

Bryan W. Shaw, Ph.D., P.E., *Chairman*  
Toby Baker, *Commissioner*  
Richard A. Hyde, P.E., *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

September 30, 2015

Mr. George Purefoy, City Manager  
City of Frisco  
6101 Frisco Square Boulevard, 5<sup>th</sup> Floor  
Frisco, Texas 75034

Re: Approval with Comments of Affected Property Assessment Report (APAR) and Response to Comments, dated August 13, 2015; and Response Action Plan (RAP), dated April 1, 2014, Exide Technologies Undeveloped Buffer Property (UBP); Frisco Recycling Center, 7471 South 5<sup>th</sup> Street, Frisco, Collin County, Texas; Voluntary Cleanup Program (VCP) No. 2541; Customer No. CN600129787; Regulated Entity No. RN106583511

Dear Mr. Purefoy:

The VCP of the Texas Commission on Environmental Quality (TCEQ) has reviewed the above referenced documents. Please submit a revised RAP which incorporates any changes noted in the APAR (expanded protective concentration level exceedance zones, etc.), incorporates the SLERA comments, as well as the comments related to the initial RAP within 60 days of the date of this letter.

Questions concerning this letter should be directed to me at (512) 239-2361. When responding by mail, please submit an original and one copy of all correspondence and reports to the TCEQ Remediation Division at Mail Code MC-127. An additional copy should be submitted to the local TCEQ Region Office. Please note that the Remediation Division sends letters via email when appropriate. Therefore, current email addresses and the site identification information in the reference block should be included in all future submittals.

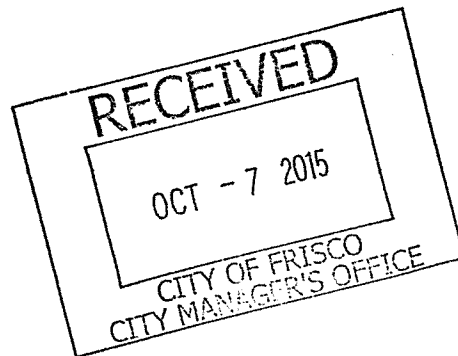
Sincerely,

A handwritten signature in black ink, appearing to read "Gary Beyer".

Gary Beyer, Project Manager  
Corrective Action Team 1, VCP-CA Section  
Remediation Division

GB/ms

Enclosure



cc: Mr. Sam Barrett, Waste Section Manager, TCEQ Region 4 Office, Dallas/Fort Worth  
Mr. Matthew A. Love, Director, Global Environmental Remediation, Exide Technologies,  
3000 Montrose Avenue, Reading, PA 19605

Mr. George Purefoy, City Manager  
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Mr. Bruce A. Cole, Executive Vice President, Strategy and Business Development, Exide Technologies, P.O. Box 14294, Reading, PA 19612-4294

Mr. James L. Gandy, Frisco Economic Development Corporation, 6801 Gaylord Parkway, Suite 400, Frisco, TX 75034

Mr. Wade Wheatley, Cook-Joyce Inc. 812 West 11<sup>th</sup>, Austin, TX 78701-2000

Mr. Tim Nichols, PB&W, LLC, 2201 Double Creek Drive, Suite 4004, Round Rock, TX 78664

**Comments reading the revised APAR:**

1. This screening level ecological risk assessment (SLERA) was developed using exposure inputs from the U.S. EPA's *Wildlife Exposure Factors Handbook* (1993) and *Combustion Guidance* (1999), as described in the Exide Work Plan. Since the development of the SLERA, the TCEQ has refined its Ecological Protective Concentration Level (PCL) Database, which is currently under multi-stakeholder review. The database includes the latest information (e.g., bioaccumulation and wildlife exposure factors), which has been reviewed and documented by West Texas A&M University. Many of the wildlife exposure inputs in the SLERA are not as conservative as those used in the database. Consequently, the ecological PCLs that result from the inputs in the database are significantly lower than the exposure point concentrations used in the SLERA that indicated acceptable risk. However, instead of requiring a recalculation of the hazard quotients in the SLERA, TCEQ will consider the risk management options for this property. For example, as stated in the SLERA, the response objective for lead in soil at the Undeveloped Buffer Property was set at 250 mg/kg based on agreements between Exide and the City of Frisco. Based on the database inputs, the ecological PCL for the American robin is 126 mg/kg; however, when concentrations exceeding the response objective are reduced to 250 mg/kg, the resulting 95% Upper Confidence Level (UCL) is 134 mg/kg. As this is a conservative value in that the maximum concentration of these remediated areas will be 250 mg/kg, the actual exposure point concentration will likely be less than 134 mg/kg, which would be acceptable ecological risk for the robin. In addition, the remediation itself and the potential for future commercial/mixed use development will limit ecological exposure.
2. The SLERA reports that the 95% UCL for copper in soil is 771 mg/kg. Copper was identified as the primary chemical of concern (i.e., maximum lead concentration is 217 mg/kg) in a 1-acre tract southeast of the former circuit fabrication facility. The ecological PCL resulting from the inputs in the database for the least shrew, using a mouse as a surrogate receptor, is 153 mg/kg. It is recommended that the existing copper protective concentration level exceedance (PCLE) zone of 548 mg/kg (Total Soil Combined) be reviewed and that concentrations that are significantly above 153 mg/kg (sample locations CF-1, 5, 6, and 10) be considered for inclusion in the PCLE zone. Alternatively, a projected 95% UCL exercise, as was done for lead, could be conducted to estimate an appropriate PCLE zone that would result in acceptable risk for the least shrew.

**Comments to the RAP, dated April 1, 2014:**

1. **RAP Executive Summary.** The report indicates that areas containing battery chips/slag were identified during the investigation, but that areas containing battery chips/slag that were not otherwise targeted for excavation were not delineated in the initial APAR. The extent of the waste and/or associated contaminated media has been subsequently been delineated as noted in the August 13, 2015, revised APAR. The revised RAP should include maps depicting the location of the waste materials, and the concentration of contamination in surrounding soils.
2. **RAP Worksheet 2.0, Page 2 of 4.** The last paragraph states "A five-part composite sample will be collected for each approximately 250 cubic yard stockpile by collecting an aliquot from five separate areas of the pile and combining them to create a

representative sample (simple random sampling).” As part of the Former Stewart Creek Waste Water Treatment Plant Stockpiled Holding Pond Sediments Sampling and Analysis Plan dated July 2, 2012, the TCEQ required one composite sample for every 50 cubic yards. Please incorporate this sampling protocol into the RAP. Please reflect these changes in RAP Worksheet 4.0.

**Comments regarding Air in the RAP:**

1. **Page 4 of 4.** The TCEQ is assuming that other than graders and front-end loaders, there is not going to be any operations or ‘treatments’ where equipment is going to process the soil. If so, then an air authorization would be needed.
2. **RAP Worksheet 3.1, Page 1 of 2.** Monitoring and Sampling. In the table under Air, concerning lead and cadmium, it states that low-volume cartridge filter samplers will be used. Please ensure that there is enough flow so that the minimum detection limit is below the NAAQS.
3. **Appendix 6: Perimeter Air Monitoring and Dust Control Plan.** Section 3.4 the term “treatment” is used. Please clarify what this will entail and evaluate whether an air authorization is needed.
4. **Appendix 6: Perimeter Air Monitoring and Dust Control Plan.** Section 4.1 Metals Analyses. Please ensure that there is enough flow so that the minimum detection limit is below the NAAQS.
5. **Appendix 6: Section 5 - Dust Control, 2<sup>nd</sup> paragraph, last sentence.** “When not actively being worked, stockpiles will be covered to reduce dust emissions and prevent infiltration/runoff during rain events.” The phrase “with plastic sheeting” should be added after ‘covered’. Please identify how plastic sheeting will be secured to the ground.
6. **Appendix 6; Paragraph 6.1.1 - Visible Dust; Subsection 6.1.2.** Particulate and Metals Concentration Take Action Levels, and Subsection 6.1.3 Particulate and Metals Concentration Stop Work Levels states that “Applying temporary cover (paper mulch with tackifier) to excavation areas or soil stockpiles not being actively worked.” Soil stockpiles are already supposed to be covered with plastic sheeting, so unless the mulch is going to be added onto the stockpile and then covered with plastic sheeting, the sentence should be revised.
7. **Appendix 6: Paragraph 6.1.1 - Visible Dust; Subsection 6.1.2.** Under Particulate and Metals Concentration Take Action Levels and Subsection 6.1.3 Particulate and Metals Concentration Stop Work Levels, please add a discussion of airborne dust wet suppression systems.
8. **Appendix 6: Subsection 6.5 - Soil Loading, On-Site Transportation and Placement.** The report states that “Material placed in the on-site landfill will be covered with paper mulch and tackifier to prevent the generation of dust on an as needed basis.” Please clarify how daily cover requirements will be met.
9. **Appendix 6: Subsection 6.6. Soil Loading and Off-site Transportation.** This section should state that the trucks will be covered with tarps before leaving the site.