



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1201 ELM STREET, SUITE 500
DALLAS, TEXAS 75270

August 11, 2022

Charles W. Munce, P.E.
Project Coordinator
GHD Services Inc.
11451 Katy Freeway, Suite 400
Houston, Texas 77079

RE: "Addendum to the Final 100% Remedial Design (Amended April 2021) Southern Impoundment;"
San Jacinto River Waste Pits Superfund Site; Unilateral Administrative Order CERCLA Docket
No. 06-05-21

Dear Mr. Munce,

The Environmental Protection Agency (EPA) has received and reviewed the "Addendum to the Final 100% Remedial Design (Amended April 2021) Southern Impoundment" (100% Remedial Design [RD] Addendum) of the San Jacinto River Waste Pits Site in Harris County, Texas (Site) which was prepared pursuant to the requirements of the Unilateral Administrative Order (UAO) for Remedial Action (RA) of the Southern Impoundment, EPA Region 6, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Docket No. 06-05-21 (Order).

The EPA approves the 100% RD Addendum with the modifications listed in the attachment to this letter. Pursuant to ¶ 5.6(a)(2) of the Statement of Work (SOW) (Approval of Deliverables – Initial Submissions), EPA may modify an initial submission to cure deficiencies in the submission if EPA determines that disapproving the submission and awaiting a resubmission would cause substantial disruption to the Work. In light of the limited season for Site construction activities and the planned start date for remedial construction in the Fall of 2022, EPA has determined that the time necessary to disapprove the submittal and await resubmission would cause substantial disruption to the Work. Based on that determination, EPA approves the 100% RD Addendum as modified in the attachment.

Thank you for coordinating, and please contact me with any questions at appelt.robert@epa.gov or 214-665-2704.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert Appelt", written over a horizontal line.

Robert Appelt
Remedial Project Manager

Attachment: EPA Modifications to the “Addendum to the Final 100% Remedial Design (Amended April 2021) Southern Impoundment”

Cc: Wells Richard, GHD
Brent Sasser, IPC
Katie Delbecq, TCEQ
Ashley Howard, EPA
Lauren Poulos, EPA

EPA Modifications to the “Addendum to the Final 100% Remedial Design (Amended April 2021) Southern Impoundment”

August 11, 2022

1. Section 2.2 Discrete Waste Characterization Sampling

The last sentence in this section reads: “As with all past waste characterization samples for the Southern Impoundment, the results indicate that the waste is non-hazardous and can be disposed of as a Texas Class 2 non-hazardous waste.” The six discrete samples were not analyzed for dioxins/furans TCLP in accordance with Texas non-hazardous industrial solid waste regulations (Texas Administrative Code [TAC] §335.505-506). Therefore, there is not adequate information to determine whether these six samples met the Class 2 disposal criteria in 30 TAC §335.505-506.

Modification: The last sentence of **Section 2.2 Discrete Waste Characterization Sampling** section will be deleted.

2. Section 2.5.4.1 Slug Testing

Several different terms are used to describe the same hydraulic property, these need to be made consistent. The second sentence, first paragraph reads: “*The values found from the slug tests performed at each well were averaged and used as the representative value for each excavation area.*” The last sentence of the first paragraph reads: “*The average conductivity values for each excavation area are included in Table 2.2. below.*” **Table 2.2 Piezometer Conductivity Numbers** references “*Estimated Hydraulic Conductivity*” in second and third column headers.

Modification: Change “*average conductivity*” in the last sentence of the first paragraph of **Section 2.5.4.1 Slug Testing** and “*Estimated Hydraulic Conductivity*” in the column headers for second and third column in **Table 2.2 Piezometer Conductivity Numbers** to read “*representative conductivity*” and “*Representative Hydraulic Conductivity*” respectively.

3. Section 2.5.4.3 Transducers

No transducer water level data was provided as part of this submittal.

Modification: Prior to start of remedial construction, provide EPA a revised **Table 2.2 Piezometer Conductivity Numbers** that includes minimum, maximum, and average elevation of water level in each of the piezometers and add the complete transducer data as an attachment to the table.

4. Section 4.1.1 Excavation Limits

Respondent has proposed a slope of 2:1 to be utilized consistently across the site for all excavation, including within excavation polygons adjacent to Market Street and the boundary of the Glendale Boat Works property.

Modification: The following will be added to at the end of the fifth paragraph of **Section 4.1.1 Excavation Limits**.

“The proposed slope of 2:1 for excavation in the polygons adjacent to Market Street and the boundary of the Glendale Boat Works property shall be reevaluated in the field, during excavation, to determine if a steeper slope may be safely used in these areas.”

The following will also be added to this section.

“During excavation, visual inspections by the engineer will verify that visible waste is not found in intervals that are assumed to be under 240 ng/kg TEQ based on previous sampling results and are designed to be left in place or used as overburden.”

“The DWA for each excavated polygon shall be recalculated during excavation based upon the TEQ of dioxins for the material left in place, the overburden placed back into the excavation, and the clean fill imported from off-site sources to demonstrate compliance with the 240 ng/kg TEQ remediation goal.”

“Once excavation is complete for the polygons adjacent to Market Street and the boundary of the Glendale Boat Works property, these areas will be surveyed before overburden of clean backfill is placed in the area and documented so that the final as built drawings will accurately show the locations and concentrations of waste left in place above the cleanup level. The final as built drawings will be included as documentation in subsequent institutional controls that will be implemented at the Site.”

“The final site as built drawings will accurately document where waste material is left in place over 240 ng/kg TEQ.”

5. Section 4.1.1 Excavation Limits

To address the possibility of inadvertent inclusion of high concentration waste material into excavation overburden material intended to be re-used as back fill on-site, the following changes shall be made to the excavation limits.

Modification: Add the following paragraph to the end of **Section 4.1.1 Excavation Limits**:

*“As specified in **Section 31 23 16 Excavation, Part 3 Execution, 8 Tolerances**, the allowable tolerance for excavation depth is 2 inches greater or less than the target excavation depth. This 2-inch tolerance shall not result in any material from the contaminated interval, as identified the design drawings, being included in the overburden material planned for re-use as backfill or left in place. Any over-excavated material that originates from within the contaminated interval indicated as waste shall be considered waste and disposed off-site.”*

Additionally, **Section 31 23 16 Excavation, Part 3 Execution, 8 Tolerances** of the specifications shall be modified to address this concern as shown below.

6. Section 4.1.1 Excavation Limits

Modification: Add this text and table to **Section 4.1.1 Excavation Limits:**

“To minimize potential for inclusion of impacted material into overburden material or material left in place, the interval of material to be excavated and disposed of as waste shall be increased by a minimum of 6 inches in the polygons identified below.

The planned excavation intervals for off-site disposal will be modified in the following polygons as shown below:

<i>Polygon</i>	<i>Draft Excavation Interval</i>	<i>Revised Excavation Interval</i>
<i>NC-B1/B2/B3 (C1/C2/C3)</i>	<i>6 - 10</i>	<i>5.5 - 10</i>
<i>NC-C1/C2/C3 (B1/B2/B3)</i>	<i>6 - 10</i>	<i>5.5 - 10</i>
<i>NE-K1/K2</i>	<i>4 - 6</i>	<i>3.5 - 6.5</i>
<i>NE-G1/G2/G3/G4(F1/F2/F3)</i>	<i>4 - 6</i>	<i>3.5 - 6.5</i>
<i>SC-C1/C2/C3(E1/E2)</i>	<i>4 - 10</i>	<i>3.5 - 10</i>
<i>SC-O1/O2</i>	<i>4 - 10</i>	<i>3.5 - 10</i>
<i>SC-D1/D2/D3/D4(E3)</i>	<i>4 - 8</i>	<i>3.5 - 8.5</i>
<i>SC-K1/K2/K3/K4</i>	<i>4 - 10</i>	<i>3.5 - 10</i>
<i>SC-Q1/Q2/Q3/Q4</i>	<i>4 - 8</i>	<i>3.5 - 8.5</i>
<i>SC-Q5/Q6/Q7</i>	<i>0 - 8</i>	<i>0. - 8.5</i>
<i>SC-Q8/Q9/Q10/Q11/Q12</i>	<i>4 - 8</i>	<i>3.5 - 8.5</i>
<i>SC-Q13/Q14/Q15</i>	<i>4 - 6</i>	<i>3.5 - 6.5</i>
<i>SCW-QR1</i>	<i>4 - 8</i>	<i>3.5 - 8.5</i>
<i>SC-B1/B2/B3/B4/B5</i>	<i>2 - 6</i>	<i>1.5 - 6.5</i>
<i>NC-Y1/Y2 (X1/X2/W1/W2/W3)</i>	<i>6 - 10</i>	<i>5.5 - 10</i>
<i>NC-X1/X2 (Y1/Y2/W1/W2/W3)</i>	<i>6 - 10</i>	<i>5.5 - 10</i>
<i>SW-Q1/Q2/Q3/Q4/Q5</i>	<i>2 - 6</i>	<i>1.5 - 6.5</i>
<i>SW-Q6/Q7/Q8</i>	<i>2 - 6</i>	<i>1.5 - 6.5</i>
<i>SW-Q9/Q10/Q11/Q12/Q13</i>	<i>2 - 6</i>	<i>1.5 - 6.5</i>

7. Section 4.4.1.2, Item 4. Equipment Decontamination Water

This item title implies it accounts for water generated during routine decontamination of equipment, but the details provided are for rainfall on the decontamination pad area. There is no information provided on an estimate for water generated during routine decontamination of equipment.

Modification: Prior to start of remedial construction, update **Section 4.4.1.2, Item 4. Equipment Decontamination Water** to include water generated as part of equipment decontamination processes. Additionally, update **Table 4.4.1.2 Maximum Expected Contact Water Generated Summary** with this additional information.

8. Section 4.4.2 Treatment System Design

The EPA understands that at some point during the RA, after satisfactory demonstration of its operation or circumstances that require changes to address potentially increased contact water treatment volumes, that changes to the system may be requested or needed to be made.

Modification: Add the following sentence to the end of **Section 4.4.2 Treatment System Design:**

“No modifications may be made to the design, the operating procedures, or the designed maximum daily treatment rate of 400,000 GPD of the WTS without prior notification and approval of the EPA.”

9. Section 4.4.3 Operations and Maintenance Requirements

There is no discussion of the intended hours of operation of the WTS.

Modification: Insert the following after the first sentence of the first paragraph of **Section 4.4.3 Operations and Maintenance Requirements:**

“Operating hours of the WTS will be determined as required by the CONTRACTOR in consultation with the ENGINEER. The ENGINEER shall provide notification to the EPA of the intended operations hours prior to start-up of the WTS and changes to the routine operating hours will be communicated to EPA.”

10. Section 4.4.3 Operations and Maintenance Requirements

The EPA needs to be notified and approve in advance any changes to the WTS design.

Modification: Add this sentence to end of the second paragraph of **Section 4.4.3 Operations and Maintenance Requirements:**

“Any changes to the filtration system bag and cartridge elements or micron rating will need EPA review and approval before testing or full implementation.”

11. Section 4.4.4 Compliance Monitoring

Modification: Replace the last sentence of the first paragraph in **Section 4.4.4 Compliance Monitoring** “Samples will only be collected and analyzed on a per batch basis” with the following sentence:

“Sample will be collected in accordance with the Minimum Frequency of Measurement as detailed in Table 4.4.4 below and Table 2.1 Sample and Analysis Frequency (Now Table 3.1) of the FSP.”

12. Section 4.4.4 Compliance Monitoring, Table 4.4.4 Monitoring Frequencies and Sample Type

Modification: Modify **Table 4.4.4 Monitoring Frequencies and Sample Type** to update the Minimum Frequency of Measurement as approved in the Final 100% Remedial Design (Amended April 2021).

Parameter	<i>Minimum Frequency of Measurement</i>	Standard Analytical TAT (business days)	Sample Type
Flow	<i>Daily</i>		Instantaneous
pH	<i>Once per week</i>		Grab
TSS	<i>Twice per week</i>	3-5 days	Composite
Metals	<i>Once per week</i>	3-5 days	Composite
Dioxins/Furans	<i>Once per week</i>	3-5 days	Composite

13. Table 13 Southern Impoundment Basis of Sizing, page 1 of 2

In the row for Sludge Dewatering Sump, the first sentence in the column titled Sizing/Selection Criteria Assumptions reads “Contractor shall select pump to ensure the contact water draining from the Sludge Dewatering Boxes and any rainwater is discharged to the Influent Tank with backing up in the sump.”

Modification: This sentence in **Table 13 Southern Impoundment Basis of Sizing** shall be changed to read:

“Contractor shall select pump to ensure the contact water draining from the Sludge Dewatering Boxes and any rainwater is discharged to the Influent Tank without backing up in the sump.”

14. Table 13 Southern Impoundment Basis of Sizing, page 2 of 2

In rows for 10-micron Filtration System and 1-micron Filtration System, in the column titled Preliminary Design Value, the filter size is incorrect.

Modification: For the 10-micron Filtration System, the Preliminary Design Value shall be modified to read “10-micron bag or cartridge filters, 95% Efficient (Rosedale Filter Cartridge Model PL-POMF-R1-1-P2 or equal), 25 gpm/cartridge elements with total system capacity of 400 gpm”

Modification: For the 1-micron Filtration System, the Preliminary Design Value shall be modified to read “1-micron bag or cartridge filters, 95% Efficient (Rosedale Filter Cartridge Model PL-POMF-R1-1-P2 or equal), 25 gpm/cartridge elements with total system capacity of 400 gpm”

15. Figure 8 PC-FSE North Central Excavation Bottom Investigation Results

Sample NC-B-7 (composite of 8-10 ft) had a concentration of 4,840 ng/kg TEQ, but the polygons represented by the associated borings (NC-AC1, NC-AC2, NC-AC3, NC-AD1, NC-AD2, NC-AD3) indicate total excavation depth to 8 ft, not to 10 ft. **Table 12 Sample Interval Results**, pages 2-3 indicate that the locations NC-AC1/AC2/AC3(AD1/AD2/AD3) and NC-AD1/AD2/AD3(AC1/AC2/AC3) would have material removed from the 6-10 ft interval.

Modification: Final excavation depth in the polygons will be to the depths indicated in **Table 12 Sample Interval Results** as opposed to those shown in **Figure 8 PC-FSE North Central Excavation Bottom Investigation Results**.

Appendix D – Design Drawings

16. Design Drawings – Excavation Intervals

To minimize potential for inclusion of impacted material into overburden material or material left in place, the interval of material to be excavated and disposed of as waste shall be increased by a minimum of 6 inches in the polygons identified below.

Modification: For design drawings that contain the polygon listed below, the applicable design drawings will be updated to show the revised excavation intervals in both the plain and cross-section views as required in this table.

Polygon	Draft Excavation Interval	Revised Excavation Interval
NC-B1/B2/B3 (C1/C2/C3)	6 - 10	5.5 - 10
NC-C1/C2/C3 (B1/B2/B3)	6 - 10	5.5 - 10
NE-K1/K2	4 - 6	3.5 - 6.5
NE-G1/G2/G3/G4(F1/F2/F3)	4 - 6	3.5 - 6.5
SC-C1/C2/C3(E1/E2)	4 - 10	3.5 - 10
SC-O1/O2	4 - 10	3.5 - 10
SC-D1/D2/D3/D4(E3)	4 - 8	3.5 - 8.5
SC-K1/K2/K3/K4	4 - 10	3.5 - 10
SC-Q1/Q2/Q3/Q4	4 - 8	3.5 - 8.5
SC-Q5/Q6/Q7	0 - 8	0.- 8.5
SC-Q8/Q9/Q10/Q11/Q12	4 - 8	3.5 - 8.5
SC-Q13/Q14/Q15	4 - 6	3.5 - 6.5
SCW-QR1	4 - 8	3.5 - 8.5
SC-B1/B2/B3/B4/B5	2 - 6	1.5 - 6.5
NC-Y1/Y2 (X1/X2/W1/W2/W3)	6 - 10	5.5 - 10
NC-X1/X2 (Y1/Y2/W1/W2/W3)	6 - 10	5.5 - 10
SW-Q1/Q2/Q3/Q4/Q5	2 - 6	1.5 - 6.5
SW-Q6/Q7/Q8	2 - 6	1.5 - 6.5
SW-Q9/Q10/Q11/Q12/Q13	2 - 6	1.5 - 6.5

17. Drawing C-12

Modification: Replace the annotation “*LIMIT OF EXCAVATION*” on **Drawing C-12** with the following annotation as shown on **Drawing C-21**:

“LIMIT OF EXCAVATION (SOME IMPACTED MATERIAL WILL BE LEFT BEHIND AS A RESULT OF NOT EXTENDING THE EXCAVATION ON TO ADJACENT PROPERTIES)”

18. Drawing C-13

Modification: In addition, replace the annotation “*LIMIT OF EXCAVATION*” on **Drawing C-13** with the following annotation as shown on **Drawing C-21**:

“LIMIT OF EXCAVATION (SOME IMPACTED MATERIAL WILL BE LEFT BEHIND AS A RESULT OF NOT EXTENDING THE EXCAVATION ON TO ADJACENT PROPERTIES)”

19. Drawings C-19, C-20, C-21

As noted previously regarding **Figure 8**, Sample NC-B-7 (composite of 8-10 ft) had a concentration of 4,840 ng/kg TEQ, but the polygons represented by that sample indicate total excavation depth to 8 ft, rather than 10 ft on design **Drawings C-19, C-20 and C-21**.

Modification: Polygons associated with boring locations SJSB-008-W1, SJSB008-N1, and SJSB008-E1 shall be excavated to a depth of 10ft.

20. Drawing C-20: On Section E, impacted material is incorrectly labeled as overburden.

Modification: Ensure impacted material is not incorporated into overburden.

21. Drawing C-21: On Section F, impacted material is incorrectly labeled as overburden.

Modification: Ensure impacted material is not incorporated into overburden.

22. Drawing C-38: On Section N, impacted material is incorrectly labeled as overburden.

Modification: Ensure impacted material is not incorporated into overburden.

23. Drawing P-01:

Modification: On **Drawing P-01** change the label of “*sampling location*” to “*compliance sampling location*”.

Appendix E – Specifications

24. Section 31 10 10 Site Clearing, Part 1 General, 3. Environmental Requirements

Modification: Add second bullet in **Section 31 10 10 Part 1 General, 3. Environmental Requirements** that reads:

“2. Survey and mark areas of the site where waste material requiring excavation and disposal is present at the ground surface before clearing and grubbing.”

25. Section 31 10 10 Site Clearing, Part 3 Execution, 3. Clearing and Grubbing

Modification: Change the second bullet in **Section 31 10 10 Site Clearing, Part 3 Execution, 3. Clearing and Grubbing** to read:

“2. Cut off trees, stumps, roots, brush, and other vegetation in areas to be cleared, flush or below the original ground surface. Care will be taken to minimize disturbance and inclusion of soil from areas where waste material is present at the surface. Waste clearing and grubbing products that include or may include waste material will be treated as excavated material requiring off-site disposal.”

26. Section 31 23 16 Excavation, Part 3 Execution, 4 Excavation

Modification: The second bullet in **Section 31 23 16 Excavation, Part 3 Execution, 4 Excavation** shall be modified as follows:

“2. Excavate at 2:1 side slopes, as shown on Drawings. The ENGINEER will reevaluate in the field, during excavation, if a steeper slope may be safely used in polygons adjacent to Market Street and the boundary of the Glendale Boat Works property.

27. Section 31 23 16 Excavation, Part 3 Execution, Part 3 Execution, 5 Over-Excavating

Modification: **Section 31 23 16 Excavation, Part 3 Execution, Part 3 Execution, 5 Over-Excavating** shall be modified by adding the following additional specification:

3. Material resulting from over-excavation carried into the designated intervals of impacted material that is to be stockpiled for off-site disposal that results from the CONTRACTOR excavating past the designated depths between impacted material and material to be used as overburden or left in place, will be considered waste material and will be treated as such for all purposes. If impacted material is mixed with other material designated as overburden intended for re-use, the resulting stockpile will be considered impacted material.

28. Section 31 23 16 Excavation, Part 3 Execution, 8 Tolerances

Modification: The second shall be modified to read:

*2. Within 2 inches greater or less than the specified depth but not uniformly greater or less. This 2-inch tolerance shall not result in any material from the impacted interval, as identified the design drawings, being included in the overburden material planned for re-use as backfill or left in place. Any over-excavation will be handled in accordance with **Section 31 23 16 Excavation, Part 3 Execution, 8 Tolerances.***

29. Section 46 07 01 Water Treatment System (WTS), Part 1 Summary, 3 System Description

Modification: Modify bullet 3 in **Section 46 07 01 Water Treatment System (WTS), Part 1 Summary, 3 System Description** to read:

“Estimated contact water generation by area, excluding expected influent rates for decontamination water from the Truck Wash Area, are provided below:”

30. Section 46 07 01 Water Treatment System (WTS), Part 2 Products, 14 Discharge Diffuser, 4. Operating Conditions

Modification: To clarify per GHD that only a single diffuser will be operated at any given time and the second one is to act as a back-up, add the following bullet under **4. Operating Conditions:**

“e. Assumed that a single diffuser will be operated during routine operations. Should the second diffusor be operated simultaneously with the first, the ENGINEER will notify the EPA.”

31. Section 46 07 01 Water Treatment System (WTS), Part 3 Execution, 5 Operation

Currently reads “2. Operate the WTS and do work necessary to treat collected contact water. Operation shall include treatment of contact water and discharge of treated water for duration of the Works.”

Modification: Modify bullet 2 in **Section 46 07 01 Water Treatment System (WTS), Part 3 Execution, 5 Operation** by adding the following:

“Operating hours of the WTS will be determined as required by the CONTRACTOR in consultation with the ENGINEER. The ENGINEER shall provide notification to the EPA of the intended operations hours prior to start-up of the WTS and at any time that the routine operating hours are expected to change or there is a variance from the routine operating hours.”

32. General Comment for Supporting Deliverables

It is understood by the EPA that the Supporting Deliverables are for reference purposes and that the Remedial Contractor (RC) selected to perform the RA will be responsible for providing fully updated and complete site-specific Supporting Deliverables. The EPA would like to re-iterate that the updated Supporting Deliverables must be provided for EPA’s review and approval before remedial construction starts in accordance with the requested July 19, 2022, Southern Impoundment Remedial Action Work Plan Supporting Deliverable Schedule update.

Attachment 1 – Transportation and Off-Site Disposal Plan

33. Section 1 Introduction

EPA’s current understanding is that the RA is expected to take 2 years to complete based upon the schedule provided in the 100% RD Addendum. During this time TxDOT may begin construction work to update and/or replace the I-10 bridge in the area near the Site.

Modification: In **Section 1. Introduction** add the following sentence to the end of the section:

“This TOPD must be revised and submitted to EPA for review and approval if changes are required during implementation of the RA, as updated truck haul routes, access to and from the site, and any other necessary changes.”

34. Section 4.2 Waste Sampling and Classification

Table 4.1 Analytical Testing Parameters for Impacted Material does not include a similar list of waste characterization analysis to be performed as were tested during earlier in-situ waste characterization sampling.

Modification: Add the following sentence after the second paragraph in **Section 4.2 Waste Sampling and Classification**.

*“Prior to start of remedial construction, **Table 4.1 Analytical Testing Parameters for Impacted Material** will be updated with the waste characterization sample requirements of the selected landfill. EPA may also request additional analytical parameters be analyzed for the samples based on the previous testing results and waste description.”*

35. Section 7.1 Waste Profiles

Modification: The following sentence will be added at the end of the paragraph in this **Section 7.1 Waste Profiles**:

“Copies of all waste profiles prepared and submitted, or updated, will be provided to the EPA at the same time they are submitted to the different Disposal Facilities designated to receive the waste from the site.”

Attachment 2 – Field Sampling Plan

36. Section 3.2 Sample Type, Location, and Frequency of Compliance Sampling

Modification: The last sentence of the first paragraph of **Section 3.2 Sample Type, Location, and Frequency of Compliance Sampling** will be changed to read:

*“Effluent samples will be collected from the compliance sampling point and analyzed prior to discharge in compliance with the **Table 3.1 Sample and Analysis Frequency** and 30 TAC 319.9.”*

37. Section 3.2 Sample Type, Location, and Frequency of Compliance Sampling, Table 2.1 Sample and Analysis Frequency

Modification: The title for the table will be changed to *“Table 3.1 Sample and Analysis Frequency”*.

Modification: Modify **Table 2.1 Sample and Analysis Frequency (Now Table 3.1)** to update the Minimum Frequency of Measurement as approved in the Final 100% Remedial Design (Amended April 2021).

Parameter	<i>Minimum Frequency of Measurement</i>	Standard Analytical TAT (business days)	Sample Type
Flow	<i>Daily</i>		Instantaneous
pH	<i>Once per week</i>		Grab
TSS	<i>Twice per week</i>	3-5 days	Composite
Metals	<i>Once per week</i>	3-5 days	Composite
Dioxins/Furans	<i>Once per week</i>	3-5 days	Composite

38. Section 3.2 Sample Type, Location, and Frequency of Compliance Sampling

Modification: Add the following sentence to the end of the second paragraph of **Section 3.2 Sample Type, Location, and Frequency of Compliance Sampling**:

“The EPA will be notified when an effluent tank batch does not meet discharge requirements and must be circulated back through the WTS. The notification will also include any additional information concerning performance checks or changes that were performed as well as a result of the effluent batch failing the discharge criteria.”

39. Section 3.3.3 Sampling Procedure

The guidance for collection of the composite sample was omitted from the FSP.

Modification: Add the following language between the fourth and fifth bullet in **Section 3.3.3 Sampling Procedure** as approved in the Final 100% Remedial Design (Amended April 2021) Southern Impoundment:

“Collect composite samples for a 24-hour period or over the length of the discharge period to the effluent tank (if the discharge occurs for less than 24 hours). A composite sampler may be used to a collect flow-weighted composite sample. Alternatively, a series of grab samples may be composited in volumes proportional to flow and collected at the intervals required by 30 TAC 319.9.”

40. Section 3.3.3 Sampling Procedure

The sample labeling procedures in this section are not consistent with those presented in **Section 2.4.3 Sampling Labeling**.

Modification: When the plans are updated by the RC prior to construction start, **Section 3.3.3 Sampling Procedure** and **Section 2.4.3 Sampling Labeling** will be updated to be consistent for all samples to be collected.

Attachment 3 – Site Wide Monitoring Plan

41. Section 2.1 Monitoring During Construction

Modification: Modify the 3rd sentence in the 3rd paragraph in **Section 2.1 Monitoring During Construction** to read:

“Also, during large rain events that might overwhelm open excavations, the RC will be required to take steps (which may include pumping, as necessary) to ensure that accumulated stormwater does not overflow from the excavation.”

42. Section 3.2 Dust

This section makes several references to an Air Monitoring Plan that has not been provided to date.

Modification: Add the following sentence to the end of **Section 3.2 Dust**.

“The Air Monitoring Plan will be provided to EPA for review and comment at least 2 weeks prior to construction start.”

43. Section 3.3 Stormwater

This section makes several references to a Stormwater Pollution Prevention Plan that has not been provided to date.

Modification: Add the following sentence to the end of Section 3.3 Stormwater:

“The Stormwater Pollution Prevention Plan will be provided to EPA for review and comment at least 2 weeks prior to construction start.”