Message

From: Shewmake, Kenneth [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=5031C1ABFE8847809A448EF4899DE65C-SHEWMAKE, KENNETH]
Sent: 10/30/2019 10:03:56 PM
To: Rauscher, Jon (Rauscher.Jon@epa.gov) [Rauscher.Jon@epa.gov]; Hidalgo, Chelsea (Hidalgo.Chelsea@epa.gov) [Hidalgo.Chelsea@epa.gov]; Tsui-Bowen, Alethea (Tsui-Bowen.Alethea@epa.gov) [Tsui-Bowen.Alethea@epa.gov]
Subject: FW: Lane Plating Rev 00 Phase 1 DSTM
Attachments: ATT00001.txt

Forwarding a risk question from TCEQ.

From: Scott Settemeyer <scott.settemeyer@tceq.texas.gov>
Sent: Wednesday, October 30, 2019 4:24 PM
To: Shewmake, Kenneth <shewmake.kenneth@epa.gov>
Subject: RE: Lane Plating Rev 00 Phase 1 DSTM

Hi Kenneth,

I was taking another look at the proposed RSL for manganese and it appears that this RSL may be based solely on exposure to a recreational user and not fish consumption. The EPA water quality criteria for fish consumption is much lower than the proposed RSL for manganese (https://www.epa.gov/wqc/national-recommended-water-quality-criteria-human-health-criteria-table). I was curious as to how you anticipate eliminating the fish consumption pathway during the risk assessment? Thanks!

Scott

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From: Scott Settemeyer
Sent: Thursday, October 10, 2019 1:21 PM
To: Shewmake, Kenneth <shewmake.kenneth@epa.gov>
Subject: FW: Lane Plating Rev 00 Phase 1 DSTM

Kenneth,

I forwarded your email to our Ecological Risk Assessor and his response is included below. Based on his response, if the EPA would like to use the proposed RSL of 2,260 ug/L for manganese in surface water, then as part of the Risk Assessment at the site, the EPA would need to provide justification that this value is protective of aquatic life.

Scott

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From: Gregory Zychowski <Gregory.Zychowski@tceq.texas.gov>
Sent: Thursday, October 10, 2019 12:40 PM
To: Scott Settemeyer <scott.settemeyer@tceq.texas.gov>
Subject: RE: Lane Plating Rev 00 Phase 1 DSTM

Hi, Scott.

Thanks for the notice.

The ecological screening level in Table D-3 (1st attachment) is 1,310 µg/L, which corresponds to the 1.310 mg/L in the TCEQ's benchmark tables. This value, in turn, apparently came from the State of Colorado's hardness-based water quality standard, using an assumed hardness of 50 mg/L $CaCO_3$. **Technically, the 1,310 µg/L value is lower than the human health RSL of 2,260 µg/L.**

Normally, we would expect any challenge to the default benchmark value to be explained:

> "Alternate and proposed benchmarks that are developed or cited by the user should be fully explained" (RG-263, TCEQ, 2018).

For example, site representatives might calculate a similar benchmark with a segment-specific hardness (instead of the 50 mg/L $CaCO_3$ default). Or if there is a particularly useful/relevant publication offering an alternative benchmark, that could be considered as well. There would be much less flexibility if we were talking about a numerical criterion from 30 TAC 307 or a federal criterion (which we're not in this case).

I hope this helps.

Greg Zychowski
Ecological Risk Assessor
TCEQ Remediation Division
512-239-3158
gregory.zychowski@tceq.texas.gov

From: Scott Settemeyer <scott.settemeyer@tceq.texas.gov>
Sent: Thursday, October 10, 2019 11:42 AM
To: Gregory Zychowski <Gregory.Zychowski@tceq.texas.gov>
Subject: FW: Lane Plating Rev 00 Phase 1 DSTM

Greg,

It looks like the manganese surface water RBEL is based on national recommended water quality criterion for the protection of human health. Do you know if EPA's calculated RSL for manganese will meet the water quality standards? If not, do you know of anyone that can help advise us if this value is protective? Thanks.

Scott

From: Shewmake, Kenneth <shewmake.kenneth@epa.gov>
Sent: Thursday, October 10, 2019 10:38 AM
To: Scott Settemeyer <scott.settemeyer@tceq.texas.gov>
Cc: Hidalgo, Chelsea <Hidalgo.Chelsea@epa.gov>; Tsui-Bowen, Alethea <Tsui-Bowen.Alethea@epa.gov>; Rauscher, Jon <Rauscher.Jon@epa.gov>
Subject: FW: Lane Plating Rev 00 Phase 1 DSTM

Scott,

I wanted to forward our contractors response to your comments. I will call you to discuss this.

From: Paddack, Mark <mpaddack@eaest.com>
Sent: Thursday, October 10, 2019 10:29 AM
To: Shewmake, Kenneth <shewmake.kenneth@epa.gov>
Subject: RE: Lane Plating Rev 00 Phase 1 DSTM

Mr. Shewmake:

I appreciate you forwarding me TCEQ's comments. I sent the responses to Dr. Dan Hinckley and Ms. Cheatwood to see if they had any further thoughts. For the most part, it sounds like everyone is pretty well in agreement on the path forward for the Phase 2 RI field event.

However in response to the multiple comments regarding manganese in surface water, Cynthia used EPA RSL calculator to get an approximate surface water RSL of 2,260 ug/L for the assumed exposure pathway that will be used in the HHRA (an adolescent recreational user that visits the stream maybe once a week). Based on her calculations, she indicated the Phase 1 manganese in surface water will risk away. However, in talking with both Dan and Cynthia, we reached concurrence to collect background surface water samples when collecting the background sediment samples in response to the TCEQ comments.

Regarding the one TCEQ comment of sampling under the buildings, as you are aware, we collected soil samples just to the south (down gradient) of the Hazardous Waste Storage Shed and the results have already demonstrated this area is a probable source area (along with the slag pile to the southeast of the building). Regarding the main building, I have already been planning to use a similar approach and install a well cluster (perched zone well and Austin Chalk well) along the south perimeter of the west portion of the building (to the southeast and south of the sumps and containerized waste storage area in the west portion of the building). I'm thinking I can also shift one of the soil borings along the south perimeter of the east portion of the building as well, as I do not know if the building is accessible to a drill rig, or the thickness of the building foundation inside the main building. By placing these borings and wells along the south side of the building, it should provide data to show the magnitude of impact beneath the main building.

Please let me know if you have additional questions or comments.

Thank You,
Mark Paddack
EA Project Manager

From: Shewmake, Kenneth <shewmake.kenneth@epa.gov>
Sent: Wednesday, October 9, 2019 4:57 PM
To: Paddack, Mark <mpaddack@eaest.com>

Cc: Rauscher, Jon <Rauscher.Jon@epa.gov>; Tsui-Bowen, Alethea <Tsui-Bowen.Alethea@epa.gov>; Hidalgo, Chelsea <Hidalgo.Chelsea@epa.gov>; Scott Settemeyer <scott.settemeyer@tceq.texas.gov>
Subject: FW: Lane Plating Rev 00 Phase 1 DSTM

Mark,

The response from TCEQ to the questions you sent on Lane Plating is in the email below. The EPA risk assessors were in agreement with the recommendations and had no additional comments.

I don't know if we already informed you, but Scott Settemeyer will be taking over for Rebecca Storms at TCEQ. His contact info is also in the email below.

Kenneth Shewmake
Remedial Project Manager
US Environmental Protection Agency, Region 6
Superfund and Emergency Management Division (SEDRA)

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work phone- (214) 665-3198

From: Scott Settemeyer <scott.settemeyer@tceq.texas.gov>
Sent: Wednesday, October 09, 2019 4:35 PM
To: Shewmake, Kenneth <shewmake.kenneth@epa.gov>
Cc: Gregory Zychowski <Gregory.Zychowski@tceq.texas.gov>; Tracie.Phillips@tceq.texas.gov; Sharon Barker <Sharon.Barker@tceq.texas.gov>
Subject: RE: Lane Plating Rev 00 Phase 1 DSTM

Kenneth,

Responses from the TCEQ are provided below. My responses are in red text and our Ecological Risk Assessor's responses are in blue text. Our Human Health Risk Assessor had no comments.

1. Proceed with the background soil study.
   I have no objections to conducting a background soil study. The EPA may want to consider using the Texas-Specific Median Background concentrations (http://www.tceq.texas.gov/assets/public/remediation/trrp/background.pdf) as a starting point for comparison to site data, and then supplement those values with site-specific background concentrations, where appropriate.

   I have no objections to a soil background study. Based on the accompanying Phase 1 data tables, I assume this would be primarily to address background metals. However, site representatives should explicitly state which COPCs are to be included in the study, and measures should be taken to ensure that the representative background concentrations are not biased high. Site representatives are also encouraged to compare the affected property data to the Ecological PCL Database results first, for any site COPCs represented therein (https://pcl.wtamu.edu/pcl/login.jsp). As far as ecological risk is concerned, a soil background study may be unnecessary for those COPCs that do not demonstrate ecological PCL exceedances, after considerations for hot spot removals, area use factor adjustments, etc.

2. Only conduct the background sediment study; based on their review of the Phase 1 data they do not see a need to do the background surface water study.

Based on the results of the Phase 1 field event, manganese was detected at elevated concentrations in surface water. Without a background study and/or further assessment for manganese in surface water, what is the plan to address these elevated concentrations?

For sediment, the same comments regarding the list of pertinent COCs and the PCL Database apply; see the above comments regarding soil background. Benthic PCLs (presented in the TCEQ's benchmark tables) should be given consideration alongside wildlife PCLs for sediment. A surface water background study may be unnecessary, depending on the results of a comparison between surface water concentrations and surface water benchmarks/standards/criteria. Ideally, risk management recommendations should address any remaining elevated risks apparent from the surface water data.

3. Do not conduct further nature and extent samples for sediment or surface water; neither of them think it is warranted. However, Dr. Hinckley did suggest the collection of some additional surface water parameters within the footprint of the Phase 1 sediment and surface water investigation footprint in order to derive a site-specific aluminum criterion for the aluminum detections in surface water.
   Based on the results of the Phase 1 field event, manganese was detected at elevated concentrations in surface water. Without a background study and/or further assessment for manganese in surface water, what is the plan to address these elevated concentrations?

   I assume that the surface water parameters would include pH, hardness, and dissolved organic carbon. These are the parameters that may affect the National Recommended Aquatic Life Criteria for aluminum, as stated here: https://www.epa.gov/sites/production/files/2018-12/documents/aluminum-criteria-final-factsheet.pdf. Are other parameters being considered?

4. Neither sees the need for fish sampling, and Dr. Hinckley also indicated he did not think the wetlands survey would be necessary based on the Phase 1 sediment and surface water data.
   I have no comments on this suggestion.

   Fish sampling is not typically a requirement of the TCEQ's ERA program, but under TRRP (30 TAC 350), such data might be presented in an optional Tier 3 site-specific ERA (SSERA; 30 TAC 350.77(d)). Forgoing fish tissue data, site-specific toxicological studies, etc. assumes that delineation and response actions will be based on the conclusions of a less site-specific approach (e.g., comparing exposure point concentrations to PCLs).

   Regarding wetlands: EA previously assumed that a wetlands survey would be completed as part of the Phase 2 RI field event, and I expressed agreement with this at the time (June 20, 2019 email to the TCEQ project manager). It is not clear how the Phase 1 surface water data (Table D-3) or the sediment data (Table C-3) have changed this preference. However, some form of wetland identification is apparent in section 1.3.2 and in Figure 2 onward of the October 2019 Phase 1 RI Data Summary Technical Memorandum. This level of description would typically suffice for a screening-level ERA (30 TAC 350.77(c)).

   Note also that the magnesium surface water screening value of 3.235 mg/L (3,235 µg/L) was removed from the TCEQ's benchmark tables in August 2019, for reasons that are beyond the discussion here. Lane Plating's site investigations began long before this change, and the older (2018) value may continue to be cited in the site's ERA-related work. However, site representatives are encouraged to periodically check for updates to any pertinent TCEQ resources (guidance, benchmarks, etc.). In cases where benchmarks are not offered, site representatives would normally be asked to propose benchmarks, or otherwise to retain the COC for further analysis (hazard quotients and/or PCLs).

5. Regarding soil, as has been expected all along, the hexavalent chromium is the main risk driver at the site, and where it is addressed, it will address all the other metal exceedances. Versus the Residential Soil RSL of 0.3 mg/kg, Cynthia suggested using a criterion of 30 mg/kg for the Phase 2 nature and extent sampling. She indicated this relates to a residential risk level of 10^{-4} and an industrial risk below 10^{-5}, and is also a level below a non-cancer concern.

The TCEQ agrees with this suggestion, for now. If additional assessment indicates that the soil source area is greater than 0.5 acres, the TCEQ requests that the criterion be divided in half to be consistent with the TCEQ cleanup standards for soil protective of groundwater.

I have no specific comments on hexavalent chromium in terms of human health risk. However, please see my response to comment no. 6 below.

6. I received a response from Dr. Hinckley earlier today regarding screening criterion for ecological risks associated with the hexavalent chromium. He indicated the only solid ecological screening level for hexavalent chromium is 130 mg/kg from EcoSSL for protection of mammals (the shrew). As such he recommends using the EcoSSL of 130 mg/kg, versus use of the 0.4 mg/kg screening level that was originally used to screen historical data used to prepare the site's Conceptual Site Model Technical Memorandum.
   I have no comments on this suggestion.

   As stated in a December 4, 2018 memorandum from the TCEQ's ecological risk assessor to the TCEQ project manager regarding the Conceptual Site Model, the Ecological PCL Database may serve as a useful point of reference for ecologically-protective thresholds. Ideally, ecological screening values or representative PCLs that do not correspond to the TCEQ's benchmark tables or the PCL Database should be explained, especially when the proposed alternatives are higher than the earlier default values.

7. I also spoke with Jay Snyder (EA's Chief Geologist), and he agreed that at least one well (with surface casing) should be installed into the Austin Chalk to complete vertical delineation.
   The TCEQ agrees with this suggestion. The TCEQ recommends that this well be installed on-site, near MW-01, since the Austin Chalk was not encountered during the installation of MW-02 and MW-03.

   I have no comments on this proposal.

Additionally the TCEQ offers the following recommendations to consider when planning for the Phase 2 field event:

- It might be helpful to collect soil samples from underneath on-site building footprints in order to determine if a remedy would be necessary to address any contaminated soils that may be present under the buildings. To this end, it might also be helpful to investigate any conduits within the on-site buildings which might serve as preferential pathways for migration to environmental media, such as floor drains, sumps, trenches, etc.
- It would be helpful if EPA could collect soil samples between 2-5 feet bgs as the TCEQ considers this depth interval to be surface soil at a commercial/industrial property. If contamination is present within this depth interval above health-based levels, the TCEQ may be required to implement a remedy.
- In addition to the monitor well recommended in #7 above, the EPA should consider installing additional groundwater monitor wells at the site to better define the aerial extent of groundwater contamination and evaluate the ability of groundwater to discharge to surface water.

If you have any questions, or if we may be of any further assistance, please feel free to contact me at (512) 239-3429, or you may reply directly to this email. Thanks!

Scott

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From: Shewmake, Kenneth <shewmake.kenneth@epa.gov>
Sent: Monday, October 7, 2019 11:43 AM
To: Scott Settemeyer <scott.settemeyer@tceq.texas.gov>; Rebecca Storms <Rebecca.Storms@Tceq.Texas.Gov>; Rauscher, Jon <Rauscher.Jon@epa.gov>; Hidalgo, Chelsea <Hidalgo.Chelsea@epa.gov>; Tsui-Bowen, Alethea <Tsui-Bowen.Alethea@epa.gov>; Kessinger,Jessica (DSHS) (Jessica.Kessinger@dshs.texas.gov) <Jessica.Kessinger@dshs.texas.gov>; Reategui-Zirena,Evelyn (DSHS) <Evelyn.Reategui-Zirena@dshs.texas.gov>
Subject: FW: Lane Plating Rev 00 Phase 1 DSTM

Lane Plating Team,

Please look at the following suggestions from our contractor who is working on the phase 2 sampling plan. Please let me know if you agree or disagree with the following suggestions. I would appreciate it if you could respond by tomorrow.

Kenneth Shewmake
Remedial Project Manager
US Environmental Protection Agency, Region 6
Superfund and Emergency Management Division (SEDRA)

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From: Paddack, Mark <mpaddack@eaest.com>
Sent: Friday, October 04, 2019 3:31 PM
To: Shewmake, Kenneth <shewmake.kenneth@epa.gov>
Subject: RE: Lane Plating Rev 00 Phase 1 DSTM

Mr. Shewmake:

I wanted to make you aware that as the Lane screening tables and figures have been falling into place, I've also been conferring with Dr. Dan Hinckley (EA ecological risk assessor) and Cynthia Cheatwood (EA's human health risk assessor), and they have provided the following suggestions for the Phase 2 field event based on review of the Phase 1 data:

1. Proceed with the background soil study.

2. Only conduct the background sediment study; based on their review of the Phase 1 data they do not see a need to do the background surface water study.

3. Do not conduct further nature and extent samples for sediment or surface water; neither of them think it is warranted. However, Dr. Hinckley did suggest the collection of some additional surface water parameters within the footprint of the Phase 1 sediment and surface water investigation footprint in order to derive a site-specific aluminum criterion for the aluminum detections in surface water.

4. Neither sees the need for fish sampling, and Dr. Hinckley also indicated he did not think the wetlands survey would be necessary based on the Phase 1 sediment and surface water data.

5. Regarding soil, as has been expected all along, the hexavalent chromium is the main risk driver at the site, and where it is addressed, it will address all the other metal exceedances. Versus the Residential Soil RSL of 0.3 mg/kg, Cynthia suggested using a criterion of 30 mg/kg for the Phase 2 nature and extent sampling. She indicated this relates to a residential risk level of 10^{-4} and an industrial risk below 10^{-5}, and is also a level below a non-cancer concern.

6. I received a response from Dr. Hinckley earlier today regarding screening criterion for ecological risks associated with the hexavalent chromium. He indicated the only solid ecological screening level for hexavalent chromium is 130 mg/kg from EcoSSL for protection of mammals (the shrew). As such he recommends using the EcoSSL of 130 mg/kg, versus use of the 0.4 mg/kg screening level that was originally used to screen historical data used to prepare the site's Conceptual Site Model Technical Memorandum.

7. I also spoke with Jay Snyder (EA's Chief Geologist), and he agreed that at least one well (with surface casing) should be installed into the Austin Chalk to complete vertical delineation.

Just to make you aware under each section that describes the data summary for surface soil, subsurface soil, surface water, sediment, and groundwater, I added the following language *"These exceedances are based on use of default EPA and/or TCEQ screening values. The distribution of exceedances may change once background conditions have been evaluated, and formal, site-specific Human Health and Ecological Risk Assessments have been completed.* I also included "preliminary" in all of the screening figure titles. I did this because I knew you wanted to make this information public , but also know that things can change from the time the data is initially screened against default screening levels and when the formal risk assessments have been completed.

Based on the above feedback, its looking like we should be able to scale back the Phase 2 field event (versus what was initially envisioned at the time of scoping). Per the above recommendations, I'm going to develop an approach for the Phase 2 field event the first part of this next week, and was wondering if you and I could have a meeting in the upcoming days to discuss the approach moving forward once you have had time to look through the Phase 1 Data Summary Technical Memorandum. I will then prepare the Sampling and Analysis Addendum, and should be able to have it to you by 21 October 2019, as mentioned a few days back.

Thank You,
Mark Paddack
EA Project Manager

From: Paddack, Mark
Sent: Friday, October 4, 2019 2:13 PM
To: Shewmake, Kenneth <shewmake.kenneth@epa.gov>
Cc: Rebecca Storms <Rebecca.Storms@Tceq.Texas.Gov>
Subject: Lane Plating Rev 00 Phase 1 DSTM

Mr. Shewmake:

Please find attached a copy of the Revision 00 Phase 1 Data Summary Technical Memorandum for the Lane Plating Works, Inc. Superfund Site. EA is also producing and distributing one hard copy and two electronic copies on compact disc (CD) of this deliverable to your attention. As requested, one electronic copy (on CD) is also being distributed to Ms. Rebecca Storms, Texas Commission on Environmental Quality (TCEQ) Project Manager.

Please let me know if you have questions or comments concerning this matter.

Thank You,

Mark Paddack
EA Project Manager