removal mechanism for this project. The attributes of hydraulic dredging are: lead will be removed to established remedial objectives from the river more effectively and efficiently; less potential for resuspension of sediment than other dredging methods, less habitat destruction; and less disturbance to river access.

The excavation in the dry using cofferdams method was not selected due to numerous disadvantages. As stated in the July 2013 SedRAP, the major disadvantages of this approach include:

• "It is a land-based approach, and providing access to each work area for construction equipment and workers presents a problem because the properties immediately adjacent to the river are largely residential in nature

- The ability to create stable cofferdam structures is questionable, due to the soft sediment and underlying bedrock in some areas
- The driving and subsequent removal of sheet piling used to construct the cofferdams is likely to disturb river sediments appreciably
- Once installed, the cofferdams would divert river flow around the structures resulting in localized increases in current velocity and, potentially, scouring and re-distribution of fine sediment (lead impacted or otherwise)"

Exide also evaluated dewatering techniques and selected geotextile dewatering bags (for example, Geotubes®) as the preferred alternative. Geotextile dewatering bags were selected for this project due to lower potential for project delays associated with equipment breakdowns common in mechanical dewatering and less short-term impacts with the slurry dewatering process being a contained process whereby the slurry is delivered via dual wall floating slurry pipeline from the river directly to the dewatering bags thereby reducing the potential for release of odors. Geotextile dewatering bags also eliminate the need for storage impoundments or barges in the river. Exide's six-acre parcel provides ample laydown area for the dewatering bags. In addition, favorable test results for the geotextile dewatering bags were generated using Mill River sediment during two rounds of treatability testing.

Response Category 14. Address the creation of a Public Information Website for this project.

[Pertains to Public Comment Letters #1 &38]

- a. <u>Concern</u>: Request that website include realtime turbidity readings and those readings are also relayed to town employee cell phones.
- b. <u>Concern:</u> Request that website contain confirmation sample data for lead.

<u>Response:</u> DEEP has setup a webpage for this project at the following link: http://www.ct.gov/deep/cwp/view.asp?a=2719&q=517076&deepNav_GID=1654

The Town of Fairfield and Exide entered into a Communication Agreement whereby the Town and Exide agree to keep lines of communication open and will meet periodically during the project to discuss the work that is planned, the status of the work, and any issues or concerns that have been raised.

DEEP does not consider it to be beneficial to post real-time monitoring data on-line. The realtime monitoring is for Exide's environmental consultant overseeing the remediation activities to use to monitor the work and make any necessary adjustments to the work procedures to ensure that resuspended sediments are not released outside of the dredge cells.

Confirmation samples and a summary of the turbidity monitoring data will become part of the public record in the Final Remedial Action Report. These data will be maintained on-site during the project and will be available for DEEP and the Town representatives to view (per the Communication Agreement between the Town and Exide) and maintained by Exide for a period of at least three years after project completion. Comprehensive site controls, monitoring, and corrective measure requirements are included in the SedRAP to ensure that the short-term impacts of the project are minimized and the remediation is successful.

Response Category 15. Address the potential long term effects on the river and biota of the dredging project.

[Pertains to Public Comment Letters #1, 2, 3, 6, 23, 37, & 38]

<u>Response:</u> Dredging and removal of contaminated sediments from the Mill River will yield positive long-term results by enhancing recovery of the ecosystem and reducing risks to the environment and the people that use the Mill River. Although dredging will result in some unavoidable short-term impacts to the ecological resources of the Mill River, the community of ecological receptors is expected to recover in 1 to 3 years. Details on the recovery of specific groups of organisms are provided below.

Several factors affect the recovery times of benthic macroinvertebrate communities following physical disturbance, such as dredge operations. Such factors include the spatial scale of the disturbance, the substrate left behind that is available for re-colonization, the adaptability of the native communities, and any resultant changes in current/flow. An extensive review by Newell et al. (1998) concluded that recovery rates for benthic macroinvertebrate communities in estuarine muds ranges from 6 to 8 months while communities in sand/gravel substrates recover within 1 to 3 years. Zajac and Whitlatch (2001) measured recovery rates in Alewife Cove (New London, Connecticut) following dredging. The benthic macroinvertebrate community of Alewife Cove recovered within 2 to 3 years. Oyster beds that are physically damaged have been shown to recover within a year of damaging events such as hurricanes (Livingston et al. 1999). In summary, some opportunistic species of benthic invertebrates are expected to colonize dredged areas of the Mill River within weeks or months, and recovery of the community is expected to occur within 2 to 3 years.

A variety of studies have measured recovery time for disturbed emergent aquatic vegetation. In general, recovery times following dredging activities range from 1 to 3 years, with initial recovery occurring as early as 6 months (Bertness and Ellison 1987; Bertness and Shumway 1993; Allison 1995; Dreyer and Niering 1997;

Knott et al. 1997; Fell et al. 2000). Some species of submerged aquatic vegetation, particularly those that can reproduce vegetatively, such as Potamogeton spp., can recover as quickly as 2 months (Henry and Amoros 1996).

Because fish and wildlife are mobile, they are not expected to be directly harmed by dredging operations. However, the quality of the habitat for these species will be reduced in the dredged areas of the Mill River. The recovery period for habitat used by fish and wildlife will follow the recovery periods for the community of benthic invertebrates (2 to 3 years) and aquatic vegetation (1 to 3 years). These relatively short-term impacts will be offset by the benefits associated with the removal of lead-contaminated sediments and reduction of associated risk to the ecological community.

Response Category 16. What, if any, municipal regulations apply to the project.

[Pertains to Public Comment Letter #38]

<u>Response</u>: The areas to be dredged are located waterward of the DEEP CJL and therefore, subject only to DEEP permitting. DEEP received numerous comments from the local Commissions, specifically the Conservation, Harbor Management, and Shellfish Commissions and considered all of their comments. In addition, these three Commissions were represented during and participated in the facilitated discussions which ensured all Commission's concerns and questions were fully taken into account. The results of these facilitated discussions were presented above and are provided in detail in the July 2013 SedRAP.

Response Category 17. Justify dredge area sequencing order.

[Pertains to Public Comment Letters #1, 2, 3, 4, 23, 26, 27, 37, & 38]

<u>Response</u>: As agreed in the facilitated discussions, the preferred sequence is to begin in Area V and work south. However, sequencing of the dredging activities will, of necessity, be dictated in part by when the inwater project starts and the work restrictions that are in place to protect fish and shellfish. It is Exide's intent to complete individual study areas during one mobilization to minimize short-term impacts to the individual area. A figure presenting a matrix of the time(s) of year dredging can be performed in any given study area is included as Attachment I. It also must be kept in mind that the river flow is tidal in nature and there is no strict up or down stream location in the river. A formal sequencing order, subject to the complications stated above, will be prepared prior to project startup for review and approval by DEEP.

Response Category 18. Explain if the NDDB request has been recently updated.

[Pertains to Public Comment Letters #1, 19, 37, 38, & 44]

<u>Response:</u> The NDDB request was last updated in May 2012 and included in the OLISP General Permit application dated June 2012. The May 2012 response from DEEP on the NDDB request indicated that there

would be no restrictions to the project related to the NDDB mapping in the vicinity of the project. As stated in the SedRAP, a review of the NDDB maps will be conducted prior to project start-up to assess whether there were any changes to the database. If there are changes to the NDDB resulting in additional restrictions to the project, Exide will be required to comply with those restrictions.

Response Category 19. A River bottom survey should be performed to document possible obstructions to dredge.

[Pertains to Public Comment Letters #1 & 38]

<u>Response:</u> A side-scan sonar and bathymetric survey of the Mill River within the study areas was performed on March 11, 2013. Bathymetric measurements were also collected during the 2008/2009 sediment investigation and are included in the SedRAP drawings. The March 2013 survey data closely matched the 2008/2009 measurements. The selected bidder will be required to repeat these surveys before project startup.

Response Category 20. Please provide testing data from proposed silt curtain.

[Pertains to Public Comment Letters #1 & 38]

<u>Response</u>: See literature provided as Attachment II. Exide is not committing to the manufacturer associated with this literature but will require a similar type product.

Response Category 21. Lack of references/citations used in preparation of the SedRAP document.

[Pertains to Public Comment Letters #1 & 38]

<u>Response:</u> A list of citations is provided as Attachment III to this Document. The citations listed pertain to materials directly cited in the SedRAP.

Response Category 22. Exide should set aside funds for additional remediation/mitigation measures until such time that the river is deemed restored and the lead health advisory is lifted.

[Pertains to Public Comment Letters #1, 2, 3, 4, 23, 38, & 43]

<u>Response:</u> The goal of this remediation project is to remove sediment from the Mill River which contains lead at concentrations greater than the cleanup goals. Exide must submit a Final Remedial Action Report documenting the results of the remediation and demonstrating the effectiveness of the remediation for DEEP's review and approval. Exide is required by Consent Order No. SRD-193 to complete this cleanup until such time DEEP finds that Exide successfully remediated lead-impacted sediment from the Mill River. DEEP will collect the necessary data to evaluate when the lead health advisory may be removed.

Response Category 23. Exide should sample any "mud wave" material that might collect in depressions in the river bottom during dredging.

[Pertains to Public Comment Letters #1 & 38]

<u>Response</u>: Project controls (e.g. in dredge operator cab GPS, underwater cameras, pump flow rate adjustments and cutterhead speed), silt curtains, and real-time turbidity monitoring will prevent the release of any "mud wave" into the river. Such controls and real-time turbidity monitoring are in fact designed to alert the on-site project manager and dredge operator of conditions that have the potential to create a "mud wave" before any such wave can form. The dredge cell silt curtain will serve as a control measure to contain any sediment release in the event a "mud wave" is in fact generated. Low points and high points (i.e. deep and shallow depressions caused by removal of impacted sediments) alike will be sampled during both the dredge cell confirmation sampling prior to concluding work in any individual dredge cell and in the final verification sampling program at project completion. The dredge cell confirmation sampling will serve to document that any sediment resuspension within a dredge cell was in fact addressed prior to relocation of the dredge. The final verification sampling performed at the conclusion of the project will serve to document the post-dredging conditions relative to the pre-dredging sampling performed in 2008/2009.

Response Category 24. Exide should submit plan and profile drawings of sewer pipe under Area V and have a PE sign and stamp a recommendation on how to avoid damage to this pipe.

[Pertains to Public Comment Letters #1 & 38]

<u>Response:</u> See Attachment IV of this Document for a cross section of this pipe as it crosses the Mill River study area. The proposed depth of dredging is 0.5 feet and the depth of the sewer pipe in this area is approximately 4 feet below top of sediment. As was the case with the very sensitive excavation work under and along Post Road in 2012, Exide and their contractors have every incentive to identify and protect public utilities from damage during the performance of remediation activities. The contract plans and specifications will be provided to the selected contractor and the contractor will be required to take all necessary steps to protect the sewer pipe.

Response Category 25. Perceived lack of specificity of SedRAP.

[Pertains to Public Comment Letters #1, 2, 3, 18, 23, 28, 37, & 38]

<u>Response</u>: The SedRAP sought to present the project in terms of the careful evaluation process involved in selecting the recommended remediation approach and the remediation goals. The SedRAP further went on to support the decision (proactive removal of sediments) by stating the recommended removal mechanism (hydraulic dredging) and dewatering process (geotextile dewatering bags [or Geotubes®]) and to justify those approaches as well as provide details on what controls will be put in place to ensure a successful project.

Some finite details such as potential launch points (via crane from the Exide site, Post Road and I-95 bridges and Harbor Road) for the dredge were informally discussed with possible contractors but were not presented in the SedRAP. These details have been considered and will be part of the bid specifications under preparation that will be provided to prospective bidders. The bid specifications will be performance based, and further detail will be incorporated into the eventual contract between Exide and the successful bidder in terms of meeting the broader project objectives and performance standards set forth in the SedRAP, in the approval of the SedRAP, and in the permits required to implement the remediation work. The key performance standards as agreed upon during the facilitated discussions are provided in Attachment VIII and in the July 2013 SedRAP.

Response Category 26. Perceived omission in Area I during Federal Wetlands flagging.

[Pertains to Public Comment Letters #1 & 38]

<u>Response</u>: See the attached letter and supporting documents from Exide's contractor Environmental Planning Services, LLC that explain that a transect was not necessary in Area I (Attachment V).

Response Category 27. Confusion over final confirmation sampling

[Pertains to Public Comment Letters #1, 37, & 38] namely:

a. <u>Concern</u>: Which drawings illustrate final confirmation sample locations?

<u>Response</u>: The final verification confirmation sampling to be conducted following the completion of the dredging activities will mimic the sampling grid used in 2008/2009 to map the lead distribution in Mill River study area and is illustrated in Drawings 15 and 16 in the July 2013 SedRAP

b. <u>Concern:</u> Request that RCRA 8 metals and fecal coliform bacteria parameters also be tested at confirmation sample locations.

<u>Response:</u> Confirmation sample locations will be tested for total lead only, as this is the contaminant for which Exide is responsible for and is the focus of this sediment remediation project.

<u>Concern</u>: What level of detail will the final sample collection report include related to final volume removed and residual lead concentration?
 <u>Response</u>: Exide is required to submit a Remedial Action Report documenting the results of the

sediment remediation project including all of the confirmation (both dredge cell confirmation and final verification) sample results. The Remedial Action Report will mirror Exide's SedQAPP

Implementation Report dated July 2009 (available on the Fairfield Conservation Department webpage) in terms of level of detail. The final verification confirmation sampling will repeat the 2008/2009 grid with greater than 400 point locations as shown in July 2013 SedRAP Drawings 15 and 16 and will report lead sediment concentrations and total solids content. The resultant maps will provide post-dredge river bottom contours and allow for volume removed calculations.

Response Category 28. If Exide disturbs and redistributes chromium around the river during the dredging, are they then responsible for that chromium in terms of remapping and removal?

[Pertains to Public Comment Letters #1 & 23]

<u>Response</u>: Exide is not responsible for chromium pollution detected in Mill River sediment. If any chromium is released, like lead, it would be associated with increased turbidity and the SedRAP provides for the control of and monitoring for increases in turbidity due to dredging activities and containment of any sediment resuspension within the isolated dredge cell.

Response Category 29. Request for slurry lead concentration before testing during 2009 Geotubes ® Dewatering Trial.

[Pertains to Public Comment Letters #1 & 38]

<u>Response</u>: All information related to the bench scale testing of the sediment samples is presented in the Watersolve report included as an attachment to the SedRAP and subsequent toxicity testing related data is presented in the report appended to the NPDES permit application.

Response Category 30. Figure 2 shows two more outfall pipes to river than Drawing 2.

[Pertains to Public Comment Letters #1 & 38] Response: This has been corrected in the July 2013 SedRAP.

Response Category 31. Why isn't there a dredge prism around grid sample point F17 in Area V where the lead concentration in the 12-18" interval is 440 mg/kg?

Response: This has been corrected in the July 2013 SedRAP.

Response Category 32. A revised project implementation and permitting schedule should be distributed.

[Pertains to Public Comment Letters #2, 3, 23, & 37]

<u>Response</u>: These schedules will be revised following the approval of the July 2013 SedRAP and issuance of associated permits and submitted to the DEEP. Updated project schedules will then be disseminated to the Town per the "Communication Agreement".

Response Category 33. The comment period should be extended and will any changes/amendments that result from the comment period be available for public review prior to project implementation? [Pertains to Public Comment Letters #2, 3, 4, 5, 10, 15, & 18]

<u>Response:</u> The public comment period was extended. As mentioned above, Exide, the Town, FairPLAN, and DEEP undertook a series of facilitated meetings to discuss the key issues that concerned interested stakeholders. The July 2013 SedRAP reflects changes made and agreed up by all parties as a result of these facilitated discussions. The July 2013 SedRAP is available on DEEP's webpage and the Fairfield Conservation Department's webpage.

Response Category 34. Exide should provide restitution for their part in the impairment of the river in the form of:

- a. Concern: Fish ladders at the Tidemill and Samp Mortar Dams
- b. Concern: Restocking of shellfish beds
- c. Concern: Habitat improvements for shellfish and fin fish
- d. Concern: Improved public access to the river
- e. Concern: Tree and shrub plantings

[Pertains to Public Comment Letters #8, 11, 12, 17, 19, 20, 26, 27, 37, 43, & 44]

<u>Response:</u> DEEP has no statutory authority to require Exide to provide restitution to the community. During the facilitated discussion process, Exide committed to providing for the placement of shells (cultch) after remediation to enhance the shellfish resources in study area IV in Southport Harbor.

Response Category 35. Concern that permit applications were submitted prior to formal SedRAP approval.

[Pertains to Public Comment Letters #16, 17, 18, 19, 28, 33, 37, 38, 39, 40, 43, & 45]

<u>Response</u>: Submittal of the permit applications along with the SedRAP is not in any way a violation of the Consent Order. The Consent Order includes a paragraph regarding the schedule for Exide to apply for the necessary permits to perform the sediment remediation. The purpose of this paragraph (Paragraph B.2.f. of the Consent Order No. SRD-193) is to ensure that Exide submits permit applications in a timely manner and to establish a deadline for the submittal of the permit applications. This paragraph does not prohibit Exide from applying for any necessary permits prior to DEEP's approval of the SedRAP. The submittal of the permit

applications during the review of the SedRAP has assisted DEEP in review of the project as a whole. Furthermore, the permits and the SedRAP are dependent on each other in that the permits are not valid until the SedRAP which authorizes the work is approved, and the SedRAP cannot be implemented without the issuance of the permits. It was always DEEP's intent to approve the SedRAP prior to issuing the NPDES Permit and OLISP General Permit registration.

Response Category 36. Issues arising from the January 10, 2013 DEEP Public Information Meeting

[Pertains to Public Comment Letters #17, 23, 38, & 40]

a. <u>Concern</u>: Are there multiple versions of the SedRAP? It appears that the latest wasn't available before the meeting.

<u>Response:</u> The SedRAP was completed in Draft form in October 2011 and multiple copies of that document were submitted to DEEP and the Town of Fairfield at that time. It is DEEP's understanding that the Town of Fairfield made copies of this document available for public viewing and this document was presented at and commented on during the January 11, 2012 meeting with Mill River adjoiners/neighbors and at the January 19, 2012 Conservation Commission Meeting.

Incorporating comments received from DEEP in early 2012, Exide submitted a Revised SedRAP in April 2012, again submitting multiple copies to DEEP and the Town of Fairfield. This Revised April 2012 SedRAP was available for public viewing at the Main Library and Pequot Library in Fairfield as well as on the Fairfield Conservation Commission and DEEP websites (the Fairfield Conservation website also provides the October 2011 Draft SedRAP) and was the SedRAP presented during the January 10, 2013 Public Information Meeting.

The Draft October 2011 and the Revised April 2012 SedRAP that incorporated DEEP comments are the only two versions of the SedRAP that had been prepared prior to the public comment period. Subsequent to the public comment period and the facilitated discussions, Exide prepared a July 2013 SedRAP that incorporated changes and commitments made as part of the facilitated process and responding to public comments.

b. <u>Concern</u>: Explain the apparent increase in dredge volume of 30%.

<u>Response</u>: The increase in dredge volume is addressed in Response Category #3 on p. 7 of this Document.

- <u>Concern</u>: Concern that issue of silt curtain placement off the bottom was changed but not reflected in the documents before the meeting.
 <u>Response</u>: Exide revised their plan and agreed to place the turbidity curtains on and anchored to the bottom of the river. This change is reflected in the July 2013 SedRAP. See also Response Category #1 on p. 3 of this Document.
- <u>Concern</u>: Issue that a fisheries biologist stated at the meeting that dredging could be done during the anadromous period with restrictions but the restrictions weren't defined.
 <u>Response</u>: Restrictions pertaining to the anadromous fish migration are illustrated in Drawings 13 and 14 of the July 2013 SedRAP. These restrictions, including the timing of work near the tide mill dam spillways, work hours, and the layout of the dredge cells, were developed with assistance from CTDEEP's Fisheries Division. The dredge cells were established to ensure that an adequate migratory fish corridor is maintained at all times. Details related to the restrictions are provided in the July 2013 SedRAP and will be included as conditions to the OLISP General Permit.

Response Category 37. An oil slick was noted during dredging in 1983, how will that be dealt with now in terms of containment inside the dredge cell and accounting for it during treatment?

[Pertains to Public Comment Letter #17]

<u>Response</u>: As stated in the July 2013 SedRAP, the remediation contractor will be required to prepare and follow a Spill Control and Countermeasures Plan to mitigate any slicks and ensure appropriate materials are on-site for removal of any slicks. In general, since slicks are a surface issue, they will not be drawn into the dredge slurry and therefore into the treatment system. In addition, the turbidity curtains along the perimeter of the dredge cell would contain any slicks that occur. In the event that persistent, heavy slicks are noted, the filtrate will be tested and treatment system amendments will be made as necessary. The Contractor will be required to properly maintain its equipment mitigating the potential for oil slicks to occur.

Response Category 38. Request for noise and odor controls.

[Pertains to Public Comment Letters #21 & 29]

<u>Response</u>: Exide has given these issues serious consideration in selecting unit processes that have very low noise levels and are closed-loop processes with minimum air exposure of sediments. For example:

- Hydraulic dredges operate on a small diesel motor and are very quiet;
- Selected dewatering treatment processes generally utilize very small motors and pumps, with the geotextile dewatering bags using no powered equipment;

- Treatment activities will be contained at the Exide site;
- All sediment slurry will be handled either in closed pipelines or geotextile dewatering bags thereby containing the potential for release of odors until the tubes are opened to allow for off-site disposal of the dewatered sediment cake; and
- If odor controls are necessary, the Contractor will apply deodorizing sprays to the geotextile dewatering bags.

Response Category 39. Request from Harbor Commission that DEEP makes no decisions on the SedRAP and permit applications until the Harbor Commission comments are responded to and sufficient time is allotted for them to make recommendations based on those comments.

[Pertains to Public Comment Letter #23]

<u>Response</u>: The Harbor Commission was an active participant in the facilitated discussions and has made several recommendations that have resulted in revisions to the SedRAP. As a follow-up to the facilitated discussions, the Harbor Commission submitted a letter dated August 22, 2013 to DEEP stating that they determined that the July 2013 SedRAP is consistent with the Harbor Management Plan and providing additional recommendations. DEEP's response to the Harbor Commission's recommendations included in their August 2013 letter will be provided in a separate letter.

Response Category 40. Concern from Harbor Commission that their approval is not listed among local approvals needed in the SedRAP.

[Pertains to Public Comment Letter #23]

<u>Response</u>: The work proposed in the SedRAP is located waterward of the CJL, as such local permits are not required. As discussed above, the DEEP worked with representatives from the Harbor Management Commission along with representatives from the Conservation Commission, Shellfish Commission, and the Town in facilitated meetings to ensure that all of their issues were addressed and they agreed with the proposed plan. In a letter dated August 22, 2013, the Harbor Commission notified DEEP that they determined that the July 2013 SedRAP was consistent with the Harbor Management Plan.

Response Category 41. Support expeditious implementation of project.

[Pertains to Public Comment Letters #24, 25, 29, 31, 32, 34, & 42]

<u>Response</u>: DEEP is in agreement with expeditiously implementing the remediation of the Mill River now that the upland parcel cleanup is completed.

Response Category 42. Why is OLISP allowing a General Permit instead of an Individual Permit?

[Pertains to Public Comment Letters #26, 27, 28, 37, & 38]

<u>Response</u>: The project meets the criteria/guidelines for the OLISP's General Permit for Coastal Activities Required by Order (Section 22a-361(d) of the General Statutes of Connecticut). In 2008, DEEP issued Consent Order SRD-193 which requires Exide to complete the investigation and remediation of their property and the Mill River study area. The General Permit review process for sites under order is allowed by statute. The General Permit was written to facilitate the process of obtaining a permit for remedial activities waterward of the CJL or in tidal wetlands which are required by state or federal enforcement actions.

Response Category 43. Request that all comments submitted by Conservation, Shellfish and Harbor Commissions be followed.

[Pertains to Public Comment Letters #35, 36, 43, & 45]

<u>Response</u>: All comments have been considered carefully. All three commissions were active participants in the facilitated discussions and helped work towards shaping the July 2013 SedRAP.

Response Category 44. Concern about 2-times the cleanup criteria rule for individual confirmation sample locations and what the net environmental benefit analysis (NEBA) protocol will be for requiring follow-up dredging.

[Pertains to Public Comment Letters #37 & 38]

<u>Response:</u> The July 2013 SedRAP clarifies the final verification sampling program as follows:

"The final verification sampling program will follow the original triangular grid based system (approximate 50 foot sample spacing) designed for the SedQAPP implementation.... The sediment collected will be containerized and analyzed for total lead content.... The data gathered from the final post-remediation mapping effort will be reviewed, tabulated and presented in a final report. Determination of the overall success in removing lead impacted river sediments above the cleanup criteria will be made following careful review, including statistical analysis (using the surface weighted average concentration (SWAC) of lead in the residual river bottom sediments) of the data gathered. Should exceedance of the established remediation standard for lead be determined by final confirmation sampling, EGI 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 system, thin layer covers, and additional sediment removal."

It should be noted that Exide conservatively designed the cleanup in a way that targets point exceedances rather than attempting to bring the average concentration to within the cleanup criteria by targeting "hot spots" only. This will require significantly more effort on the part of Exide; however it

will leave the Mill River with average lead sediment concentrations well below the target clean-up levels.

Response Category 45. Request the overbank areas prone to flooding be re-evaluated due to Hurricane Sandy.

[Pertains to Public Comment Letter #37]

<u>Response</u>: Exide inspected the study area environs immediately following the storm and observed/photographed no evidence of recent sediment deposition in these areas due to the storm.

Response Category 46. Revise SedRAP to incorporate comments from the Department of Agriculture/Bureau of Aquaculture in terms of water quality as it pertains to shellfish.

[Pertains to Public Comment Letter #38]

<u>Response</u>: The Department of Agriculture Bureau of Aquaculture (DoAg) has been consulted as part of the OLISP General Permit review process and their comments were incorporated into the July 2013 SedRAP and OLISP Permit.

Response Category 47. Provide plan and schedule for TMDL testing of metals and bacteria near shellfish area at the mouth of Southport Harbor and in Long Island Sound (comment raised because of previous shellfish closures as a result of town excavation work in Pine Creek).

[Pertains to Public Comment Letter #38]

<u>Response</u>: As stated in Response Category #1 on p. 4 of this Document, metals and bacteria will be bound to sediment particles and the July 2013 SedRAP includes controls for and monitoring of resuspended sediment. In regard to bacteria, DEEP initiated a monitoring program for the Mill River and Southport Harbor. The DEEP will provide DoAg with the data and request that DoAg evaluate the data in a timely fashion in order to minimize any necessary shellfish bed closures. DoAg is responsible for the management of the shellfish beds to be protective of public health.

Response Category 48. Submit revised drawings that illustrate channel profile of underwater contours, inverts, water column thicknesses for all basins and bridge/culvert crossing under 7Q10 conditions (low flow).

[Pertains to Public Comment Letter #38]

<u>Response:</u> The drawings included in the July 2013 SedRAP provide details on water column thickness in the study area. As agreed upon during the facilitate discussions, constriction points within the study area will be

inspected at a minimum of twice per week during the fish migration period to confirm that water loss due to dredging does not create inadequate migration corridors.

Response Category 49. Expand Woodlot company survey to include Tidemill Dam, water depths, and the relation of these to the habitats of plants and animals.

[Pertains to Public Comment Letter #38]

<u>Response</u>: The Woodlot survey information is adequate for its intended purpose on this project i.e. supporting the Menzie-Cura ecological studies by providing mapping of habitat and vegetation in the study areas. The Woodlot survey drawings extended into the Tidemill Dam area (study area IV).

TABLES

Table 1

List of General Categories for the Public Comments on April 2012 SedRAP

- 1. Re-suspended Sediments
 - a. Questions regarding turbidity curtain design and setup.
 - b. What is the calculated volume of sediments that will be lost during dredging?
 - c. Question about mobilization of fecal coliforms, metals, and inorganics during dredging.
 - d. How does optically measured turbidity equate to TSS?
 - e. Define contaminants associated with, and acute toxicity of, resuspended sediment.
 - f. Will "mud waves" or waves of semi-fluid mud break free of the dredge cells and require supplementary dredging result in 100% of the river bottom being dredged?
 - g. Request for third turbidity measuring point at depth at some monitoring locations
 - h. Will resuspended sediment escaping from the dredge cells result in artificial upward creep of the background turbidity measured in the river?
 - i. Why has the revised SedRAP removed the stop work response due to turbidity exceedences?
 - j. Request that water quality in the harbor be monitored for a range of parameters during dredging.
- 2. Potential for adverse effects on anadromous fish populations/shellfish populations.
- 3. Explain the apparent 30% increase in dredge volume from that noted in the SedRAP.
- 4. Question over habitat destruction (removal of sediment, sticks, rocks and related materials) during dredging, potential sumps/pits, and proposed restoration of structural elements and clean fill to re-grade bottom contours.
- 5. Request for pre-dredge baseline survey of biota.
- 6. Question over potential archeological artifacts encountered during dredging.

- 7. Concerns over Chromium in the Mill River from Superior Plating.
 - a. How sufficiently is chromium mapped in the Mill River and what level of certainty is there that all chromium will be removed all with the lead
 - b. Will Exide test for chromium in their filtrate discharge?
- 8. Concern over structural integrity of the tide gates along the east side of Tide Mill Dam.
- 9. Question over potential abutter ownership in-river and how it affects the project. Town requests that Exide provide assessors maps, with lot numbers and deed descriptions of all river adjoiners.
- 10. Request for mapping the Coastal Jurisdiction Line and supplementing the project drawings with sufficient additional detail to allow the Conservation Department/Wetlands Agency to make a determination on whether or not Inland Wetland regulated areas will be impacted and therefore require an IWPA. Request that Exide ask for a Declaratory Ruling from Wetlands Agency on the IWWC Issue.
- 11. Explain the lack of sediment samples under the I-95 overpass.
- 12. Explain why there is no additional study required for the Railroad Drain.
- 13. Justify chosen dredge and dewatering methods.
- 14. Address the creation of a Public Information Website for this project.
 - a. Request that website include realtime turbidity readings and those readings are also relayed to town employee cell phones
 - b. Request that website contain confirmation sample data for lead
- 15. Address the potential long term effects on the river and biota of the dredging project
- 16. What, if any, municipal regulations apply to the project.
- 17. Justify dredge area sequencing order.
- 18. Explain if the NDDB request has been recently updated.
- 19. A River bottom survey should be performed to document possible obstructions to dredge.
- 20. Please provide testing data from proposed silt curtain.
- 21. Lack of references/citations used in preparation of the SedRAP document.

- 22. Exide should set aside funds for additional remediation/mitigation measures until such time that the river is deemed restored and the lead health advisory is lifted.
- 23. Exide should sample any "mud wave" material that might collect in depressions in the river bottom during dredging.
- 24. Exide should submit plan and profile drawings of sewer pipe under Area V and have a PE sign and stamp a recommendation on how to avoid damage to this pipe.
- 25. Perceived lack of specificity of SedRAP.
- 26. Perceived omission in Area I during Federal Wetlands flagging.
- 27. Confusion over final confirmation sampling, namely:
 - a. Which drawings illustrate final confirmation sample locations?
 - b. Request that RCRA 8 metals and fecal coliform bacteria parameters also be tested at confirmation sample locations.
 - c. What level of detail will the final sample collection report will include related to final volume removed, and residual lead concentration?
- 28. If Exide disturbs and redistributes chromium around the river during the dredging, are they then responsible for that chromium in terms of remapping and removal?
- 29. Request for slurry lead concentration before testing during 2009 Geotube Dewatering Trial.
- 30. Figure 2 Shows two more outfall pipes to river than Drawing 2
- 31. Why isn't there a dredge prism around grid sample point F17 in Area V where the lead concentration in the 12-18" interval is 440 mg/kg
- 32. A revised project implementation and permitting schedule should be distributed
- 33. The comment period should be extended and will any changes/amendments that result from the comment period be available for public review prior to project implementation?
- 34. Exide should provide restitution for their part in the impairment of the river in the form of:
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 - b. Restocking of shellfish beds

- c. Habitat improvements for shellfish and fin fish
- d. Improved public access to the river
- e. Tree and shrub plantings
- 35. Concern that permit applications were submitted prior to formal SedRAP approval
- 36. Issues arising from the January 10, 2013 DEEP Public Information Meeting
 - a. Are there multiple versions of the SedRAP? It appears that the latest wasn't available before the meeting.
 - b. Explain the apparent increase in dredge volume of 30%.
 - c. Concern that issue of silt curtain placement off the bottom was changed but not reflected in the documents before the meeting.
 - d. Issue that a fisheries biologist stated at the meeting that dredging could be done during the anadromous period with restrictions but the restrictions weren't defined.
- 37. An oil slick was noted during dredging in 1983, how will that be dealt with now in terms of containment inside the dredge cell and accounting for it during treatment.
- 38. Request for noise and odor controls.
- 39. Request from Harbor Commission that DEEP make no decisions on the SedRAP and permit applications until the Harbor Commission comments are responded to and sufficient time is allotted for them to make recommendations based on those comments.
- 40. Concern from Harbor Commission that their approval is not listed among local approvals needed in the SedRAP.
- 41. Support expeditious implementation of project.
- 42. Why is OLISP allowing a General Permit instead of a Individual Permit?
- 43. Request that all comments submitted by Conservation, Shellfish and Harbor Commissions be followed.
- 44. Concern about 2-times the cleanup criteria rule for individual confirmation sample locations and what the net environmental benefit analysis (NEBA) protocol will be for requiring follow-up dredging.
- 45. Request the overbank areas prone to flooding be re-evaluated due to Hurricane Sandy.

- 46. Revise SedRAP to incorporate comments from the Deptartment of Agriculture/ Bureau of Aquaculture in terms of water quality as it pertains to shellfish.
- 47. Provide plan and schedule for TMDL testing of metals and bacteria near shellfish area at the mouth of Southport Harbor and in Long Island Sound (comment raised because of previous shellfish closures as a result of town excavation work in Pine Creek).
- 48. Submit revised drawings that illustrate channel profile of underwater contours, inverts, water column thicknesses for all basins and bridge/culvert crossing under 7Q10 conditions (low flow).
- 49. Expand Woodlot company survey to include Tidemill Dam, water depths, and the relation of these to the habitats of plants and animals.

Table 2 Public Comment Response Matrix Exide SedRAP

														Res	ponse	e Cate	gories	5														
Comment #	Comment Received From:	1 2	3	4 5	6	7 8	9 10	11 12	2 13	14 15 1	6 17	18 19	20 21	22 2	3 24	25 26	27 2	8 29	30 3	1 32	33 3	34 35	363	37 3	8 39	40 4	1 42	43 4	4 45	46 47	48	49
1	Thomas Steinke, Fairfield Conservation Commission 12/28/12	X X	Х	X X	X	X	XX	XX	X	XX	Х	X X	X X	XZ	XX	XX	ΧΣ	XX	ХХ	C I		T	TT	干	\square				TT	T	Π	
2	Committee on Exide (Representatives of the Fairfield Harbor Management, Conservation, and	X X	v	N		V	v		- W	v	X			v		V				v	v											
2	Shellfish Commissions 1/9/13		X	X		X	X	X		X	X			X		X				X	X											
3	Mary Van Conta, Fairfield Harbor Management Commission 1/10/13	X X	Х	X		X	Χ	Х		Х	Х			Х		Х	\square			Х	Х		\square	Τ	\square		\square		\square		Π	
4	Jocelyn Shaw, Fairfield Resident 1/10/13	X		X			X	X	X		Χ			X							Χ											
5	Sanford Wakeman, Fairfield Shellfish Commission 1/10/13																				Х			Τ					\square		\square	\square
6	Tom Corell, Fairfield Resident					X				X																						
7	Mary von Conta, Fairfield Harbor Management Commission 1/25/13	X X			2	XX																										
8	Thomas Steinke, Fairfield Conservation Commission 1/18/13	Х							Χ												2	X										
9	Suzanne D. Simmonds, Fairfield Resident	X																														
10	David Sturges, Fairfield Resident	Х			2	X															Х											
11	Bob Campbell, Fairfield Resident	X X		Х	2	X															2	X							\square			
12	Alan Pakiela, Trout Unlimited	X X		Х	2	X															2	X										
13	Hilary Michaels, Fairfield Resident	X X		X X																			\square	\perp			\square		\square			
14	Thomas Steinke, Fairfield Conservation Commission 2/14/13	Х																					+				4		44			
15	Mary von Conta Fairfield Harbor Management Commission 2/14/13	\square		_					\square		+	_									Х		\downarrow	\perp		_			┶			
16	Michael Herley, Fairfield RTM's Public Health & Safety Committee																					X	+						4			\square
17	Thomas Steinke, Fairfield Shellfish Commission 2/19/13	X X	Х				X X	X	X												2	X X	XZ	X					\square			\square
18	Jocelyn Shaw, Fairfield Resident 2/19/13			X	2	X	X		X							Х					Х	X	++	4	44		4		44	42		\vdash
19	Robert Bilek, NPDES, Fairfield Resident		Х	X	2	X			X			X				_					2	XX	┶┷┶	\perp		_			┶┷		\square	
20	James Salce, Fairfield Resident	X																			2	X	++	4	_		4		44			\vdash
21	Peter Penczer, Fairfield Department of Community and Economic Development			_								_									_	_	┢		<u> </u>				+		┢	-
22	Barbara Stetson, Fairfield Resident	X X	37			X	X	X	,	N/	X			37		37		7		37	_			+		X/			++			\vdash
23	Mary von Conta, Fairfield Harbor Management Commission 2/22/13	XX	X			XX	X	X	•	X	X	_		X		X	2	X		X	_	_		_	X	X	c7		╈		\square	
24																							╄═╋┙		4	2	<u>×</u>		╇		\blacksquare	<u> </u>
25	Judi Klein, Fairfield Resident	v		v		_	v		v		v	_										v	┢━┢╸	+	╉╋┥	2	(v		╆╾╋		┢─┥	
20	Dawn Llewellyn, NPDES, Fairfield Resident																				4	A V	╋╋		+	-		_	╇	+-	\square	-
27	Glann Pateliffe, Fairfield Pesident	Λ		A V		v	<u>л</u>				Λ					v					4			+					+		\vdash	\square
28	Jessica Doerner, Fairfield Resident			Λ	4	<u>^</u>			Λ							Λ						Λ	++	-	~		V A		++	+-		
30	Helen Watking Fairfield Resident							x	v																`	1			++			
31	Tom & Rhiannon Kelty Fairfield Resident																						t t t	Ŧ			x		Ħ	T	\square	H
32	Scott & Debbie Farquhar, Fairfield Resident																									2	x					
33	Joan Gartin, Fairfield Resident																					X	TT	T					\square	T	T	
34	Deanna & David Edginton, Fairfield Resident																									2	x					
35	Carol Pontrelli, NPDES, Fairfield Resident																T						TT	T				X	T	T	Ħ	
36	Carol Pontrelli, RAP, Fairfield Resident																											X				
37	Robert Bilek, RAP, Fairfield Resident	Х	Х	X		X			Х	X	Х	Х				Х	Х			X	2	ХX		Т			X	X	X	\top	Π	\square
38	Thomas Steinke, Fairfield Conservation Commission 2/27/13	X X	Χ	XX		XX	X X	XX	X	XXX	XX	X X	X X	X	XX	XX	X	X	XX	K		X	X				X	Х		XX	X	Χ
39	Ellen Jacob, Fairfield RTM D-9																					X		Τ							Π	
40	Pam Ritter, Fairfield Resident					X																X	X									
41	Charlene Brauns-Schindler, Mill River Wetland Committee	X		X				X	X																							
42	Tom Naughton, Fairfield Resident					X																				2	X					
43	Gaylord Meyer, District t RTM			Χ	2	X	X X	X	X					Х							2	X X					\Box	Х			\square	
44	Gian Morresi, Trout Unlimited	X X		Χ		X						Х									2	X										
45	Kathyrn Braun and others, Fairfield Residents																					Х						Х				