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October 25, 2022

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United States Environmental Protection Agency (EPA), Superfund Division (6SF-RA)
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Southern Impoundment Supporting Deliverables
San Jacinto River Waste Pits Site
Harris County, Texas
EPA Region 6, CERCLA Docket No. 06-05-21 for Remedial Action

Dear Ms. Poulos:

GHD Services Inc. (GHD), on behalf of International Paper Company (Respondent), submits to the United States Environmental Protection Agency (EPA) this Emergency Response Plan (ERP). This ERP is being submitted with the requirement that it be updated and resubmitted, following selection of the Remedial Contractor (RC) for the Southern Impoundment Remedial Action (RA), in order to incorporate the RC's input into the ERP.

Should you have any questions or require additional information regarding this submittal, please contact GHD at (713) 734-3090.

Regards,

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CM/kdn/23

Encl: Attachment 1 - Emergency Response Plan

Copy to: Robert Appelt, EPA
Katie Delbecq, Texas Commission on Environmental Quality (TCEQ)
Brent Sasser, IPC

100028294

Attachments

Attachment 1

Emergency Response Plan

Emergency Response Plan Southern Impoundment

San Jacinto River Waste Pits Superfund Site
Harris County, Texas

International Paper Company

October 25, 2022

→ The Power of Commitment

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1. Introduction

This Emergency Response Plan (ERP) was prepared by GHD Services Inc. (GHD), on behalf of International Paper Company (IPC), for the Southern Impoundment of the San Jacinto River Waste Pits Superfund Site in Harris County, Texas (Work Site). This ERP is an updated version of an ERP included as one of the supporting deliverables with respect to the Final 100% Remedial Design - Southern Impoundment (Amended April 2021) (GHD, 2021a), and revised as one of the supporting deliverables with respect to the Southern Impoundment Remedial Action Work Plan (RAWP), submitted to the United States Environmental Protection Agency (EPA) on November 26, 2021 (GHD, 2021b) to meet requirements contained in the August 5, 2021, Unilateral Administrative Order (UAO; EPA, 2021). The purpose of this ERP is to plan for potential emergencies prior to the commencement of operations associated with the Southern Impoundment Remedial Action (RA) and was prepared in accordance with the EPA Emergency Responder Health and Safety and Occupational Safety and Health Administration (OSHA) requirements under 29 Code of Federal Regulations (CFR) 1910 and 1926.

This ERP is being submitted with the requirement that it be updated and resubmitted, following selection of the Remedial Contractor (RC) for the Southern Impoundment RA, in order to incorporate the RC's input into the ERP.

The Work Site is located in Harris County, Texas, east of the City of Houston, between two unincorporated areas known as Channelview and Highlands. The Southern Impoundment is approximately 20 acres in size and is located on a small peninsula that extends south of Interstate Highway 10. References in this ERP to the "Work Site" are to the Southern Impoundment.

Major incidents that may require emergency response during the RA could include severe weather, fire, explosion, chemical reaction, truck rollovers, off-site accidents involving transport vehicles, spills or other incidents that may pose a hazard to on-site personnel and nearby residents and/or the environment.

2. Pre-Emergency Planning

2.1 Coordination with Outside Parties

During any emergency events on-site, personnel will coordinate and communicate with the following authorities (as necessary):

- USEPA Region 6.
- Harris County Sheriff.
- Channelview Fire Department.
- National Response Center.
- Harris County Hazardous Materials Response Team (HCHMRT).
- Texas Commission on Environmental Quality (TCEQ).
- Texas Department of Transportation (TxDOT).
- United States Coast Guard (USCG).
- Port of Houston Authority (POHA).

Prior to shipping impacted material off-site, the RC will contact Harris County Pollution Control Services (PCS) to ensure that while a permit is not required, the substantive requirements of the PCS Permit Services Section (PSS) are met.

A meeting with these authorities may be conducted prior to the commencement of each phase of Southern Impoundment RA activities at the Work Site, in order to facilitate a coordinated, integrated, and timely response for any emergencies that may occur during intrusive field activities which represent a potential for release of hazardous substances. Topics to be discussed/reviewed at the meeting may include the following:

– Site history/historical response actions.
– Nature and extent of contamination.
– Nature and duration of anticipated field activities.
– Health and Safety Plan (HASP) contents.
– ERP contents.
– Transportation routes.
– Emergency response support that can be provided by local emergency response authorities.

2.2 Initial Notification Procedures

To minimize hazards to human health and safety and/or the environment, in the event of a fire, explosion, spill, or release involving a hazardous substance including oil, raw materials and by products, or hazardous waste, it is the responsibility of on-site personnel to immediately report any such releases to the Site Supervisor (SS). The SS will be responsible for implementing emergency procedures, if necessary, and for notification of appropriate project specific contacts and local emergency response authorities listed in Table 1.

2.3 Emergency Contacts

The emergency telephone numbers for the local emergency response authorities and other local, state, and federal authorities are presented in Table 1. The closest hospital to the Work Site is located approximately 9 miles east of the Work Site, in Baytown, Texas. The emergency telephone numbers and the emergency route to the hospital will be posted at the Work Site prior to commencement of the RA activities at the Work Site and will be included in the Southern Impoundment Health and Safety Plan.

Signage with the emergency contact information in Table 1 will be posted at the main Work Site entrance.

Table 1 Emergency Contact Information

Emergency Information		
Contact	**Phone Number**	**Site Location**
Local Police: Harris County Constable Precinct 3 Baytown Police Department	911 (281) 427-4792 (281) 422-8371	Southern Impoundment: Adjacent to 18003 Market Street Channelview, Texas 77530 (29.791692, -95.066069)
Local Fire Department: Channelview Fire Department	911 (281) 452-5782	
Ambulance	911	
Stakeholders		
EPA Region 6	(800) 887-6063 or (214) 665-2760	
National Response Center	(800) 424-8802	
Harris County Hazardous Materials Response Team 24-Hour Emergency Line	(800) 590-0005	
Texas Commission on Environmental Quality (TCEQ)	(713) 767-3500	

Emergency Information		
Contact	**Phone Number**	**Site Location**
Texas State Emergency Response Commission	(800) 832-8224	
Texas Department of Transportation (TxDOT)	(800) 558-9368	
United States Coast Guard (USCG)	(504) 589-6225	
Port of Houston Emergency Dispatch Non-Emergency Dispatch	 (713) 670-3611 (713) 670-3620	
Harris County Pollution Control Services (PCS)	(713) 920-2831	

3. Emergency Recognition and Prevention

This section describes the methods and procedures that will be used to recognize and prevent or minimize the adverse effects of any releases of hazardous substances that may occur at the Work Site during implementation of the Southern Impoundment RA.

3.1 Emergency Recognition

Procedures will be put in place so that on-site personnel will be prepared to recognize and report to the SS any incident (e.g., fire, explosion) or releases of hazardous substances which may endanger human health and safety or the environment. Specifically, when personnel discover such an incident or release of a hazardous substance, the procedures that on-site personnel would be instructed to follow would include the following:

– Report the incident/release to the SS.
– The SS will determine if the incident/release represents an emergency and, if so, will immediately notify IPC's Remedial Project Manager.

The procedures would also address plans so that personnel in the affected area(s) will immediately evacuate the area of release or the Work Site in accordance with the "Evacuation Procedures," presented in Section 6.

3.2 Release Prevention Measures

The following procedures/measures will be implemented, as applicable, at the Work Site to prevent potential releases of or minimize the impact of releases of hazardous substances during the RA:

– All potential hazardous substances (i.e., diesel fuel, etc.) will be stored in vessels with adequate secondary containment should a spill occur. Fuel services will also be provided by a daily fuel truck. The fuel vendor will have spill kits available on the truck.
– All potential contaminated substances generated during activities (i.e., impacted soils, dewatering fluids, decontamination fluid, used Personal Protective Equipment [PPE], etc.) will be placed onto the appropriate staging pads or placed in compatible containers.
– The SS will be accountable for hazardous substances spill/release prevention and is responsible for properly instructing on-site personnel in the operation and maintenance of equipment to prevent the discharges of hazardous substances.
– A supply of spill/release response materials and emergency safety equipment should be stored at the Work Site during activities to immediately respond to releases/emergencies. Equipment and materials may include, but are

not limited to, spill kits, shovels, wheelbarrows, dirt, sand, and visqueen that may be used to dike, contain, or remove minor to moderate spills or releases.

– On-site personnel will be trained, consistent with the level of their responsibilities and in accordance with 29 CFR 1910.120(q)(6), so that they are capable of providing immediate response in order to contain and/or mitigate spills and releases. If necessary, a spill response contractor will be contracted to clean up larger spills or releases.
– A meeting may be conducted with local emergency response authorities in order to facilitate a coordinated, integrated, and timely response for any emergencies that on-site personnel are unable to contain and/or control.

3.2.1 Emergency Conditions

An emergency condition is any condition that could reasonably be expected to endanger the health or safety of the public, cause significant adverse impact to the land, water, or air environment, or cause severe damage to property. In the event of an unauthorized discharge that causes an emergency condition, the TCEQ 24-hour State of Texas Spill Reporting Hotline (800-832-8224) or State Emergency Response Commission (SERC) (800-832-8224) and the Federal National Response Center (NRC) (800-424-8802) must be notified immediately after ascertaining the situation. Notification required by this section must be made regardless of the volume of discharge. A written report must be provided within seven days of becoming aware of the circumstances. The written report should contain the following information:

– A description of the noncompliance and its cause
– The period of noncompliance including exact dates and times, and, if the noncompliance has not been corrected, the anticipated time it is expected to continue
– Steps being taken to reduce, eliminate, and prevent recurrence of the noncompliant discharge

An example spill report form is available in Appendix A.

3.2.2 Non-Emergency Conditions (Exceedance of a Reportable Quantity)

In the event of an unauthorized discharge that exceeds a reportable quantity, but does not cause an emergency condition, SERC or NRC must be notified by telephone within 24 hours. A written follow up report is also required and must be submitted within seven (7) calendar days of the event. Notifications shall also be provided as set forth in Section 3.3 of the SOW (also discussed below in Section 9).

A reportable quantity spill is a discharge or spill of oil, petroleum product, used oil, industrial solid waste, hazardous substances including mixtures, streams or solutions, or other substances into the environment in a quantity equal to or greater than the reportable quantity list in 30 Texas Administrative Code (TAC) Chapter 327.4 (relating to Reportable Quantities) in a 24-hour period and subject to 30 TAC Chapter 327.3 (relating to Notification Requirements).

The written report should contain the same information required for emergency conditions, as discussed in Section 3.3.1 above. The spill reports will be kept on file at the Work Site. In lieu of hardcopy spill report forms, copies of incident reports may also be maintained electronically and will be available upon request.

4. Personnel Roles

This section of the ERP describes, for purposes of the RA, the various personnel roles, responsibilities, and the lines of authority that individuals may be assigned and communication procedures that may be followed by on-site personnel involved in responses to incidents or emergencies.

4.1 Site Supervisor

The SS (or equivalent) will be assigned responsibility for implementing on-site emergency response procedures and directing the on-site and emergency personnel. All on-site personnel and their communications would be coordinated through the SS. Specific duties of the SS in the case of an incident will include the following, as applicable:

– Initially identify the source and character of the incident and the type and quantity of any release (if applicable). Assess possible hazards to human health or the environment in consultation with the Health and Safety Officer (as defined in Section 4.2) that may result directly from the incident.
– If the incident may threaten human health or safety of on-site personnel, immediately determine whether evacuation of the Work Site is necessary in consultation with the Project Coordinator and EPA Remedial Project Manager (RPM).
– If the incident does not threaten human health or safety of on-site personnel or nearby residents or the environment, determine if on-site personnel can contain or control the incident or release. If not, notify local emergency response authorities identified above in Table 1.
– Direct on-site personnel to control the incident or release until, if necessary, outside emergency response help arrives. Specifically ensure that the location where the incident/release occurred and the surrounding area are evacuated and all operations in the vicinity of the incident are discontinued to ensure that fire, explosions, or spills do not spread. Direct Work Site personnel not involved in emergency response actions to avoid the area of the incident and leave emergency control procedures unobstructed and ensure protected personnel are on standby for emergency rescue, if necessary.
– Determine, in consultation with the Health and Safety Officer, when the emergency has passed and initiate an "all clear" signal to notify on-site personnel of such.
– Ensure that all emergency equipment used is decontaminated, recharged, and/or fit for its intended use before Work Site operations are resumed.
– Record time, date, and details of the incident, and submit a written report to the EPA within 20 days of the release that is at or above reportable quantities, and determine what additional reporting is required.
    - Per regulations developed under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (Superfund), a spill/release of one pound or more of any hazardous substance for which a reportable quantity has not been established or which is listed under the Solid Waste Disposal Act, Clean Air Act, Clean Water Act, or Toxic Substances Control Act (TSCA), may require reporting.

4.2 Health and Safety Officer

This individual will be responsible for identifying and evaluating actual and potential hazards and provide oversight of emergency response actions with respect to the safety of operations being conducted. The Health and Safety Officer will report directly to the SS. Specific duties of the Health and Safety Officer are as follows:

– Conduct an initial assessment of the emergency situation to identify chemical(s) and potential physical hazard(s) of the emergency response actions.
– Perform necessary air monitoring to determine levels of exposure and necessary protective equipment for emergency personnel and evaluate the potential for off-site migration of airborne contaminants.
– Present a safety briefing to on-site personnel to inform them of the actual and potential hazards of the emergency response and required levels of personnel protective equipment.
– Identify use of any engineering controls, (e.g., ventilation, remote handling devices, etc.), to control overexposure of personnel to hazardous substances.
– Identify work zones to be established by on-site personnel.
– Investigate any injuries or illnesses as a result of accidents occurring during the emergency response.
– Observe the safety of clean-up activities and ensure appropriate PPE requirements are being adhered to.

– Determine when it is safe for personnel to return to the affected area after emergency response actions are completed.
– Maintain a log of safety briefings, air monitoring, safety observations, and other important issues relevant to safety.

4.3 On-Site Personnel

The SS will be responsible for directing the on-site personnel in emergency response operations. Specific steps that the SS may take in directing on-site personnel are described below.

The on-site personnel will be instructed to respond initially to all emergency incidents. Priorities of on-site personnel will be to protect human health and safety of on-site personnel and nearby residents, and then the environment. Concentration will be placed on preventing the spill/release from spreading to nearby areas. Specific duties of the on-site personnel will be as follows:

– Clear the area of all personnel not actually involved in responding to the emergency and remove any injured persons from the area such that medical treatment can be administered by qualified first aid trained personnel.
    - Prior to allowing treatment of injured persons by first aid trained personnel, decontamination of the injured persons will be performed. On-site personnel will be responsible for ensuring that the level of decontamination reflects the extent of injury and level of contamination.
– Establish appropriate work zones for emergency response as directed by the Health and Safety Officer.
– Control the incident or release at the direction of the SS, until, if necessary, outside emergency response help arrives.

The SS will appoint or designate, as necessary, on-site personnel to assist in the following efforts:

– Notification of local emergency response authorities.
– Work Site evacuation and accounting of personnel and visitors.
– Assuring that personnel not involved in the emergency response and/or clean-up activities are kept a safe distance from the area and do not interfere with operations.
– Maintaining on-site traffic lanes for emergency response vehicles.
– Sampling efforts to determine the extent of contamination and clean-up efforts, if appropriate.
– Proper containerization, labeling and staging of any recovered hazardous substances, if appropriate.
– Assisting in decontaminating, recharging, or replacing all emergency equipment used during the emergency response.
– Assisting in returning personnel to their work areas after the "all clear" signal is given.

5. Severe Weather

5.1 Preparation

The SS will adopt procedures to monitor weather and river levels, along with any Hazardous Weather Outlooks for the surrounding areas. The SS will also adopt procedures to be followed in the event that a severe weather or tornado watch or warning is issued by the National Weather Service, which may include directing on-site personnel to shelter areas, which will be determined prior to the RA. Routes to shelters will be included in the Southern Impoundment HASP.

It is anticipated that the RA activities will be conducted in the months of the year with a lower likelihood for hurricanes and tropical storms, but there could be exceptions in which activities take place during the remaining months of the

year. There would be defined preparation phases to address situations involving severe weather, a tropical depression, tropical storm, or a hurricane that is anticipated to make landfall in the general vicinity of the Work Site based on the National Hurricane Center advisories. Four phases and associated procedures that will be adopted to protect the Work Site and personnel in the event of severe weather are described below.

To verify preparedness in the event of inclement weather, the SS will conduct routine drills and review the respective phases with the project team members. During the preparedness drills, the project team will discuss the equipment and materials presently on-site and how they would handle securing the Work Site and personnel in the event of severe weather. If opportunities for improvement are identified during the drills, the findings will be incorporated into the ERP.

Level I Preparation

Level I preparations would be for expected severe weather events, including heavy rains with potential localized flooding, in the southeast Texas vicinity and will affect the Channelview Area within 48 hours. In the event of a Level I scenario, the SS would execute the following steps:

– Monitor the weather forecast for updated hurricane predictions.
– Consider suspending all non-essential Work Site activities and deliveries and covering any open excavations.
– Evaluate the work necessary to control loose materials/equipment from potential damage (water or wind).
– Verify that all supplies needed to secure the Work Site are available.

Level II Preparation

Level II preparations would be for an expected tropical depression, tropical storm, or hurricane landfall in the southeast Texas vicinity which is predicted to have 50+ miles per hour (mph) winds and will affect the Channelview Area within 72 hours. In the event of a Level II scenario, the SS would execute the procedures outlined in Level I and, in addition, execute the following:

– Suspend all non-essential work.
– Consider timing of a complete suspension of work and for covering of any open excavations.
– Secure or remove equipment that could be damaged by the storm (i.e., small totes, drums, vehicles, monitoring instruments, etc.).
– Suspend all work and shutdown and move equipment off-site, as necessary.
– Backfill any open excavations using available on-site material or clean backfill.

In the event that the tropical depression, tropical storm, or hurricane is predicted to make landfall in the southeast Texas vicinity within 48 hours the SS would follow these additional procedures:

– Evacuate all personnel from the Work Site.
– Suspend all work activities and move equipment off-site until the SS, in coordination with the Project Coordinator and EPA RPM, determines the Work Site is safe for re-entry.

5.2 Re-Entry Procedure

The Health and Safety Officer, in coordination with the Project Coordinator and IPC's Remedial Project Manager, will be responsible for determining the appropriate time for personnel to return to the Work Site. Work Site personnel will not be permitted to access the Work Site until the SS approves entry.

Federal, state, and local government agencies and law enforcement officials have agreed to recognize specific identification from critical infrastructure owners and operators, and their contractors, subcontractors, and assignees that seek access into a closed emergency area. Once identity has been verified, access is granted at the discretion of agency or official representatives (e.g., law enforcement, National Guard). A valid State Driver's License and/or

employer issued photo ID and/or Transportation Worker Identification Credential (TWIC) Card may be required to gain access at checkpoints.

Once the local authorities have granted access, the SS, in coordination with ’IPC's Remedial Project Manager, can then determine the appropriate time for personnel to return to the Work Site.

5.3 Site Inspection

Once it is determined that the Work Site is safe to access, it is anticipated that specific personnel selected by the SS will mobilize to the Work Site to complete a post severe weather site inspection. The SS will be responsible for determining how such personnel should document Work Site conditions, including with photographs and field notes. In addition, the SS may have such personnel note any damage or impact to materials or equipment, determine approximate high-water levels, and/or obtain relevant information from any local residents that may have stayed in the area during the storm. The SS will also be responsible to, if necessary, direct personnel to prepare a site inspection report for submittal to the EPA.

6. Evacuation Route and Procedures

Emergencies require prompt and deliberate action. In the event of a hazardous substance spill/release, it will be necessary for personnel and other persons present at the Work Site to follow an established set of procedures consistent with OSHA requirements in 29 CFR 1910.120(b)(4)(ii)(J) and (j)(1)(viii). The procedures that are established should be followed, as closely as possible, with the understanding that, in specific emergency situations, the SS may deviate from the procedures to provide a more effective plan for bringing the situation under control. The SS will be responsible for determining which situations require evacuation of the Work Site.

This section describes procedures which may be employed to address potential exposures of on-site personnel and persons in the vicinity of the Work Site to hazardous conditions arising out of spills/releases of hazardous substances at the Work Site. It is anticipated that no single defined route can be identified for evacuation or safe distances due to the nature of the work, and that safe distances will only be determined at the time of an emergency, based on a combination of Work Site and incident conditions. However, the following measures are provided to serve as general guidelines. Table 2, below, addresses the criteria for releases.

Table 2 Criteria for Hazardous Material Spill/Release Incidents

Release Classification	Criteria
Minor Release	Low toxicity compound spill > 1 barrels (bbl) outside secondary containment, or ≥ 5 bbl inside secondary containment, unless it impacts or potentially impacts state or marine waters. Single handheld detector with a Lower Explosive Limit (LEL) reading ≥ 50 percent. Smoke Investigation.
Major Release	High toxicity compound spill impacting or potentially impacting state or marine waters. Fire or Explosion. Hazardous materials release with off-site potential.

6.1 Minor Releases Requiring Limited Evacuation

As part of the procedures applicable in the event of minor releases (small spills of low toxicity) of hazardous substances, personnel may be directed to evacuate the immediate area and report to the Contaminant Reduction Zone (CRZ). The CRZ will be determined by the SS prior to the RA. Low toxicity may be defined for this purpose as a compound having an Animal LD50 greater than 50 milligrams/ kilograms (mg/kg). A signal to evacuate a limited area in the case of a minor release will be established, such as one short blast using an air horn or verbal communication. Small spills or leaks from a container will require initial evacuation of an area, potentially at least 35 feet in all directions, to allow for clean-up and to prevent exposure.

After initial assessment of the extent of the release and potential hazards, the SS, in consultation with the Health and Safety Officer, will determine the specific boundaries for evacuation. Appropriate steps, such as caution tape, rope, traffic cones, or barricades would be used to secure the boundaries.

6.2 Major Release Requiring Evacuation of the Work Site

As part of the procedures applicable in the event of a major hazardous substance release (large spills of high toxicity), personnel may be directed to evacuate the Work Site. High toxicity may be defined for this purpose as a compound having an Animal LD50 less than 50 mg/kg. A signal to notify on-site personnel to evacuate the Work Site in case of major releases requiring evacuation of the Work Site will be established prior to the RA. Work Site evacuation would be initiated by the SS, in consultation to the extent practical, with the Project Coordinator, IPC's Remedial Project Manager, and the EPA RPM. However, if necessary, the SS would initiate Work Site evacuation, as necessary, to protect the health and safety of on-site personnel.

6.3 Site Evacuation Route

As part of the procedures governing evacuation of the Work Site, muster points and evacuation routes for the Work Site will be identified. The routes should be addressed during safety meetings, including any changes to such routes due to changing Work Site conditions, work activities, and weather factors. A secondary evacuation route would also be identified during the safety meeting.

6.4 Evacuation Route

As part of the procedures to be followed in the event Work Site evacuation is necessary, it is recommended that the following actions (or similar) be undertaken:

- The signal for Work Site evacuation should be activated.
- No further entry of visitors, contractors, or trucks will be permitted. Vehicle traffic within the Work Site should cease to allow safe exit of personnel and movement of emergency equipment.
- ALL personnel, visitors, and contractors should immediately leave through the identified primary or secondary evacuation route.
- No persons will remain or re-enter the Work Site unless to carry out their emergency duty procedures. Those within the Work Site area will normally only include emergency response personnel or other emergency teams (e.g., fire department).
- Immediately upon exit, ALL personnel, visitors, and contractors should be accounted for by the SS or designee.
- The names of emergency response team members and/or other emergency team members involved in emergency response should be reported to the SS.
- Re-entry into emergency areas, to find persons not accounted for should not be attempted.
- Re-entry into the Work Site will be made only after an "all clear" signal is given by the SS. At his/her direction, a signal or other notification will be given for re-entry into the Work Site.

7. Emergency Site Security and Control

The SS will put in place security measures to be followed in the event of an emergency. Implementation of security procedures should begin with the notification that an emergency has occurred. If it is necessary to evacuate personnel from the Work Site or an area within the Work Site, security measures would be implemented to safely remove personnel and to secure the area from re-entry, to prevent or minimize the exposure of unprotected personnel to Work Site hazards and avoiding interference with emergency response actions. As part of those measures, on-site

personnel should be instructed to immediately take steps to secure the spill/release area and establish safe boundaries (i.e., work zones). This may include, if necessary, establishing the following three work zones at the direction of the Health and Safety Officer:

– ***Support Zone (SZ)*** - The uncontaminated area where emergency response personnel should not be exposed to hazardous conditions.
– ***Contaminant-Reduction Zone (CRZ)*** - The area where decontamination takes place.
– ***Exclusion Zone (EZ)*** - The contaminated area/emergency response area.

Contaminated equipment, containers, vehicles, or other items used by emergency responders will be decontaminated in the CRZ.

7.1 Delineation of Work Zones

The location of these three zones would be pre-determined, based on, to the extent applicable, sampling and monitoring results, expected work activities, and potential routes and extent of contamination dispersion in the event of a release. Procedures should be adopted to minimize movement of personnel and equipment among these zones, to restrict to access control points to prevent cross contamination from contaminated areas to clean areas, and to clearly mark work zones, including by lines, placards, hazard tape, construction cones and/or signs, or enclosed by physical barriers such as fences or ropes.

7.2 Communication Systems

A system of communication will be established at the hazardous substance spill/release scene. The communication system will address both internal communication among on-site personnel and external communication between on-site and off-site personnel.

The SS will be responsible for determining the proper methods of communication at the Work Site. The SS will also be responsible for instructing all on-site personnel on the use of the selected communication methods.

7.2.1 Internal Communication

Internal communication will be used to:

– Alert emergency response personnel members to emergencies.
– Pass along safety information, such as the next rest period, air change, heat-stress check, etc.
– Communicate changes in the work to be accomplished.
– Maintain site control.

The SS will be responsible for determining the proper methods of communication at the Work Site. The SS will also be responsible for instructing all on-site personnel on the use of the selected communication methods.

7.2.2 External Communication

An external communication system between on-site and off-site personnel will be implemented to:

– Coordinate emergency response.
– Report to management.
– Maintain contact with essential off-site personnel.
– The primary means of external communication will be by telephone.

8. Emergency First Aid and Medical Treatment

During the RA, it is anticipated that any personnel requiring emergency medical attention would be evacuated immediately from EZs and CRZs and that personnel will be instructed to not enter such areas to attempt a rescue if their own lives would be threatened. The decision whether or not to decontaminate a victim prior to evacuation in such a situation will be based on the type and severity of the illness or injury and the nature of the contaminant. Personnel would be instructed that if decontamination does not interfere with essential treatment, it should be performed.

8.1 Emergency Medical Actions

If actual or suspected serious injury occurs, it is recommended that these steps be followed:

– Remove the exposed or injured person(s) from immediate danger.
– First aid to be rendered at on-site personnel discretion. Decontaminate affected personnel after critical first aid is given.
– Notify SS and Health and Safety Officer of the incident.
– Obtain emergency medical services or ambulance transport to the hospital. Routes to the nearest hospital and urgent care facility will be included in the HASP and posted at the Work Site.
– Other personnel in the work area will be evacuated to a safe distance until the Health and Safety Officer determines that it is safe for work to resume. If there is any doubt regarding the condition of the area, work shall not commence until all hazard control issues are resolved.

8.2 First Aid

Qualified personnel may give first aid at their discretion and stabilize an individual needing assistance. Professional medical assistance will be obtained at the earliest possible opportunity.

8.3 Emergency Numbers

In the event of an emergency medical incident the telephone numbers provided in the above Table 1 shall be available to summon for assistance.

9. Emergency Alerting and Response Procedures for On-Site Incidents

In the event of an emergency involving an on-site hazardous substance spill or release, the general procedures that may be used for rapid and safe response and control of the situation may include those identified below.

9.1 Emergency Alerting Procedures

If on-site personnel discover a chemical spill or a vapor or substance release, they should immediately notify the SS. When contacted, the SS should obtain information pertaining to the following, to the extent applicable:

– The substance spilled or released.
– Location of the release or spillage of hazardous substance.
– An estimate of quantity released and the rate at which it is being released.

– The direction in which the spill/release or vapor or smoke release is heading.
– Any injuries involved.
– Fire explosion or chemical reaction or possibility of these events.
– The area and substances involved and the intensity of the fire or explosion.

This information will then be used by the SS to assess the magnitude and potential severity of the spill or release.

In accordance with Section 3.3 of the Remedial Action Statement of Work (SOW), if any event occurs during performance of the Work that causes or threatens to cause a release of Waste Material on, at, or from the Southern Impoundment and that either constitutes an emergency situation or that may present an immediate threat to public health or welfare or the environment, IPC shall: (1) immediately take all appropriate action to prevent, abate, or minimize such release or threat of release; (2) immediately notify the authorized EPA officer orally; and (3) take such actions in consultation with the authorized EPA officer and in accordance with all applicable provisions of the Health and Safety Plan, and any other deliverable approved by EPA under the SOW.

"Waste Material" shall mean: (a) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (b) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (c) any "solid waste" under Section 1004(27) of the Resource Conservation and Recovery Act of 1976 (RCRA), 42 U.S.C. § 6903(27); and (d) any "hazardous substance" or "solid waste" under Sections 361.003(11) and (35) of the Texas Solid Waste Disposal Act.

The "authorized EPA officer" for purposes of immediate oral notifications and consultations is the EPA Project Coordinator, the EPA Alternate Project Coordinator, or, if the EPA Project Coordinators are not available, the authorized EPA officer is the EPA Emergency Response Branch (800-887-6063), Region 6.

Upon the occurrence of any event during performance of the Work that IPC is required to report pursuant to Section 103 of CERCLA, 42 U.S.C. § 9603, or Section 304 of the Emergency Planning and Community Right-to-know Act (EPCRA), 42 U.S.C. § 11004, IPC shall immediately notify the authorized EPA officer orally.

For any event covered by the above paragraphs in Section 9.2, IPC shall: (1) within 5 days after the onset of such event, submit a report to EPA describing the actions or events that occurred and the measures taken, and to be taken, in response thereto; and (2) within 30 days after the conclusion of such event, submit a report to EPA describing all actions taken in response to such event.

9.2 Emergency Response Procedures

The initial response to any emergency should be to protect human health and safety, and then the environment. Other steps, such as identification, containment, treatment, and disposal assessment, should be considered as part of the secondary response.

Emergency response procedures may include the measures described below:

– If a spill/release occurred that was not contained within a dike or sump area, an area of isolation should be established around the spill/release. The size of the area should be established depending on the size of the spill/release and the substances involved.
– If the spill/release results in the formation of a toxic vapor cloud (such as due to the outbreak of fire), further evacuation may be required, based on isolation directions that have been established prior to the initiation of work activities for Southern Impoundment RA. A decision may be made to modify the scope of the evacuation based on air monitoring performed by the Health and Safety Officer.
– If the control and clean-up of a spill or release is determined to be within the capabilities of the on-site personnel and to not threaten human health or safety of on-site personnel or nearby residents, local emergency response authorities may not be notified. A decision on notifications to local emergency authorities would be made by the SS, and in consultation with the IPC's Remedial Project Manager and EPA RPM, if practicable.

– Any release occurring from drums or other containers containing solid wastes should be placed into approved containers and should be labeled as to its contents and transferred to the on-site staging area pending treatment and/or off-site disposal.
– In the event of spilled liquid, the spilled liquids should be confined to the immediate area of the spill and the liquids may be pumped, with the use of a portable hand pump, into an overpack drum or tank (or similar container) or absorbed with an inert absorbent. The spilled liquids should be confined by implementing steps such as diking around the spill with native material or with an inert absorbent. Containers containing such materials should be appropriately labeled as to contents and transferred to an on-site drum staging area pending treatment and/or off-site disposal. In some situations, such as if the spilled liquid consisted of non-aqueous phase liquids (NAPL) or decontamination water, additional steps may be required to address the spilled substance and visibly affected soils.

The SS is designated responsibility for determining whether spill or release is not within the capabilities of the on-site personnel or for other reasons should be immediately reported to the 911 dispatcher. In that situation, the SS will have responsibility for initiating evacuation of potentially affected Work Site areas.

10. Personal Protection and Emergency Equipment

10.1 Personal Protective Equipment

Emergency response personnel entering an EZ for emergency spill/release response should, depending on the task and exposure potential, be required to wear an appropriate protection level as determined by the SS and as directed by the Health and Safety Officer.

10.2 Emergency Equipment

Emergency equipment will need to be available for deployment during emergencies/releases of hazardous substances if needed. That emergency equipment may include the equipment discussed below.

10.2.1 Air Monitoring Equipment

The SS will determine which direct reading instrumentation will be used in emergency situations to assess the degree of environmental hazard prior to the RA.

The following equipment list includes direct reading instrumentation that could be used in emergency situations to assess the degree of environmental hazard. This equipment will only be used by the Safety and Health Office, SS, or other specially trained designees. This equipment will be stored, charged and ready, for immediate use in evaluating hazardous chemical concentrations.

Equipment Name	Application
Photoionization detector (PID) with an 11.7 eV lamp.	Measures total undifferentiated organic chemical concentrations.
MiniRae capable of monitoring oxygen, combustible gas, carbon monoxide, and hydrogen sulfide.	Measures oxygen, combustible gas, carbon monoxide, and hydrogen sulfide
Real-Time Digital Particulate Monitor, such as a MIE DataRAM.	Measures particulate levels.

10.2.2 Emergency Response Clean-Up Equipment

A sufficient supply of emergency response clean-up equipment should be maintained at the Work Site to be used for spill/release control. The SS will determine which emergency response clean-up equipment should be used for spill/release control prior to the commencement of activities at the Work Site as part of the RA.

10.2.3 Emergency Safety Equipment

It is recommended that the following equipment, at a minimum, be staged at the Work Site, during active Southern Impoundment activities, to provide for safety and first aid:

- Additional PPE equipment.
- Potable water.
- OSHA approved first aid kit sized for a minimum of ten people.
- Portable emergency eyewash.
- 20-pound ABC type dry chemical fire extinguishers (one per each piece of heavy equipment).

11. Response Follow-Up

Following all emergency response actions and activation of this ERP, it is recommended that the SS adopt response follow-up procedures that include conducting a debriefing session for all key individuals involved to evaluate the response and revisions to ERP, if necessary. The follow-up procedures may address the need for and responsibility for preparation of an incident report.

12. References

- GHD, 2021a. *Final 100% Remedial Design-Southern Impoundment (Amended April 2021)*, San Jacinto River Waste Pits Superfund Site. Prepared for International Paper Company and U.S. Environmental Protection Agency, Region 6. June 2, 2022.
- GHD, 2021b. *Remedial Action Work Plan - Southern Impoundment Revision 2*, San Jacinto River Waste Pits Superfund Site. Prepared for International Paper Company and U.S. Environmental Protection Agency, Region 6. November 26, 2021.
- EPA, 2021. Unilateral Administrative Order for the Remedial Action of the Southern Impoundment. U.S. EPA Region 6, CERCLA Docket No. 06-05-21. In the matter of: San Jacinto River Waste Pits Superfund Site, Harris County, Texas, Respondent. August 2021.

Appendices

Appendix A

Spill Report Form

Spill Report Form
San Jacinto Waste Pits Superfund Site - Southern impoundment
Channelview, Texas

Date of Spill:_____ Date of Spill Discovery:_____
Time of Spill:_____ Time of Spill Discovery:_____

Name and Title of Discoverer:_____

Type of material spilled and manufacturer's name:_____

Description of spill location:_____

Directions from nearest community:_____

Estimated volume of spill:_____

Weather conditions:_____

Topography and surface conditions of spill site:_____

Impacted medium (pavement, sandy soil, water, etc.):_____

Proximity of spill to surface waters: _____

Did the spill reach a waterbody? _____Yes _____No

If so, was a sheen present? _____Yes _____No

Describe the causes and circumstances resulting in the spill:_____

_____

_____

Describe the extent of observed contamination, both horizontal and vertical (*i.e.*, spill-stained soil in a 5-foot radius to a depth of 1 inch): _____

_____

_____

Describe immediate spill control and/or cleanup methods used and implementation schedule: _____

_____

Current status of cleanup actions:_____

Name/Company/Address/Phone Number for the following:

Spill Coordinator:_____

Person Who Reported the Spill:_____

Form completed by:_____Date:_____

Spill Report Form
San Jacinto Waste Pits Superfund Site - Southern impoundment
Channelview, Texas

Date of Spill:_____ Date of Spill Discovery:_____
Time of Spill:_____ Time of Spill Discovery:_____

Name and Title of Discoverer:_____

Type of material spilled and manufacturer's name:_____

Description of spill location:_____

Directions from nearest community:_____

Estimated volume of spill:_____

Weather conditions:_____

Topography and surface conditions of spill site:_____

Impacted medium (pavement, sandy soil, water, etc.):_____

Proximity of spill to surface waters: _____

Did the spill reach a waterbody? _____Yes _____No

If so, was a sheen present? _____Yes _____No

Describe the causes and circumstances resulting in the spill:_____

_____

_____

Describe the extent of observed contamination, both horizontal and vertical (*i.e.*, spill-stained soil in a 5-foot radius to a depth of 1 inch): _____

_____

_____

Describe immediate spill control and/or cleanup methods used and implementation schedule: _____

_____

Current status of cleanup actions:_____

Name/Company/Address/Phone Number for the following:

Spill Coordinator:_____

Person Who Reported the Spill:_____

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Spill Report Form
San Jacinto Waste Pits Superfund Site - Southern impoundment
Channelview, Texas

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Time of Spill:_____ Time of Spill Discovery:_____

Name and Title of Discoverer:_____

Type of material spilled and manufacturer's name:_____

Description of spill location:_____

Directions from nearest community:_____

Estimated volume of spill:_____

Weather conditions:_____

Topography and surface conditions of spill site:_____

Impacted medium (pavement, sandy soil, water, etc.):_____

Proximity of spill to surface waters: _____

Did the spill reach a waterbody? _____Yes _____No

If so, was a sheen present? _____Yes _____No

Describe the causes and circumstances resulting in the spill:_____

_____

_____

Describe the extent of observed contamination, both horizontal and vertical (*i.e.*, spill-stained soil in a 5-foot radius to a depth of 1 inch): _____

_____

_____

Describe immediate spill control and/or cleanup methods used and implementation schedule: _____

_____

Current status of cleanup actions:_____

Name/Company/Address/Phone Number for the following:

Spill Coordinator:_____

Person Who Reported the Spill:_____

Form completed by:_____Date:_____

Spill Report Form
San Jacinto Waste Pits Superfund Site - Southern impoundment
Channelview, Texas

Date of Spill:_____ Date of Spill Discovery:_____
Time of Spill:_____ Time of Spill Discovery:_____

Name and Title of Discoverer:_____

Type of material spilled and manufacturer's name:_____

Description of spill location:_____

Directions from nearest community:_____

Estimated volume of spill:_____

Weather conditions:_____

Topography and surface conditions of spill site:_____

Impacted medium (pavement, sandy soil, water, etc.):_____

Proximity of spill to surface waters: _____

Did the spill reach a waterbody? _____Yes _____No

If so, was a sheen present? _____Yes _____No

Describe the causes and circumstances resulting in the spill:_____

_____

_____

Describe the extent of observed contamination, both horizontal and vertical (*i.e.*, spill-stained soil in a 5-foot radius to a depth of 1 inch): _____

_____

_____

Describe immediate spill control and/or cleanup methods used and implementation schedule: _____

_____

Current status of cleanup actions:_____

Name/Company/Address/Phone Number for the following:

Spill Coordinator:_____

Person Who Reported the Spill:_____

Form completed by:_____Date:_____

Spill Report Form
San Jacinto Waste Pits Superfund Site - Southern impoundment
Channelview, Texas

Date of Spill:_____ Date of Spill Discovery:_____
Time of Spill:_____ Time of Spill Discovery:_____

Name and Title of Discoverer:_____

Type of material spilled and manufacturer's name:_____

Description of spill location:_____

Directions from nearest community:_____

Estimated volume of spill:_____

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Topography and surface conditions of spill site:_____

Impacted medium (pavement, sandy soil, water, etc.):_____

Proximity of spill to surface waters: _____

Did the spill reach a waterbody? _____Yes _____No

If so, was a sheen present? _____Yes _____No

Describe the causes and circumstances resulting in the spill:_____

_____

_____

Describe the extent of observed contamination, both horizontal and vertical (*i.e.*, spill-stained soil in a 5-foot radius to a depth of 1 inch): _____

_____

_____

Describe immediate spill control and/or cleanup methods used and implementation schedule: _____

_____

Current status of cleanup actions:_____

Name/Company/Address/Phone Number for the following:

Spill Coordinator:_____

Person Who Reported the Spill:_____

Form completed by:_____Date:_____

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