

14 February 2014

Via Hand Delivery

Ms. Joanna Manning, Project Manager (MC-127)
Texas Commission on Environmental Quality (TCEQ)
VCP / Corrective Action Section
P.O. Box 13087
Austin, TX 78711-3087

Re: Response to 10 February 2014 Comments on Grand Park Workplan by Mr. Henry Bradbury, Grand Park, 7275 Dallas Parkway, Frisco, Texas, VCP #2592

Dear Ms. Manning:

Cook-Joyce, Inc. (CJI) has prepared this response on behalf of its clients, the City of Frisco (the City) and Russell & Rodriguez. This letter serves as a response to comments¹ provided by Mr. Henry Bradbury to TCEQ on the Revised Affected Property Assessment Workplan (Workplan) for the Grand Park VCP Site in Frisco, Texas.

The City appreciates Mr. Bradbury's concurrence with the City's request that TCEQ address all Exide related investigations, and remediation, of Stewart Creek with a coordinated TCEQ review and approval process. Likewise, the City appreciates Mr. Bradbury's other comments and would like to use this opportunity to address those comments and clarify for the public the City's VCP submittals to TCEQ. The City notes that the VCP process consists of an ongoing dialogue between the City and TCEQ to arrive at a final solution that is protective of public health and the environment. As noted in the comments below, the City has consistently held Exide to a more protective remedial standard that required by the applicable TCEQ regulations and the City will apply those standards to its VCP projects as well.

RESPONSE TO COMMENTS

Mr. Bradbury's comments in his 10 February 2014 letter are provided below in italics; the City's responses are provided after each comment or question.

- 1) In the January 27, 2014 letter from the City's consulting firm Cook-Joyce, they request a variance from the same TRRP-required sampling frequency requirements which Mr. Russell urged TCEQ to strictly enforce upon Exide. The fact is that all assessments should be performed with the specified sampling frequency outlined by TRRP. TRRP specifically requires one sample per 1/8th acre for residential exposure under 30 TAC 350.511(3), and TCEQ has previously noted that sampling of the Exide VCP parcels every 1/2 acre would only qualify for commercial/industrial closure and not residential (see internal TCEQ email from Danielle Lesikar to Merrie Smith dated March 8th, 2013).*

Mr. Bradbury is referring to §350.51(l)(3), in the Texas Risk Reduction Program (TRRP). That portion of the rule specifically states:

"The soil exposure area for **existing residential yards or platted residential properties** shall not exceed 1/8th acre or the size of the front or back yard of the

¹ Letter from Mr. Henry Bradbury to Ms. Joanna Manning, TCEQ, *Comments on City of Frisco's Revised Affected Property Assessment Workplan for Grand Park (VCP #2592)*, dated 10 February 2014.





affected residential lot, unless it is demonstrated that a larger area, not to exceed 1/2 acre, is appropriate based upon the activity patterns of residents at a specific affected property. **For other properties classified as residential** (e.g., **parks**, hospitals), **the executive director may approve a larger exposure area if justified based on site-specific conditions.** If an area larger than 1/8th acre or the size of the front or back yard of the existing affected residential lot is approved by the executive director, then the person shall comply with the applicable institutional control in requirements §350.111(b), (b)(8) or (10) of this title (relating to Use of Institutional Controls). If COCs are relatively homogeneous over an area larger than the residential default size, the executive director may allow concentrations to be averaged over this larger area, in which case the institutional control would not be required.” **[emphasis added]**

The City has proposed using a modified exposure area in the portion of Grand Park that will be redeveloped as a park, in accordance with TRRP requirements. The specific, technical reasons for that proposal were provided in our 27 January 2014 letter² to TCEQ and in the Revised Workplan³ for Grand Park. To ensure transparency, they are also provided with this letter as Attachment A.

CJL notes that in our review of, and experience with, the TRRP rule, the requirement to collect at least one sample per residential lot (1/8th acre) is designed to be protective of children that will live at that location and spend time on a daily basis in that home’s front or back yard. Clearly, in that scenario additional sampling frequency is warranted. Although residential development in Grand Park is considered unlikely, that possibility is why the City has elected to collect at least 8 soil samples per acre in portions of the Grand Park Site that could be developed with mixed use residential and commercial properties (such as a building with retail stores on the ground floor and apartments or condominiums on upper floors).

However, in the portion of the Site that will be redeveloped as a city park, CJL notes the following:

- Children will not live in the park, therefore exposures on a daily basis are considered unlikely.
- Children will not be limited to playing in an extremely small area in the park.
- Although plans have not been finalized for the park, the playground equipment in the park will be installed on imported sand, gravel, or mulch, not on the bare ground.
- CJL considers it possible but unlikely that significant impacts originating from airborne deposition of particulate from the former Exide facility will be discovered in upland areas of Grand Park. This conclusion is based in part on data obtained from the assessment of land surrounding the former Exide facility (the “J-Parcel”). Those data have not been provided to TCEQ or released to the public to date. The main purpose of the Grand Park VCP project is to ensure that waste and contamination are removed from Stewart

² Letter from CJL to Ms. Joanna Manning, TCEQ, *Response to TCEQ Comments and Transmittal Letter for Revised Documents, Grand Park, 7275 Dallas Parkway, Frisco, Texas, VCP #2592*, dated 27 January 2014.

³ *Revised Affected Property Assessment Workplan for Grand Park, 7275 Dallas Parkway, Frisco, Texas VCP #2592*, Cook-Joyce, Inc., dated October 2013, revised January 2014.



Creek, which has been repeatedly impacted in the past by operations at the former Exide facility.

- CJI notes that the proposed assessment level for lead, 250 milligrams of lead per kilogram of soil (250 mg/Kg), is half of the level considered safe for children to be exposed to on a daily basis.
- Finally, CJI notes that environmental assessment is an iterative process. The discovery of significant contaminant concentrations in surface soil at the Site will drive additional sampling to delineate impacted areas and to confirm that contaminated soils have been removed.

We hope that the information provided above clarifies the reasons why a modified exposure area is appropriate for the future park area.

- 2) *While Cook-Joyce argues that higher sampling frequency (1 per ½ acre) is reasonable for a site that has not been impacted by the Exide property, this proposal is unfounded for the Grand Park site, as Exide's disposal practices have impacted numerous non-contiguous properties where past dumping has resulted in what are potentially undocumented hazardous waste dumps. In light of this proven and growing impact to off-site parties, it is imperative that the TCEQ require a thorough investigation to the letter of our State rules to justify a certification that Grand Park as suitable for use as a park. As TRRP specifically includes parks within the definition of residential property (See 30 TAC 350.4(a)(74), sampling frequency within the Grand Park site must comply TRRP's residential requirement of 1 sample per 1/8 acre.*

Please refer to the response to comment 1.

- 3) *Section 3.1/Surface Water Sampling - Sampling should also include non-filtered water data unless turbidity exceeds 10 NTU as outlined in current TCEQ groundwater guidance. This will allow comparison of filtered ("dissolved") and non-filtered ("total") results. Artificially removing dissolved or suspended sediment without cause will bias the resulting data. It is also preferable to include total suspended solids (TSS), hardness and ensure the quality assurance blanks are collected in conformance with TCEQ's Surface Water Quality Monitoring Procedures (RG-415).*

The City concurs with this statement, which is why the Revised Workplan clearly states that surface water samples will be collected in accordance with TCEQ Regulatory Guidance (RG) 415⁴. The Revised Workplan also states that surface water samples that are analyzed for total metals will not be filtered, and that surface water samples that are analyzed for dissolved metals will be filtered.

At this time the City does not consider total suspended solid (TSS) analyses necessary because the samples will be collected from non-turbid water ("Sampling will not occur during periods of abnormally high turbidity associated with high or flood flows in the creek."). Finally, the Revised Workplan also clearly states that duplicate samples will be collected to evaluate analytical precision. The duplicates will be analyzed in addition to the wide variety of other Quality

⁴ *Surface Water Quality Monitoring Procedures, Volume 1: Physical and Chemical Monitoring Methods, RG-415, TCEQ, Revised August 2012.*



Assurance/Quality Control (QA/QC) analyses that are required by TCEQ for data to meet the standards required by the TRRP.

- 4) Section 3.3.1/Target Metals - *The sampling frequency should meet TRRP's 1 per 1/8 acre unless deed recordation as commercial/industrial is proposed. Cook-Joyce's arguments in Section 3.4 that there are no current residential platted properties and that future development will restrict residential construction size; that past ownership was not connected with Exide; and that the dominant wind direction is away from the site and toward Exide do not hold up under scrutiny (as discussed further below) and do not justify variance from TRRP requirements.*

Cook-Joyce's disregard for contamination from wind deposition has been disproved already with the sampling work performed at the Exide and surrounding facilities itself. In addition, Cook-Joyce specifically identifies aerial deposition of contaminants from the Exide facility as a Recognized Environmental Condition for the Grand Park site in the January 16, 2014 Phase I ESA (see comments on ESA below). Since Exide's air emissions were not consistent and may have had episodes of high releases with lead content, use of averaged wind direction is unsuitable since even a single event during a southern wind could be a concern. This certainly occurred during the life of the Exide facility. The onus to demonstrate protective levels is on the Applicant within the VCP.

Also, the fact that Exide did not previously own the Grand Park site does not justify a variance from TRRP sampling requirements, as Exide's past disposal practices have impacted numerous non-contiguous properties. Finally, future development can only be restricted by a deed recordation. If this is desirable, then it should be deed recorded as commercial to avail the City of lesser data needs. This however would prevent the Site from being a park, as TRRP specifically includes parks within the residential definition (See 30 TAC 350.4(a)(74)). Full evaluation of the fill areas identified in the geotechnical evaluation should be included in the sampling requirements, as disposal of wastes from Exide's operations have been documented on numerous off-site properties.

Please refer to the response to comment 1.

- 5) Section 3.5/Groundwater Assessment - *More monitoring wells may be needed depending upon the results of the soil and fill investigation efforts. The final decision on frequency should be dependent on the source areas found during the next level of investigation.*

The City concurs with this statement, which is why the Revised Workplan states, "CJI proposes to install monitoring wells at locations where surface soil contamination is discovered in upland portions of the Site."

Mr. Bradbury had the following comments on the Phase I Environmental Site Assessment (ESA)⁵ the City completed for the Grand Park Site.

- 6) *The Phase I ESA specifically includes the Exide facility as a Recognized Environmental Condition (REC) based on aerial deposition of lead particulate during Exide operations*

⁵ Phase I Environmental Site Assessment, Grand Park, 7275 Dallas Parkway, Frisco, Texas VCP #2592, CN600245526840, Cook-Joyce, Inc., dated 16 January 2014.



(1960s to 2012) (Page viii). This is contradictory to Cook-Joyce's request to not evaluate for impact from this concern in Section 3.3.1 of the revised January 2014 APA Work Plan. Thorough evaluation of surficial metals will be key to accomplishing a successful investigation at this property.

The City disagrees that the Revised Workplan is contradictory to the Phase I ESA. Clearly, the purpose of the surficial soil sampling at Grand Park is to assess potential impacts from airborne deposition from the former Exide facility.

- 7) *It is recommended that the two (2) previously unknown wells be sampled for a wide range of chemicals of concern (COC) since no knowledge of their installation has been found. At a minimum, this should include TPH TX1005/1006, VOCs SW-846 8260B, SVOCs SW-846 8270, RCRA Metals SW-846 602017141.*

As documented in the Revised Workplan CJI is attempting to obtain more information regarding the two permanent monitoring wells discovered on Grand Park. If they are utilized in the investigation, groundwater samples obtained from the wells will be analyzed for constituents that are considered to be credibly present based on the historical uses of that portion of the Site.

- 8) *Fill material was identified during the geotechnical evaluation and should be further evaluated given that past dumping/filling by Exide has been demonstrated at nearby properties. Fill of up to five (5) feet was noted in B-6 (Infrastructure effort), TP-1 (Pavement subgrade effort), B-6 (Pavement subgrade effort), and TP-1 (March 15th, 2013 Dams/Lakes effort).*

Both boring 6 (B-6) and Test Pit 1 (TP-1) are referred to twice by Mr. Bradbury. Approximately 4 feet of possible fill (brown and tan clay with gravel) were observed in the upper 4 feet (e.g. from the ground surface to 4 feet below grade) of B-6. Approximately 5 feet of brown and tan clay fill with organic material was observed in the upper 5 feet of TP-6.

The City concurs that past dumping/filling by Exide or its predecessors has been discovered at nearby properties. However, the City also notes that 63 borings have been installed in Grand Park to date. Five test pits have also been excavated. Fill material was reported in 2 of those locations. The City further notes that:

- It has already proposed further assessment at B-6, which is also the location of a piezometer that the City has proposed sampling.
- No debris, such as slag, cobbles, battery chips, or other waste, is reported in the fill material at either location. TP-1 was a test pit that was excavated to a depth of 15 feet. The City notes that test pits are installed so that the strata exposed on the sidewalls of the pit can be visually evaluated.

However, in the event that a debris fill is observed at Grand Park it will be evaluated appropriately.

- 9) *Slag and battery waste was noted during the site reconnaissance (see Photo 1) which should be further investigated as well as catalogued to help future investigations. Also, based on the site reconnaissance, numerous areas of the site appear to include*



undocumented dumping or filling. Delineation of potentially buried refuse (See Photos 39 through 43) is needed.

Potential slag was noted in Stewart Creek and depicted in the Phase I ESA in Appendix H, Photograph 3. Water and sediment in Stewart Creek have and will be sampled by City of Frisco and Exide consultants as part of the on-going assessment of the Creek.

The debris noted at Grand Park appeared primarily to be dumped in or adjacent to drainage features. In the event that buried debris is discovered, it will be excavated and disposed of appropriately. In addition, the debris piles documented in the Phase I ESA should be disposed of appropriately.

10) Based on the description of numerous mounds and burrows, the ecological considerations should include areas outside the creek (See Photo 14), as site conditions may impact wildlife in these areas.

The City concurs with this statement and has clearly indicated to TCEQ verbally and in writing that ecological considerations will be evaluated as part of the Affected Property Assessment Report (APAR) or as otherwise agreed to by TCEQ as part of an overall Stewart Creek investigation/remediation. To clarify this statement for concerned citizens of Frisco that may review this letter, an APAR includes an ecological evaluation of the area being assessed, which would include the entire Grand Park Site. That evaluation includes an evaluation of endangered species that may be present at the Site and if action levels for specific contaminants should be developed to protect vulnerable wildlife.

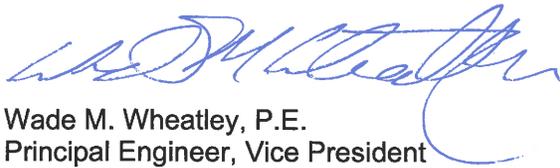
A complicating factor is that the ecological assessment of Stewart Creek might not be performed as part of this VCP project. Currently, TCEQ has required that Exide assess and evaluate impacts to Stewart Creek as part of their assessment of contamination originating from their facility. This includes an ecological evaluation of those impacts. In the event that the City does not perform an independent ecological evaluation of Stewart Creek, the City will provide oversight and a third party review of the work (and conclusions from that work) performed by Exide.



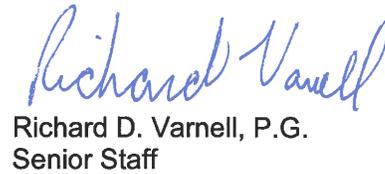
CLOSING

We hope this information fully responds to Mr. Bradbury's comments relating to the Grand Park VCP Site. Please contact the undersigned with questions or comments. We can be reached at 512/474-9097 or by email at wade.wheatley@cook-joyce.com or richard.varnell@cook.joyce.com.

Sincerely,



Wade M. Wheatley, P.E.
Principal Engineer, Vice President



Richard D. Varnell, P.G.
Senior Staff

RV:rv

Cc: George Purefoy, City of Frisco
Mack Borchardt, City of Frisco
Henry Hill, City of Frisco
Kerry Russell, Russell & Rodriguez
Rusty Simpson, Southwest Geoscience



ATTACHMENT A





ATTACHMENT A

CJI proposes using a modified exposure area in the portion of Grand Park that will be redeveloped as a park. We believe a modified exposure area is justified based on the following:

Current and Future Uses of the Park Area

- No existing residences and no platted residential properties currently exist on that area of the Site.
- The City of Frisco will restrict the future construction of residential properties in that area through the use of a deed recorded development restriction.
- Open areas are proposed for the park. The use of the park will not be limited to a small area (such as the back yard of a home). Therefore, exposure scenarios based on chronic exposures to a contaminant in a small area are not applicable to the Site.

Contamination Pathways at Grand Park

- It is documented that Stewart Creek has been impacted by the former Exide facility.
- It is considered unlikely that significant impacts originating from the former Exide facility will be discovered in upland areas of Grand Park. This is based on the following lines of reasoning:
 - Wind direction - According to wind roses for the Dallas/Fort Worth area (<http://www.tceq.texas.gov/airquality/monops/windroses.html>) the Site is crosswind from the former Exide facility (the primary emission source in the area). Airborne impacts originating from the former Exide facility are considered the primary mechanism by which surface soil could have been contaminated at the Site. Based on the wind roses CJI considers it unlikely that upland portions of the Site would have been significantly impacted by airborne deposition from the former Exide facility.
 - The Site was not owned or controlled by Exide or its predecessors.

Investigation Specifics

- Extensive investigation activities and intensive sampling and delineation of potential source areas both on and off the Site will be conducted.
- The Site-specific PCL for lead, which is considered the primary contaminant of concern at the Site, is 250 milligrams per Kilogram (per City directive). This is ½ of the residential ^{Tot}Soil_{Comb} PCL, which is anticipated to be the critical PCL for lead at the Site. This will result in more conservative delineation and remediation efforts at the Site than would otherwise be regulatorily required.
- In addition to grid sampling, targeted sampling will be performed in specific areas if battery chips or slag are observed by CJI field personnel.



ATTACHMENT A

- CJI will statistically evaluate the samples taken in the future park area. CJI expects to demonstrate that COCs (if present) are relatively homogeneous over an area larger than the residential default size in accordance with 30 TAC 350.51(I)(3).

Based on this information CJI believes that a modified exposure area and a reduced sampling frequency is warranted in the future park area within the overall Site.