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

January 12, 2022

Charles W. Munce, P.E.
GHD Services Inc.
5551 Corporate Boulevard, Suite 200
Baton Rouge, Louisiana 70808

RE: Request for Northern Impoundment Schedule
Extension San Jacinto River Waste Pits Superfund Site
CERCLA Docket No. 06-02-18

Dear Mr. Munce,

The Environmental Protection Agency (EPA) received and has reviewed International Paper Company and McGinnes Industrial Maintenance Corporation (Respondents) written notification, dated October 1, 2021, requesting an extension of the deadline for submittal of the *Pre-Final 90% Remedial Design – Northern Impoundment* (Northern Impoundment 90% RD) for the San Jacinto River Waste Pits Superfund Site (Site).The notification was submitted pursuant to Paragraph 87 of the Administrative Settlement Agreement and Order on Consent for Remedial Design (AOC). EPA has also reviewed the Addendum to the Request for Northern Impoundment Schedule Extension that was received on November 7, 2021, which modified the schedule for staged submittal of some of the supporting deliverables, and added explanation as to why each deliverable could not meet the current deadline.

The Northern Impoundment 90% RD is currently due on January 17, 2022. Respondents requested a schedule extension of 160 days for the submittal of the Northern Impoundment 90% RD, until June 26, 2022, to incorporate recently collected Supplemental Design Investigation (SDI) data into the Northern Impoundment 90% RD. EPA reviewed the design deliverables to be submitted, as well as the data collected, and EPA concurs that the data collected resulted in changes to the RD that still require significant engineering and design work. Therefore, EPA approves a partial extension of the Northern Impoundment 90% RD, limited to those deliverables listed for late submittal in Attachment A. Other deliverables will be required to be submitted according to the original January 17, 2022 deadline. The complete Northern Impoundment 90% RD, with the exception of the supporting deliverables in Attachment A, is due June 26, 2021. Although EPA's partial approval of the extension request will delay the RD process, EPA believes it is critical that the remedy be designed to be implementable in a safe and environmentally protective manner. To prevent additional delays for submitting the Northern Impoundment 90% RD, TWG meetings will continue monthly to address technical issues that are outstanding on the site, unless EPA and Respondents agree otherwise.

The Respondents' request states that the extension is necessary to allow time for:

- Receipt, evaluation, and incorporation of the analytical, geotechnical, and supporting data from the Supplemental Design Investigation (SDI), which was completed on September 16, 2021;
- Updating the design to incorporate changes that are required in fundamental design assumptions (i.e., excavation depths, excavation horizontal limits, and alignment of the best management practice) that were the basis of the remedial design at the time the current deadline was requested and approved; and

- Receipt of and the opportunity to evaluate downstream modeling data from the Coastal Water Authority that is vitally important to checking the assumptions used for the RD.

The basis for the extension request is further outlined in the notification. The changes to the RD that still require significant engineering and design work, are directly attributed by Respondents to the following:

- SDI data indicates that there will be significant changes to this vertical and horizontal delineation from what was assumed prior to the SDI.
- The increase in the horizontal and vertical limits of the excavation increases the volume of material that must be excavated and then managed for disposal, the sequencing of seasonal excavation (potentially adding another excavation season), and the expected volumes of contact water for storage and treatment.
- The BMP alignment will need to be moved east, beyond the extent of the Northern Impoundment boundary, a change that presents new challenges associated with encroachment into the navigational channel and potential impacts on River levels during high-water events that will need to be discussed with various stakeholders.
- As detailed in the February 2021 Extension Request, the CWA is planning a modification to the Lake Houston control structure upstream of the Site, which will allow for a higher volume of water to be released. GHD is still awaiting data to be incorporated into the Drainage Impact Analysis.

EPA concurs that changes to the RD that still require significant engineering and design work constitute justification for a schedule extension as outlined in the AOC. As noted above, the Respondents requested a 160-day extension for the complete RD, with a staged deliverable schedule of supporting documents. The basis for the request is premised on the following:

- Receipt of all preliminary SDI data - October 1, 2021
- Evaluate analytical and geotechnical SDI data and revise the necessary vertical and horizontal excavation limits - 8 weeks
- Design - 30 weeks
    - Civil Design 16 weeks
    - Water Design 18 weeks
    - Structural Design 22 weeks
    - Other Design & Data Collection – 30 weeks
- Prepare RD Package - Basis of Design document, Supplemental Plans, Drawings and Specifications, etc. - 5 weeks
- Reviews, revisions, and finalization - 3 weeks

After the initial extension request, EPA was informed during the October 19, 2021, Technical Workgroup Meeting of a potential risk of hydraulic heave that could occur in the northwest corner of the site if excavation was completed "in the dry." EPA received a formal report describing GHD's analysis of the potential hydraulic heave concern on December 9, 2021. EPA informed GHD on October 20, 2021 that an independent analysis of the potential hydraulic heave issue would need to be completed before considering this extension request. Respondents did not provide the final data needed to complete this analysis until December 17, 2021. EPA also received a letter on December 22, 2021 reiterating the respondents' position on the risks of hydraulic heave and their recommended path forward. USACE supported EPA's review of the presented information associated with the potential hydraulic heave concern in the northwest corner. EPA has previously reviewed and commented on two acceptable methodologies for removal of waste material that were presented in the 30% RD; removal of waste when all water is removed and removal of waste though the water column within a BMP. EPA continues to agree that both approaches meet the objectives of the ROD, as long as all waste material requiring removal is located within the coffer dam wall BMP. After reviewing all the data, EPA believes waste in the northwest corner can be safely removed using one of these previously approved approaches.

As stated above, EPA approves a partial schedule extension of specific design deliverables, limited to those deliverables listed for late submittal in Attachment A, and other deliverables will be required to be submitted according to the original January 17, 2022 deadline. The complete Northern Impoundment 90% RD, with the exception of the supporting deliverables in attachment A, is due June 26, 2021. Respondents shall submit a revised RD Deliverable schedule pursuant to section 6.2 of the SOW by COB January 17, 2022, in accordance with this extension request. EPA will monitor the progression of the northwest corner design. If developments occur that require further extension of this the proposed timeline for the northwest corner, GHD can submit an additional extension request related to the northwest area only for evaluation. However, issues in the northwest area will not justify an extension for the remainder of the site. If an additional request is submitted for the northwest corner, EPA expects that Respondents will provide an implementable design on June 26, 2022, that will allow EPA and Respondents to address the issues in the northwest corner of the site without further affecting the timeline for the remediation of the site.

Please contact me if you have any questions. You may reach me at 214-665-7597.

Sincerely,

Ashley Howard

Ashley Howard
Project Manager

Enclosure: Attachment A - Revised Schedule for 90% Remedial Design Supporting Deliverables

cc: Phil Slowiak, IPC
Brent Sasser, IPC
Judy Armour, IMC

Attachment A

Revised Schedule for 90% Remedial Design Supporting Deliverables

RD Component	Submittal Date	Explanation for Extension Request
Health and Safety Plan (HASP) (Describes all activities to be performed to protect on-Site personnel and area residents from physical, chemical, and all other hazards posed by the Northern Impoundment Remedial Action (RA).	January 17, 2022	
Emergency Response Plan (ERP) (Describes procedures to be used in the event of an accident or emergency at the Northern Impoundment).	January 17, 2022	
Monitored Natural Recovery Plan (Operations & Maintenance [O&M] Plan) (Describes the plan to implement Monitored Natural Recovery in the Sand Separation Area, as specified in the Record of Decision [ROD]).	January17, 2022	
Transportation and Off-Site Disposal Plan (TODP) (Describes the procedures for on-Site management of excavated material to be disposed of off-Site, transportation routes for off-Site shipments, etc.).	January 17, 2022	
Quality Assurance Project Plan (QAPP) (Augments the Field Sampling Plan and addresses sample analysis and data handling during the Northern Impoundment RA).	March 31, 2022	The QAPP is intended to augment the Field Sampling Plan (FSP). Additional time is needed to better understand what will be included in theFSP.
Site-Wide Monitoring Plan (SWMP) (Describes procedures for ongoing monitoring necessary during the Northern Impoundment RA).	May 31, 2022	Additional time is needed to better understand the excavation extent and sequencing and how that will affect stormwater controls, etc.
Field Sampling Plan (FSP) (Describes procedures for sample collection activities during the Northern Impoundment RA).	May 31, 2022	Additional time is needed to better understand the excavation extent and sequencing and how that will inform the post-confirmation sampling procedures.
Construction Quality Assurance/Quality Control Plan (CQAQCP) (Describes the planned and systemic activities that verify the Northern Impoundment RA construction will satisfy all plan, specifications, and related requirements).	June 26, 2022	This plan cannot be finalized until the drawingsand specifications are finalized (also in June 2022).
Operations and Maintenance Plan (O&M Plan) (Describes the requirements for inspecting, operating, andmaintaining the Northern Impoundment RA, following completion of Northern Impoundment RA construction).	June 26, 2022	Further design work, not expected to be completed until second quarter 2022, needs to becompleted to determine if this plan will be necessary.
O&M Manual (Serves as a guide to the purpose and function of the equipment and systems that make up the remedy).	June 26, 2022	Further design work, not expected to be completed until second quarter 2022, is needed to determine if an O&M Manual is necessary.
Institutional Controls Implementation and AssurancePlan (ICIAP) (Describes plans to implement, maintain, and enforce the ICs for the Northern Impoundment).	June 26, 2022	ICs will be dependent upon the final design.
Complete set of Construction Drawings and Specifications (Complete set of drawings and specifications that are certified by a registered engineer and suitable for procurement).	June 26, 2022	Additional time is needed to incorporate data fromthe Supplemental Design Investigation and to develop these drawings and specifications, as detailed in the October 2021 Extension RequestLetter.
Design Criteria Report (As detailed in Sections 3.5 and 3.6 of the SOW).	June 26, 2022	This accompanies the aforementioned construction drawings and specifications and provides details on the basis of the design.