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Our ref: 11215131-Poulos-22

October 25, 2022

Ms. Lauren Poulos
Remedial Project Manager
United States Environmental Protection Agency (EPA), Superfund Division (6SF-RA)
1201 Elm Street, Suite 500
Dallas, Texas 75270 2102

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 Site-Wide Monitoring Plan (SWMP). This SWMP 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 SWMP.

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

Regards,

Charles Munce
MidCon Region Market Leader

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CM/kdn/22

Encl: Attachment 1 - Site-Wide Monitoring Plan

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

100028298

Attachments

Attachment 1

Site-Wide Monitoring Plan

Site-Wide Monitoring Plan Southern Impoundment

San Jacinto River Waste Pits Superfund Site
Harris County, Texas

International Paper Company

October 25, 2022

→ **The Power of Commitment**

Contents

Appendices

1. Introduction

This Site-Wide Monitoring Plan (SWMP) 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 SWMP is being submitted on behalf of IPC to meet requirements under the August 5, 2021, Unilateral Administrative Order (UAO; EPA, 2021).

GHD has been selected as the Remedial Contractor (RC) for the Southern Impoundment Remedial Action (RA). This SWMP is an updated version of a SWMP included as one of the supporting deliverables with respect to the *Final 100% Remedial Design - Southern Impoundment* (Amended April 2021) (GHD, 2021a). It was later revised on November 26, 2021 and July 17, 2022 pursuant to the Southern Impoundment Revised Remedial Action Work Plan (Revised RAWP; GHD, 2021b) submitted to the Environmental Protection Agency (EPA) on November 26, 2021. It is being further revised pursuant to the Revised RAWP, based on the selection of GHD as the RC.

This SWMP describes the framework for monitoring to be performed by the RC to prevent the potential spread of dust generated during construction and the monitoring of the best management practices (BMPs) in the construction Stormwater Pollution Prevention Plan (SWPPP) to manage stormwater runoff. This SWMP also lists options that the RC may elect to implement to control odors should they occur during construction as part of the Southern Impoundment RA.

References below in this SWMP to the “Work Site” are to the locations within the Southern Impoundment at which the RA is being implemented.

1.1 Relationship to Supporting Plans

The SWMP should be considered in combination with the other supporting plans identified in the Final 100% Remedial Design (Amended June 2022) (GHD, 2022), as they have been updated or approved for use as part of the Southern Impoundment RA. The Field Sampling Plan (FSP) defines the procedures related to sampling of treated effluent water from the wastewater treatment system, waste confirmation sampling of impacted material, and sampling of imported backfill that will be used to fill excavations during implementation of the Southern Impoundment RA. The Construction Quality Assurance/Quality Control Plan (CQA/QCP) describes the procedures to verify that the excavation objectives are achieved during implementation. Field and analytical quality procedures are described in the Quality Assurance Project Plan (QAPP). The Transportation and Off-Site Disposal Plan (TODP) describes the procedures for on-site management and loading of excavated material to be disposed of off-site during the Southern Impoundment RA, the transportation routes for off-site shipments from the Southern Impoundment, and measures to be implemented, if needed to protect communities that may be affected by the shipments.

In addition, this SWMP is supported by a site-wide Air Monitoring Plan which details how dust will be monitored. The Air Monitoring Plan has been developed by the RC and is included as Appendix A. The RC has also developed a SWPPP that details the measures to be taken to control stormwater run-on and run-off at the Work Site during the Southern Impoundment RA, which is included as Appendix B.

2. Site-Wide Monitoring Approach

2.1 Monitoring During Construction

Based on the Pre-Construction Field Sampling Event (PC-FSE) and as detailed in the Southern Impoundment 100% Remedial Design Addendum (GHD, 2022) (100% RD Addendum), excavation limits for Southern Impoundment RA have been confirmed. During RA construction, monitoring of excavation activities will include delineation of excavation

boundaries. As each excavation is completed, surveying will be performed to verify the extent of excavation (both vertical and horizontal) and to clearly mark the boundaries of the excavation for the subsequent area to be excavated. These associated monitoring activities to be performed in relation to the excavation work are addressed in the CQA/QCP.

Excavation and loading activities will be performed in a controlled manner to prevent or significantly reduce the generation of dust. The Air Monitoring Plan provides air monitoring procedures for dust.

Stormwater control will be an essential part of the excavation program, both with regards to run-on and runoff during rain events. The RC is being required to manage stormwater run-on so that, to the extent possible, it is diverted from open excavations in order to reduce the volume of water requiring treatment and to prevent sloughing of the excavation faces. Also, during large rain events that might overwhelm open excavations, the RC will take steps (which may include pumping, as necessary) to ensure that accumulated stormwater does not overflow from the excavation. Detailed plans for soil erosion and sediment controls can be found on design Drawings C-04 and C-05 in the RC-developed SWPPP. The plan for implementation of stormwater BMPs is also detailed in the SWPPP.

2.2 Post-Construction Surveying

Upon completion of backfilling, surveying will be performed by the RC to confirm that fill placement was completed to the pre-construction elevations. Grading of the final surface is to be performed to ensure that surface water drains away from the backfilled areas (i.e., no ponding).

3. Environmental Media

This section describes the regulatory framework methods for monitoring of environmental media present on-site to prevent spread of impacted material beyond the limits of the excavation areas.

3.1 Soils

Based on the results of the Remedial Investigation (RI), Pre-Design Investigation (PDI) 1, PDI 2, and the PC-FSE, and as described in the 100% RD Addendum, specific 2-foot interval vertical horizons have been identified for excavation such that, following their removal the resulting soil depth-weighted average (DWA) concentration for a given polygon area would be less than 240 nanograms per kilograms (ng/kg) 2,3,7,8-tetrachlorinated dibenzo-*p*-dioxin (TCDD) toxicity equivalents for mammals ($TEQ_{DF,M}$). This results in a total excavation volume of approximately 92,000 cubic yards (cy), of which approximately 28,800 cy will be overburden that will be temporarily stockpiled and then reused as backfill (because it does not require off-site disposal) and approximately 63,200 cy will be transported off-site for disposal.

3.2 Dust

The majority of waste material in the Southern Impoundment should have a high moisture content so dust generation during excavation activities should be minimal. A reagent, such as Portland cement, may be mixed with the waste material to solidify it so that it passes the paint filter test for landfill acceptance. Solidification and loading activities are to be performed in a controlled manner to minimize the generation of dust. The RC has prepared and will implement the Air Monitoring Plan which provides air monitoring procedures for dust. The Air Monitoring Plan also defines what steps will be taken if threshold levels are approached and/or exceeded. The Air Monitoring Plan also includes procedures for dust mitigation and control.

3.3 Stormwater

For the Southern Impoundment RA, the RC has developed and will implement the SWPPP, to manage stormwater and address run-on and run-off from the excavation areas. The SWPPP meets the substantive requirements of the applicable or relevant and appropriate requirements for stormwater management. Preventative measures included in the SWPPP include grading the area surrounding an excavation to drain surface water away from an open excavation, and/or constructing berms to prevent water from entering an excavation. Additional measures include diverting surface water in areas adjacent to an excavation to existing surface drainage systems and requiring that these surface drainage systems be kept open and operational.

Even with surface water run-on controls, water from precipitation and perched water infiltration will accumulate within excavation areas. The RC has developed procedures to manage this contact water and may do so by operating and maintaining necessary dewatering equipment to remove the water from the excavations and convey it to on-site contact water storage tanks.

4. Data Collection and Monitoring Procedures

The purpose of site-wide monitoring during the Southern Impoundment RA is to monitor the extent and potential migration of contaminated media on-site and to determine whether performance standards are being achieved. The RC is being required to adopt procedures for collecting baseline data on affected media within the Work Site during construction.

4.1 Excavation Performance Verification

A primary objective of the Southern Impoundment PC-FSE was to complete confirmation sidewall, excavation bottom, and overburden sampling activities prior to mobilization for the RA Construction to better refine the extents of excavation and the volume of material available for reuse. The excavation areas within the Southern Impoundment are grouped into four distinct excavation areas that are given the following designations-Northeast (NE), North Central (NC), South Central (SC), and Southwest (SW), and the boundaries of these excavation areas have been defined. Results from this sampling event were incorporated into updated design drawings submitted as part the 100% RD Addendum.

Prior to commencing excavation, a complete topographic survey of each excavation area will be conducted to establish a pre-excavation topographic surface. The recorded topographic information (coordinates and elevations) will be used by the design engineer to create final electronic files to be used by the RC's grade-controlled excavation equipment. Prior to commencing excavation activities, the design limits of each polygon within an excavation area will be identified in the field by the RC's surveyor. It is anticipated that the required excavation activities to implement the Southern Impoundment RD will be performed from the ground surface using standard track mounted and extended reach excavators. The technical specifications that are included in the 100% RD Addendum require that the bucket of the excavator be outfitted with GPS indication equipment (i.e., Topcon 3DXi). This will allow for the collection of survey data (elevation and location) accurate to within approximately +1/10 of an inch, without the necessity for personnel entry into the excavation to collect this data to confirm excavation boundaries. In addition, the RC is being required to engage a licensed land surveyor to perform data collection from the ground surface outside the limits of the excavation using electronic means, to allow for development of "as constructed" documentation of the excavation activities (i.e., vertical and horizontal limits). The CQA/QCP describes additional procedures to verify that the excavation limits, as defined in the 100% RD Addendum, have been achieved.

4.2 Dust Monitoring

Dust monitoring will be performed as specified in the Air Monitoring Plan. Those monitoring and mitigation activities are summarized below.

4.2.1 Monitoring Instruments and Procedures

Real-time air monitoring for dust will be performed using dust monitors placed at the perimeter of the Work Site, typically upwind and downwind of Southern Impoundment RA activities. Additionally, air monitoring may be conducted on-site near work areas. All instruments will be calibrated and operated in accordance with the manufacturer's specifications or applicable test/method specifications.

4.2.2 Monitor Design and Frequency

Data from the dust monitors will be collected throughout Southern Impoundment RA ground disturbance activities. If concentrations of dust are above the thresholds established in the Air Monitoring Plan, RC personnel will be required to implement dust suppression measures.

The Air Monitoring Plan discusses the dust action level and how it was developed.

4.2.3 Suppression and Mitigation Measures

The RC is being required to implement dust suppression and mitigation measures on-site to minimize airborne dust produced from construction activities. Dust suppression measures may include, but would not be limited to:

- Reduction of speed of reagent addition during potential solidification mixing.
- Reduction of on-site traffic.
- Reduction in speed of on-site traffic.
- Watering or misting on-site roads.
- Use of appropriate truck covers.
- Applying or maintaining aggregate, or similar, for on-site roads.

4.3 Stormwater

Stormwater monitoring will be performed in accordance with the SWPPP. The intent of the SWPPP is to identify BMPs that will be implemented to address stormwater impacts. These BMPs may include, but would not be limited to, the following:

- Minimize the disturbed area and protect natural features and soil:
  - Limit access to the impacted area.
  - Use only approved access roads.
- Control stormwater flowing onto and through the Work Site.
  - Take steps so that stormwater that accumulates in the excavations or containment areas will be routed to the water treatment system.
- Stabilize disturbed soils promptly.
- Establish perimeter controls.
- Take steps to retain any potential pollutants on-site.
- Inspect and maintain all controls.
- Immediately repair or remove any leaking equipment.
- Inspect equipment prior to entering or leaving the Work Site to ensure that it is clean and free of soils, vegetation, and trapped debris.

4.3.1 Stormwater Construction Components

The anticipated sequences of construction activities and BMPs that may be installed at the Work Site to address stormwater are briefly described below:

– Silt fencing, straw wattles or similar devices may be installed around the perimeter of the Work Site before any stripping of the topsoil or disturbance of the ground.
– Under-grate, over-grate, and/or curb inlet filters may be placed at storm drain grates before construction occurs, if necessary.
– Straw bales or wattles may be installed in drainage ways present throughout the Work Site.
– Construction entrance(s) may be constructed to minimize the tracking of sediment off-site and onto the adjacent roadway.
– Straw/hay bales and filter fabric or filter bags may be used for filtration.
– Secondary containment should be utilized around the wastewater treatment system.
– Secondary containment and/or berms and silt fencing may be utilized around the staging and/or dewatering areas for excavated and stockpiled material.

4.3.2 Stormwater Monitoring and Maintenance Procedures

Stormwater monitoring and maintenance procedures are outlined in the SWPPP. The following procedures are identified in the SWPPP and will be used to monitor stormwater erosion and sediments control to ensure compliance with the construction SWPPP during project and post-project activities, as applicable:

– Identify areas where maintenance of erosion and sediment controls are inadequate.
– Remove sediment from any installed commercial grade silt fences when sediment build-up reaches one-third the height of the fence.
– Re-anchor and/or repair commercial grade silt fences, hay/straw bales, and other BMPs, as necessary.
– Conduct follow-up inspections of disturbed areas to determine the success of stabilization measures.
– Remove sediment from construction entrances when rock is clogged. Re-grade and add additional rock, as necessary to retain efficiency.

4.3.3 Stormwater Inspection Procedures

Under the SWPPP, a qualified person who is knowledgeable of the conditions at the Work Site will be designated to conduct inspections during Southern Impoundment RA activities. This inspector, subject to the provisions of the SWPPP, would be given authority to address activities that may result in non-compliance with the SWPPP.

The responsibilities of the inspector include, but would not be limited to:

– Verifying compliance with the requirements of the SWPPP and any other applicable ARAR.
– Verifying that the limits of authorized project work areas and locations of access roads are properly marked before clearing.
– Verifying the location of drainage and irrigation systems.
– Identifying stabilization needs in all areas.
– Verifying that temporary erosion controls are properly installed and maintained daily, as necessary.
– Inspecting and verifying restoration of areas of disturbed or bare soil.
– Inspecting areas used for storage of materials that are exposed to stormwater.
– Inspecting temporary structural erosion and sediment control devices/measures.
– Inspecting areas where vehicles enter or exit the Work Site.

– Verifying the repair of all ineffective, temporary, erosion control measures as soon as reasonably practicable but no longer than 24 hours after identification.

4.3.4 Responses to Changed Conditions

The RC will be required to amend the SWPPP as needed during the Southern Impoundment RA.

4.4 Odors

There is the potential that Southern Impoundment RA excavation activities may result in odors. Odors are most likely to occur during excavation activities when previously buried material and soils are unearthed and exposed to air. The main concern with respect to odors is the potential impact on adjacent businesses, the neighboring community, and Southern Impoundment RA workers.

If odors are present that would create a nuisance to the public or a concern for worker health and safety, the RC will implement on-site measures to counter, suppress, or mask the odors. These measures may include, but are not limited to the following:

– Deployment of odor suppressing foams.
– Perimeter misting systems.
– Perimeter masking desiccants.
– Minimization of the number and/or size of stockpiles.
– Minimization of the size and time excavations remain open.

5. Documentation

This section addresses the monitoring documentation requirements for the environmental media to be monitored. The RC will be required to maintain necessary documentation, including survey records related to the excavation areas. Dust monitoring records and notes regarding the maintenance of stormwater controls should also be maintained on-site. The frequency and types of documentation required for dust and stormwater monitoring are outlined in the Air Monitoring Plan and the SWPPP, respectively.

6. References

– 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.
– 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. April 19, 2021.
– 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.
– GHD, 2022. *100% Remedial Design Addendum*, San Jacinto River Waste Pits Superfund Site. Prepared for International Paper Company and U.S. Environmental Protection Agency, Region 6. June 2, 2022.

Appendices

Appendix A

Air Monitoring Plan

Air Monitoring Plan

San Jacinto River Waste Pits

International Paper

October 25, 2022

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Contents

Table index

1. Introduction

This Air Monitoring Plan (AMP) was prepared by GHD Services Inc. (GHD), on behalf of International Paper Company (IPC), to address air monitoring during the remedial action (RA) at the Southern Impoundment of the San Jacinto River Waste Pits Superfund Site. This AMP discusses the development of site-specific action levels protective of potential exposures to dust generated at the Southern Impoundment RA (Work Site), in which dioxins and furans could potentially be present, and the methods for monitoring airborne dust. This AMP was developed to assist in protecting the health and safety of personnel working at the Work Site and off-site personnel working in the surrounding industrial area.

2. Development of Work Site Action Levels

Work Site action levels (WSALs) were developed based on established exposure guidelines and standards, site-specific risk-based screening levels, and equivalent airborne dust concentrations as discussed in the subsections below. The WSALs are designed to provide early indication for the need to implement dust control measures; an exceedance of the WSALs does not necessarily indicate a health concern.

2.1 Occupational Exposure Guidelines and Standards

GHD used established guidelines and limits to establish the WSALs. The US Occupational Safety and Health Administration has established Permissible Exposure Limits (PELs) for workers to dust, based upon a lifetime workplace exposure, 8 hours per day and 40 hours per week for 30 years. These levels are intended to be health protective for potential for long-term exposures and are not an indication of health concerns from a short-term perspective.

Table 1 Exposure Guidelines and Standards for Dust

Contaminant of Interest	Occupational Exposure Limit	Basis	Units
Total Dust	15	OSHA PEL	mg/m^3
Respirable Dust	5	OSHA PEL	mg/m^3
Notes: mg/m^3 – milligram per kilogram			

2.2 Screening Level Development for Dioxins and Furans

GHD used the United States Environmental Protection Agency (USEPA) Regional Screening Level (RSL) calculator to derive a site-specific risk-based Screening Level (SL)[1]. A cancer target risk of 10^{-5} and non-cancer hazard quotient of 1 were used in the calculation. The outdoor worker air scenario was selected, which includes default USEPA exposure assumptions for an outdoor worker: Exposure Time (ET) = 8 hours/day, and Averaging Time (AT) = 365 days. Remedial Actions will occur in two six-month seasons, therefore a work site-specific Exposure Duration (ED) of 2 years and Exposure Frequency (EF) of 112 days/year were chosen. The EF of 112 days / year is based on the USEPA default exposure assumption for an outdoor worker of 225 days / year adjusted for 6 months (225 / 2). These exposure assumptions represent a good faith attempt to estimate the potential exposure to dust generated during

[1] **https://www.epa.gov/risk/regional-screening-levels-rsls**. Accessed 10/20/2022.

excavation activities for both a worker on-site and an off-site worker in the surrounding industrial areas. A SL of 0.00000009 mg/m^3 for 2,3,7,8 TCDD was calculated. This represents the concentration that would have to be sustained for 8 hours per day for 112 days a year to represent a potential risk of developing an adverse health effect. Instantaneous or short-term airborne concentrations above this SL do not necessarily indicate a health concern, only that mitigation activities are warranted. Results from the RSL Calculator are summarized in Attachment 1.

2.3 Dioxin and Furan Equivalent Airborne Dust Concentration Development

There is currently not an available real-time method for directly measuring dioxin and furans in air. However, because dust generated from the Work Site could potentially contain dioxins and furans, dust concentrations can conservatively be used as an indicator for potential exposures to these compounds. This assumption is overly conservative because it assumes that all soil that could become airborne would contain dioxins and furans, which is not the case. Based on this highly conservative assumption that all of the excavation areas contain the highest detected concentration of total dioxins and furans (total TEQ), GHD calculated the dioxin and furan Equivalent Airborne Dust Concentration ($EADC_{SL}$); i.e., the total dust concentration that would contain a dioxin and furan concentration equal to the SL.

The $EADC_{SL}$ calculation shows this relationship. The equation for calculating the $EADC_{SL}$ is shown below.

$$EADC_{SL} = SL \times Conc^{-1}_{Contaminated\ soil} \times 10^6$$

Where: SL = Screening Level, mg/m^3
$Conc^{-1}_{Contaminated\ soil}$= Inverse of the soil concentration, kilograms per milligram (kg/mg)

The peak total TEQ soil concentration detected was 0.206 mg/kg$_{soil}$. Using the equation above, the $EADC_{SL}$ was calculated as shown below:

$$\text{Total dust} = \text{EADC}_{SL} = \frac{mg_{soil}}{m^3_{air}} = \left(\frac{0.00000009\ mg}{m^3_{air}}\right)\left(\frac{kg_{soil}}{0.206\ mg}\right)\left(\frac{10^6 mg_{soil}}{kg_{soil}}\right) = 0.43\ mg/m^3$$

Where: SL = The screening level of 0.00000009 mg/m^3
$Conc^{-1}_{Contaminated\ soil}$ = One kg of soil contains 0.206 mg of total TEQ
10^6 = The amount (in mg) of soil in a kg of soil

Therefore, assuming the highest detected total TEQ concentration is present equally in all Work Site soil (which is known to not be the case), airborne dust concentrations above 0.43 mg/m^3 averaged over an 8-hour period would be required to potentially exceed the calculated SL for Total TEQ. This concentration is the basis for the WSALs for the Southern Impoundment RA, as discussed in Section 3 below.

Table 2 Equivalent Airborne Dust Concentration

Compound of Interest	Soil Concentration (mg/kg)	Community Guideline (mg/m^3)	Community	Units
			$EADC_{SL}$ measured as total dust sustained for 8-hours to reach the guideline.	
Total TEQ	0.206	0.00000009	0.43	mg/m^3

3. Work Site Action Levels

After consideration of the occupational exposure guidelines and limits and the site-specific screening levels of other compounds of interest, the more conservative WSAL of 0.43 mg/m^3, averaged over 1 hour, will be used at the Work Site during the RA. The WSALs are designed to provide early indication for the need to implement dust control measures; an exceedance of the WSALs does not necessarily indicate a health concern. GHD will perform real-time total dust air monitoring on-site and on the perimeter of the Work Site during the RA. The WSALs are summarized in Table 3.

Table 3 Work Site Action Levels

Chemical of Interest	Location	Action Level[1]	Duration	Description of Action
Total Dust Concentrations (Total Dust)	On-site near Work Areas and Perimeter of the Work Site	< 0.43 mg/m^3	1-Hour Average	No action required
		> 0.43 mg/m^3	1-Hour Average	Notify the Project Manager, implement dust suppressant and mitigation measures to reduce dust concentrations below the action level.
Notes: [1]Action levels are based on real-time average concentrations of total dust				

If the WSAL is exceeded, dust suppression and mitigation measures on-site to minimize airborne dust produced from work activities may include, but would not be limited to:

– Reduction of speed of reagent addition during potential solidification mixing,
– Reduction of on-site traffic,
– Reduction in speed of on-site traffic,
– Watering or misting on-site roads,
– Use of appropriate truck covers, and
– Applying or maintaining aggregate, or similar, for on-site roads.

4. Air Monitoring Methods

Real-time air monitoring for total dust will be performed using TSI Dustrak aerosol or equivalent monitoring instruments. Dust monitors will be placed around the perimeter of the Work Site both downwind and upwind of the work area. Additionally, air monitoring will be conducted on-site near work areas. All instruments will be calibrated and operated in accordance with the manufacturer's specifications or applicable test or method specifications.

GHD

Hyland Herring, PhD, DABT

Joseph Cameron, CIH

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Site-specific
Outdoor Worker Air Inputs

Variable	Outdoor Worker Air Default Value	Site-Specific Value
AT_{out} (averaging time - outdoor worker)	365	365
ED_{out} (exposure duration - outdoor worker) yr	25	2
EF_{out} (exposure frequency - outdoor worker) day/yr	225	112
ET_{out} (exposure time - outdoor worker) hr	8	8
THQ (target hazard quotient) unitless	0.1	1
LT (lifetime) yr	70	70
TR (target cancer risk) unitless	1.0E-06	1.0E-05

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Site-specific

Outdoor Worker Regional Screening Levels (RSL) for Air

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical	CAS Number	Mutagen?	Volatile?	Chemical Type	IUR ($ug/m^3)^{-1}$	IUR Ref	RfC (mg/m^3)	RfC Ref	Carcinogenic SL TR=1E-05 (ug/m^3)	Noncarcinogenic SL THI=1 (ug or $fibers/m^3$)	Screening Level (ug or $fibers/m^3$)
TCDD, 2,3,7,8-	1746-01-6	No	Yes	Organics	3.80E+01	C	4.00E-08	C	9.00E-05	3.91E-04	9.00E-05 ca**

Appendix B

[Appendix Title]

Construction Stormwater Pollution Prevention Plan Southern Impoundment

San Jacinto River Waste Pits Superfund Site
Harris County, Texas

International Paper Company

October 25, 2022

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Figure index

Appendices

1. General Work Site Information

Project Name:	San Jacinto Waste Pits Superfund Site – Southern Impoundment Project
Nature of Construction:	Excavation of Waste from Southern Impoundment
Site Area Covered by SWPPP:	20 acres
Location of Project:	18003 Market Street Channelview, Texas 77530 (Harris County)
Latitude/Longitude:	29°47'29.4" North, 95°04'03.0" West
Sequence of Major Activities:	**Season 1:** Mobilization and hydroexcavate for utilities Demolition and Disposal of Existing Building Install temporary erosion controls Install wastewater control systems Utility relocation and stockpile berms Washdown racks Waste excavation, on-site transport and stockpile Overburden excavation, on-site transport and stockpile Soil solidification Waste loadout and stockpile management Placement of fill material Placement of overburden Utility relocation Revegetation of Work Site Repair of Market Street, as needed **Season 2**: Mobilization and hydroexcavate for utilities Immediately install temporary erosion controls Install wastewater control systems Utility relocation and stockpile berms Washdown racks Install sheet pile wall (and removal) Waste excavation, on-site transport and stockpile

	Overburden excavation, on-site transport and stockpile
	Soil solidification
	Waste loadout and stockpile management
	Placement of fill material
	Placement of overburden
	Removal/replacement of deadmen
	Install new concrete pad and covered area
	Utility relocation
	Revegetation of Work Site
	Repair Market Street, as needed
	Revegetate Site
Receiving Waters:	San Jacinto River Tidal
	Segment 1005 of San Jacinto River Tidal
Project Timeline:	Anticipated start - November 2022
	Anticipated end - April 2024
Primary Operator:	GHD Services, Inc.

2. Introduction

2.1 SWPPP General Requirements

This Stormwater Pollution Prevention Plan (SWPPP or Plan) was prepared by GHD Services, Inc. (GHD) on behalf of International Paper Company (IPC), for the remediation of the San Jacinto River Waste Pit Site Superfund Site - Southern Impoundment, located in Channelview, Harris County, Texas (Project or the Work Site), pursuant to the requirements of the General Permit to Discharge under the Texas Pollutant Discharge Elimination System (TPDES) for construction sites associated with construction activity, TXR150000 (General Permit), and in accordance with good engineering practices. The General Permit regulates stormwater discharges from construction activities (clearing, grading, and excavation) and is included in Appendix A. This SWPPP and the General Permit will be maintained either on-site in a secure location or off-site if needed to secure the Plan. If the Plan is stored off-site, it will be made available within 24 hours of a request for the Plan. The SWPPP will be made available at the time of an on-site inspection to the Texas Commission on Environmental Quality (TCEQ), as needed.

2.2 Applicable or Relevant and Appropriate Requirements (ARARs)

Compliance with ARARs does not include formal submission of permit applications to agencies to provide permits or approvals. Instead, information sufficient to demonstrate compliance with the substantive requirements of the ARARs is presented to the Environmental Protection Agency (EPA), in coordination with other agencies with jurisdiction with respect to the applicable ARARs. This SWPPP has been prepared as a part of the Site-Wide Monitoring Plan (SWMP).

2.2.1 NPDES and TPDES Requirements

As discussed in the Southern Impoundment Revised Remedial Action Work Plan (Revised RAWP; GHD, 2021a), this SWPPP has been prepared following selection of GHD as the Remedial Contractor (RC) and will be submitted to EPA as part of an updated version of the SWMP. During the Project, the RC will adhere to this SWPPP, as it may be approved or modified by EPA.

2.3 Authorized Operator

Coverage under the General Permit is required by GHD, which will have day-to-day operational control over construction activities at the Work Site (primary operator) and operational control over construction plans and specifications and employment of other operators, such as a general contractor, to perform or supervise construction activities (secondary operator). GHD must post the TCEQ site notice and implement a SWPPP. As the primary operator. GHD will certify the SWPPP by signing the SWPPP Certification document provided in Appendix B. Both the primary and secondary operators (if applicable) must post site notices. The Large Construction Site Primary Operator Notice (notice) is provided in Appendix C. A copy of the notice should be kept with the SWPPP. As discussed in Section 2.2, compliance with ARARs does not include formal submission of permit applications to the agencies to provide permits or approvals but is subject to EPA review and approval prior to implementation. A Notice of Intent is not required to be filed with the TCEQ.

2.4 Purpose and Scope

The purpose of this SWPPP is to assist GHD, as the RC, and any other contractors and subcontractors in the implementation of control measures for stormwater runoff from the Work Site to prevent degradation of water quality in nearby receiving streams. The SWPPP achieves this by specifying Best Management Practices (BMPs) for preventing

or controlling erosion and sedimentation associated with construction activities. The SWPPP also documents the following:

– Adherence by contractors and subcontractors to BMPs specified in the SWPPP
– The effectiveness of control measures specified in the SWPPP and modification of the SWPPP if countermeasures are found to be ineffective
– Regular inspections of the Work Site and maintenance of control measures by Project personnel
– Final stabilization of the Work Site and termination of Project activities
– Responsibilities of primary and secondary operators

A notice will be posted by primary and secondary operators in an appropriate location accessible to the public indicating the General Permit number, name and telephone number of the local contact, a brief description of the Project, and the location of the SWPPP. The notice must be placed in a publicly accessible location near where construction is actively underway and the notice must be safely and readily available for viewing by the general public, local, state, and federal authorities. In lieu of hardcopy inspection and spill report forms, copies of inspections and incident reports may also be maintained electronically and will be available for inspection upon request by TCEQ.

3. Site Description

3.1 Location

The Work Site is located at 18003 Market Street, Channelview, Harris County, Texas, east of the City of Houston, between two unincorporated areas known as Channelview and Highlands. It is part of the area referred to as the Southern Impoundment, which is approximately 20 acres in size and is located on a small peninsula that extends south of Interstate Highway 10 (I-10). The GPS coordinates are 29°47'29.4" North and 95°04'03.0" West. A vicinity map that shows the location of the Work Site is included as Figure 1.

Within the Work Site, approximately 6.25 acres will be disturbed during this Project. The Work Site is bisected by an industrial property and bounded on the south and east by industrial property, the San Jacinto River on the west, and industrial property and I-10 on the north side.

4. Project Description

4.1 Purpose and Nature of Construction Activity

The Southern Impoundment consists of an impoundment built in the mid-1960s and used in that time period for disposal of solid and liquid pulp and paper mill material. The primary hazardous substances identified within the Southern Impoundment are polychlorinated dibenzo p dioxins and polychlorinated dibenzofurans. The entire peninsula south of I-10 was subject to continuous and significant modification from the early 1970s through the 1980s. Additional background information regarding the Southern Impoundment is contained in the *Remedial Investigation Report* (Integral and Anchor QEA, 2013).

The purpose of this Project is implementation of the remedy selected by the EPA for the Southern Impoundment as described in the *Record of Decision* (ROD) (EPA, 2017) and as described in the July 2022 *Addendum to the Final 100% Remedial Design - Southern Impoundment* (Amended April 2021) (GHD, 2022a).

4.2 Sequence of Major Activities

It is anticipated that the Project will be initiated in November 2022. Construction will be completed over an approximately 18-month period, with excavation activities taking place solely during the non-hurricane season in Texas (November 1 – April 30). Certain non-excavation activities for Season 2 may take place between Season 1 and Season 2. The anticipated general order of Project construction activities for each season, which may be modified or amended as the Project proceeds, is as follows:

Season 1:

- Mobilization and hydro excavation for utilities
- Demolition and disposal of existing building
- Install Temporary Erosion Controls
- Install wastewater control systems
- Utility relocation and stockpile berms
- Washdown racks
- Conduct waste excavation, on-site transport and stockpile
- Conduct overburden excavation, on-site transport and stockpile
- Soil solidification
- Waste loadout and stockpile management
- Placement of fill material
- Placement of overburden
- Utility relocation
- Revegetate Work Site
- Repair Market Street, as needed

Season 2:

- Mobilization and hydroexcavate for utilities
- Install Temporary Erosion Controls
- Install wastewater control systems
- Utility relocation and stockpile berms
- Washdown racks
- Conduct waste excavation, on-site transport and stockpile
- Conduct overburden excavation, on-site transport and stockpile
- Soil solidification
- Waste loadout and stockpile management
- Placement of fill material
- Placement of overburden
- Removal/replacement of deadmen
- Install new concrete pad and covered area
- Utility relocation
- Repair Market Street, as needed
- Revegetate Work Site

4.3 Area Estimates

The Work Site is approximately 20 acres which approximately 6.25 acres will be disturbed during this Project.

4.4 Soil Description

Soils in the Southern Impoundment are entirely composed of Ijam clay, 0 to 2 percent slopes, frequently flooded, tidal. (See Attachment E) According to the Natural Resources Conservation Service (NRCS) this soil type is classified as hydric because the map unit contains Aquic suborders, great groups or subgroups, Albolls suborder, Historthels great group, or Andic, Cumulic, Pachic or Vitrandic subgroups that: based on the range of the characteristics for the soil series, they will at least in part meet one or more field indicator of hydric soils in the United States or show evidence that the soil meets the definition for hydric soils.

4.5 Runoff Coefficient and Water Quality

The runoff coefficient is the ratio of the amount of water not absorbed by the ground surface to the total amount of rainfall. Following grading of the Work Site, the runoff coefficient of the Work Site is estimated to be 0.5 for an open space. Considering the Work Site's gradual slope, limited off-site discharge of sediment is anticipated during the construction period. Stormwater quality is expected to be good but improved with BMPs to remove sediment and prevent any unauthorized direct discharge into nearby waterways.

4.6 Receiving Waters

The Work Site is relatively level and includes the San Jacinto River bordering the western portion of the Work Site and industrial areas on the eastern portions of the Work Site. Elevations range from approximately 0 to 10 feet above sea level. The Work Site is located within Segment No. 1005 - San Jacinto Tidal. Sources of hydrology on the Work Site are primarily rainfall and sheet flow. The discharges are to impaired waterbodies listed on the Clean Water Act Section 303(d) list for dioxins and PCBs in edible tissues. A Total Maximum Daily Load (TMDL) to address the impairment is planned to be developed for Segment 1005.

5. Non-Stormwater Discharges

Stormwater discharges that combine with certain non-stormwaters are eligible for coverage under the General Permit.

The non-stormwater discharges allowed by the General Permit are described below:

- Discharges from firefighting activities
- Uncontaminated fire hydrant flushings
- Water from routine external washing of vehicles, external portions of buildings or structures, and pavement, where no detergents are used
- Uncontaminated water used to control dust
- Potable water sources including waterline flushings that have not been hyperchlorinated
- Uncontaminated air conditioning condensate
- Uncontaminated ground or spring water, including foundation or footing drains that have not been contaminated by industrial materials such as solvents
- Lawn watering and similar irrigation drainage

All discharges will be controlled by BMPs as much as practical.

6. Endangered Species

Under the TPDES General Permit, discharges that would adversely affect a listed endangered or threatened aquatic dependent species or its critical habitat are not authorized, unless the requirements of the Endangered Species Act are satisfied.

A *Threatened & Endangered Species Habitat Suitability Assessment* (GHD, 2022b) was prepared for the proposed Project to comply with Section 7 of the Endangered Species Act (16 United States Code [U.S.C.] §§ 1536). The assessment concluded that two endangered species were determined to potentially, but not likely, be present in or near the Work Site: the West Indian Manatee and the Saltmarsh Topminnow. If threatened or endangered species are discovered within the Work Site during construction activities (i.e., clearing, placement of fill material), a plan will be developed for avoidance or mitigation. Any such activities will be coordinated with Texas Parks and Wildlife Department.

7. Stormwater Pollution Prevention

7.1 Potential Pollutants

The intent of this SWPPP is to prevent impact to stormwater due to the construction activities associated with this Project. The following pollution sources may be associated with Work Site activities:

Construction Activity and/or Material	Potential Pollutant
Land Clearing	Sediment-Total Suspended Solids (TSS), Turbidity, Oils and Grease, Total Petroleum Hydrocarbons (TPH)
Excavation	Sediment-TSS, Turbidity, Oil and Grease, TPH, polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans
Filling	Sediment-TSS, Turbidity, Oil and Grease, TPH
Grading	Sediment-TSS, Turbidity, Oil and Grease, TPH
Leaks and spills	Petroleum Products, Detergents/Cleaning Solvents, Paints
Fertilizing vegetation	Fertilizers
Fueling vehicles	Gasoline/Diesel Fuels

To prevent impacts to stormwater due to the above construction activities, stormwater containment measures will be utilized to prevent contaminated stormwater from leaving the Work Site. GHD will be the RC, also referred to below as the Contractor, for the Project. Throughout this Project, the Contractor will implement sediment and erosion controls and minimize the impact of construction by utilizing BMPs. These BMPs will include the following:

– Minimize the disturbed area and protect natural features and soil.
  - Limit access to the Project area.
  - Use only approved access roads within and outside the Work Site. .
– Inspect equipment prior to entering or leaving areas within the Work Site to ensure that it is clean and free of soils, vegetation, and trapped debris.
– Immediately repair, capture leaks from, or remove any leaking equipment from the Work Site.
– Phase the construction activity.
– Control or mange stormwater flowing onto and through the Work Site.
– Establish perimeter controls.

– Adopt measures to retain any potential pollutants on-site.
– Stabilize construction entrance and exit.
– Restore topsoil to the upper soil horizon when backfilling excavations.
– Stabilize disturbed soils promptly.
– Manage roadway drag out.
– Apply seed to all disturbed areas where stabilization has not been established.
    - Use seed mix that is free of noxious weeds to prevent the introduction of undesirable species.

Structural BMP and installation details are located in the Erosion and Sedimentation Control Plan found in Appendix H of this SWPPP.

7.2 Erosion and Sediment Control

The following structural BMPs are anticipated to be installed, as applicable, during the Project. Proposed structural BMPs may be found in Appendix H. Stormwater will be managed, to the maximum extent possible, to divert it from open excavations in order to reduce the volume of water requiring treatment and prevent sloughing of excavation faces. The activities described below are to occur, subject to being able to safely access the Work Site during or following storm or other events.

Silt fences or equivalent measures will be installed as documented in Appendix H - Erosion Control Plan and Details before any stripping of the topsoil or disturbance of the ground occurs. Silt fencing will be installed as appropriate around the boundary of the Work Site.

– Control barriers (e.g., silt fencing) should be repaired or replaced when:
    - Depth of sediment exceeds 1/3 the height of the barrier.
    - They become non-functional.
– During construction, if dewatering is required, sediment laden water will be discharged through sediment barriers and filters. Filter fabric or filter bags will be used for filtration.
– If applicable, inlet controls should also be inspected after every storm event to check for collapse into the inlet or other damages that may block flow in the inlet.
    - In addition to routine inspection, inlet protection devices should be observed and monitored during larger storm events to verify that they are not ponding or diverting water in a manner that floods a roadway or damages property.
    - Floatable debris and other trash caught by the inlet protection should be removed after each storm event.
    - Sediment collected at area inlet protection should be removed before it reaches half the height of the protection device. Sediment should be removed from inlets with excavated impoundment protection before the volume of the excavation is reduced by 50 percent. In addition, the weep holes should be checked and kept clear of blockage.
    - Concrete blocks, 2-inch x 4-inch boards, stakes, and other materials used to construct inlet protection should be checked for damage and repaired or replaced if damaged.
    - When filter fabric or organic filter tubes are used, they should be cleaned or replaced when the material becomes clogged. For systems using filter stone, when the filter stone becomes clogged with sediment, the stones must be pulled away from the inlet and cleaned or replaced.
    - Sediment should also be removed from curb inlet protection after each storm event because of the limited storage area associated with curb inlets.
    - Because of the potential for inlet protection to divert runoff or cause localized flooding, remove inlet protection as soon as the drainage area contributing runoff to the inlet is stabilized. Ensure that all inlet protection devices are removed at the end of the construction.

– During construction, temporary vegetation stabilization will be implemented. Temporary cover BMPs include temporary seeding, mulches, matrices, blankets and mats, and the use of soil binders.
– Inspect and maintain erosion control measures until disturbed areas are stabilized.
– Remove and properly dispose of sediment barriers once disturbed areas are re-vegetated and stabilized.
– Throughout the construction process, as areas of earthwork are completed, permanent seeding will be established. The completion of the earthwork will be sequenced with seasons appropriate for seeding and stabilization.

7.2.1 Additional BMPs for Work near Water Bodies

– Avoid disturbances to bed or banks of streams or water bodies.
– Avoid placement of imported materials (e.g., riprap) on bed or banks of water bodies, as practicable.
– Preserve vegetation buffers adjacent to water bodies as practicable.
– Use existing gravel roads to avoid rutting in wet areas.
– Limit equipment operating near water bodies to what is necessary to complete project objectives.
– Equipment should not be parked or stored overnight in water bodies.
– Dispense and store fuels and hazardous materials at least 100 feet from water bodies and within designated areas.
– When working in close proximity to water bodies, stage spoil at least 10 feet from the water's edge.

7.2.2 Additional BMPs for Work Involving Water Discharge

– Place intake hose slightly above bottom of trench to prevent sediment uptake.
– Use geotextile filter bags on discharge end of pumps.
– Discharge to a well-vegetated upland area (outside of excavation area). For accumulated stormwater and perched water infiltration within the excavation area, dewatering equipment will be maintained on-site. Accumulated water will be conveyed to on-site contact water storage tanks prior to treatment.
– For large-volume water discharges direct discharge into a dewatering filter bag.
– Periodically monitor discharge and replace filter bags as necessary.
– Record discharge volumes and any other field data.

7.3 Other Controls

Potential pollutants of concern for stormwater are suspended solids (i.e., soil, concrete, sediment), and petroleum products (i.e., oil and grease related to heavy trucks and equipment). Stormwater quality controls to prevent to the extent possible stormwater impacted from Project activities from leaving the Work Site are detailed below.

7.3.1 Vehicles

Potential pollutants associated with heavy trucks and equipment includes diesel fuel, oil, and antifreeze. For all fueling activities that take place on-site, the Contractor will be required to have a spill kit for fuel tank trucks, and qualified personnel will be in attendance during all fueling operations. Temporary fuel tanks brought on-site will be equipped with appropriate secondary containment, liquid level sensing device, and spill kits. Equipment will be parked in a designated, protected area to prevent potential spills from leaving the Work Site. There will be no on-site vehicle or equipment washing permitted except for decontamination at designated locations. There will be no equipment fueling within 100 feet of any wetlands or other waters.

7.3.2 Concrete Washouts

The Permit authorizes rinse activities at construction sites under Sections II.E.1, 2, and 3 of the Permit provided that the following requirements are met:

– There will be no direct discharge of rinse water from concrete truck washout activities to surface waters in the state, including discharge of rinse water to storm sewers
– Concrete truck rinse water must be discharged to areas of the construction site where structural controls exist, such as temporary berms, temporary shallow pits, temporary storage tanks, or other reasonable measures, to prevent direct discharge
– Rinse water may be discharged to areas with minimal slope to allow infiltration and filtering of the concrete rinse water
– Washout activities must be minimized during rainfall
– The rinse water shall not cause or contribute to groundwater contamination

7.3.3 Dust Control

Excavation activities may create soil disturbance and open space for wind to pick up dust particles. Dust control measures reduce entrainment of dust from disturbed areas, reducing the likelihood of dust being carried off-site.

The majority of waste material to be excavated should have a high moisture content so dust generation during excavation activities should be minimal. A reagent, such as Portland cement, may be mixed with the waste material to solidify it so that it passes the paint filter test for landfill acceptance. Solidification and loading activities are to be performed in a controlled manner to minimize the generation of dust. An Air Monitoring Plan pursuant to the SWMP has been developed which will provide air monitoring procedures for dust. The SWMP and/or Air Monitoring Plan will define what steps will be taken if threshold levels are approached and/or exceeded.

Dust suppression measures may include, but would not be limited to:

– Reduction of speed of reagent addition during potential solidification mixing
– Reduction of on-site traffic
– Reduction in speed of on-site traffic
– Watering or misting on-site roads
– Use of appropriate truck covers
– Applying or maintaining aggregate, or similar, for on-site roads

7.3.4 Solid Waste

Construction materials and other solid wastes generated on-site will be properly managed and disposed of to reduce the risk of pollution. General trash and debris generated on-site will be collected and stored in designated covered containers prior to disposal at an off-site permitted solid waste landfill. Waste storage areas will be routinely inspected, and areas around trash bins will be kept free of litter. There will be no discharge of refuse or litter in stormwater from the construction Site.

7.3.5 Material Stockpiles

Various materials such as soil and aggregate will be stockpiled at the Work Site as part of normal construction activities. A combination of methods such as temporary berms, silt fencing and tarping will be used to control erosion from temporary stockpiles. These temporary stockpiles and associated BMPs will be inspected as part of periodic inspection program.

7.3.6 Sanitary Wastewater

Portable toilets will be placed on level ground, away from traffic, and staked to prevent tipping. A contractor will remove all sanitary wastewater from temporary facilities located at the Work Site for disposal. No sanitary wastewater will be discharged from the Work Site to waters of the State.

7.4 Stabilization Practices

Stabilization measures will be implemented within 14 days at locations within the Work Site where construction activities have ceased and will not be resumed within 21 days. Temporary stabilization measures may include temporary seeding, mulches, matrices, blankets and mats, and the use of soil binders. Upon completion of final grading of any portion of the Work Site, final stabilization will be implemented in the form of final landscaping.

Final stabilization, as defined in the NPDES General Permit for Storm Water Discharges From Construction Activities, is defined as: “All soil disturbing activities at the Work Site have been completed and a uniform (that is, evenly distributed, without large bare areas) perennial vegetative cover with a density of at least 70 percent of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.”

The following records shall be maintained in Appendix D Site Stabilization Tracking Form of the SWPPP:

– Dates when major grading activities occur
– Dates when construction activities temporarily or permanently cease on a portion of the Work Site
– Dates when stabilization measures are initiated

7.5 Post Construction BMPs

The Work Site will be backfilled to the topography necessary and surveyed to confirm fill placement was completed to pre-construction elevations. Grading of the final surface will be performed such that surface water drains away from the backfilled areas. Further, the Contractor will ensure that surface stabilization will occur as soon as possible to reduce potential erosion.

8. Maintenance and Inspections

8.1 Monitoring and Maintenance Procedures

The following procedures will be used to monitor stormwater erosion and sediment controls and maintain compliance with the Permit requirements for Project and post Project activities:

– Identify areas where maintenance of erosion and sediment controls is inadequate
– Remove sediment from any sediment traps and ponds when the design capacity has been reduced by 50 percent
– Remove sediment trapped at perimeter controls before it reaches 1/3 of the aboveground height
– Re-anchor and/or repair silt fences, filter bags, and other BMPs as necessary
– Conduct follow-up inspections of disturbed areas to determine the success of stabilization measures
– Remove sediment from construction site entrances when rock is clogged. Re-grade and add additional rock as necessary to retain efficiency

8.2 Inspection Procedures

A qualified person who is knowledgeable of Work Site conditions and the General Permit will conduct inspections during Southern Impoundment RA activities. The primary operator will delegate inspection duties to qualified persons. The qualified persons will have the authority to stop activities that may result in a noncompliance with this Plan.

The General Permit requires inspections to be conducted:

– At least once every seven (7) days, -OR-
– At least once every 14 calendar days and within 24 hours of the end of a storm event that equals or exceeds 0.5 inch of rainfall

Inspections will be conducted at least once every seven (7) days and within 24 hours of a storm event that equals or exceeds 0.5 inch of rainfall.

Any change in the inspection schedule shall be noted on the inspection checklist. The inspection schedule may not be changed more than a maximum of one time per month. In addition, any schedule change must be implemented at the beginning of the calendar month and the reason for the schedule change must be documented in the SWPPP.

The inspector will be responsible for:

– Ensuring compliance with the requirements of this SWPPP and any other environmental permits and approvals
– Verifying that the limits of authorized Project work areas and locations of access roads are properly marked before clearing
– Verifying the location of drainage systems
– Identifying stabilization needs in all areas
– Ensuring that temporary erosion controls are properly installed and maintained daily, as necessary
– Inspecting areas of disturbed or bare soil
– Inspecting areas used for storage of materials that are exposed to stormwater
– Inspecting temporary structural erosion and sediment control devices/measures such as silt fences, filter bags, and rock filter dams
– Inspecting areas where vehicles enter or exit the Work Site
– Inspecting concrete washout area for capacity and leaks, if applicable
– Inspecting locations where stormwater discharges from the Work Site
– Ensuring restoration of contours and topsoil
– Establishing a program to monitor the success of restoration
– Keeping records of compliance with the Permit
– Monitoring of vegetation of disturbed areas as construction is completed in the area
– Verifying the repair of all ineffective, temporary, erosion control measures as soon as reasonably practicable

A Construction Site Inspection Checklist for documenting inspections is provided as Appendix F. Following each site inspection, a summary report will be available within 24 hours of the inspection.

Based on the conditions noted during the inspection, this SWPPP will be revised as needed, but in no case later than seven (7) calendar days following the inspection. The revisions will provide for timely implementation of any changes to the SWPPP. Revisions to the SWPPP will be documented on a Tracking Form for SWPPP Amendments included in Appendix G. A copy of this SWPPP, including the inspection checklists and modifications, will be kept on-site, and then maintained on file by San Jacinto River Waste Pits Superfund Site Project for three years following final stabilization of the Work Site or for such longer period as may be required by IPC. In lieu of hardcopy inspection forms, copies of inspections reports and SWPPP Amendment Tracking Forms may be maintained electronically and will be available upon request.

9. SWPPP Amendments

This SWPPP will be amended as needed during the Project and, at a minimum whenever:

– There is a change in design, construction, operation, or maintenance that has a significant effect on the discharge of pollutants to the waters of the State and which has not otherwise been addressed in this SWPPP
– Inspections or investigations indicate the SWPPP is not effective in eliminating or significantly minimizing pollutants from clearing, grading, or trenching activities or is not achieving the objectives of controlling pollutants
– There are changing Work Site conditions based on updated plans, new operators, new areas of responsibility and changes in BMPs
– Additional measures are necessary to protect endangered and/or threatened species or historic properties

Secondary operators will be responsible for providing information on changing construction, operation and maintenance to the primary operator. Updates to the SWPPP will be made by the primary operator in conjunction with the inspector.

Amendments to the SWPPP will be documented on the Tracking Form included in Appendix G. Other documents included that require periodic updates are Appendix D-Site Stabilization Tracking Form and Appendix H - Erosion and Sedimentation Control Plan maps of current Work Site erosion controls. In lieu of hardcopy forms, these appendices may also be maintained electronically and will be available upon request.

10. Termination of Coverage

The Work Site has authorization under ARARs as a large construction site under the General Permit. One of the following conditions must be met prior to terminating Permit coverage.

– Final stabilization has been achieved on all portions of the Work Site that are the responsibility of the permittee. Final stabilization will be achieved using hydromulch, or equivalent means. See Section 7.4 Stabilization Practices for definition of final stabilization.
– A transfer of operational control has occurred.
– The operator has obtained authorization under an individual or alternative TPDES permit.

In place of the Notice of Termination (NOT) required for large construction sites and in accordance with ARARs, the primary operator will document the following information:

– Final stabilization has been achieved on all portions of the Work Site that are the responsibility of the primary operator.
– The name, address and telephone number of the primary operator.
– The name, address, county and latitude and longitude of the construction site.
– A signed certification that either all stormwater discharges requiring authorization under the General Permit will no longer occur or that the operator is no longer the current operator and that all temporary structural erosion controls have been removed or have been transferred to a new operator.

Within 30 days completion of the Project and final stabilization of the Work Site, the secondary operator will perform the following:

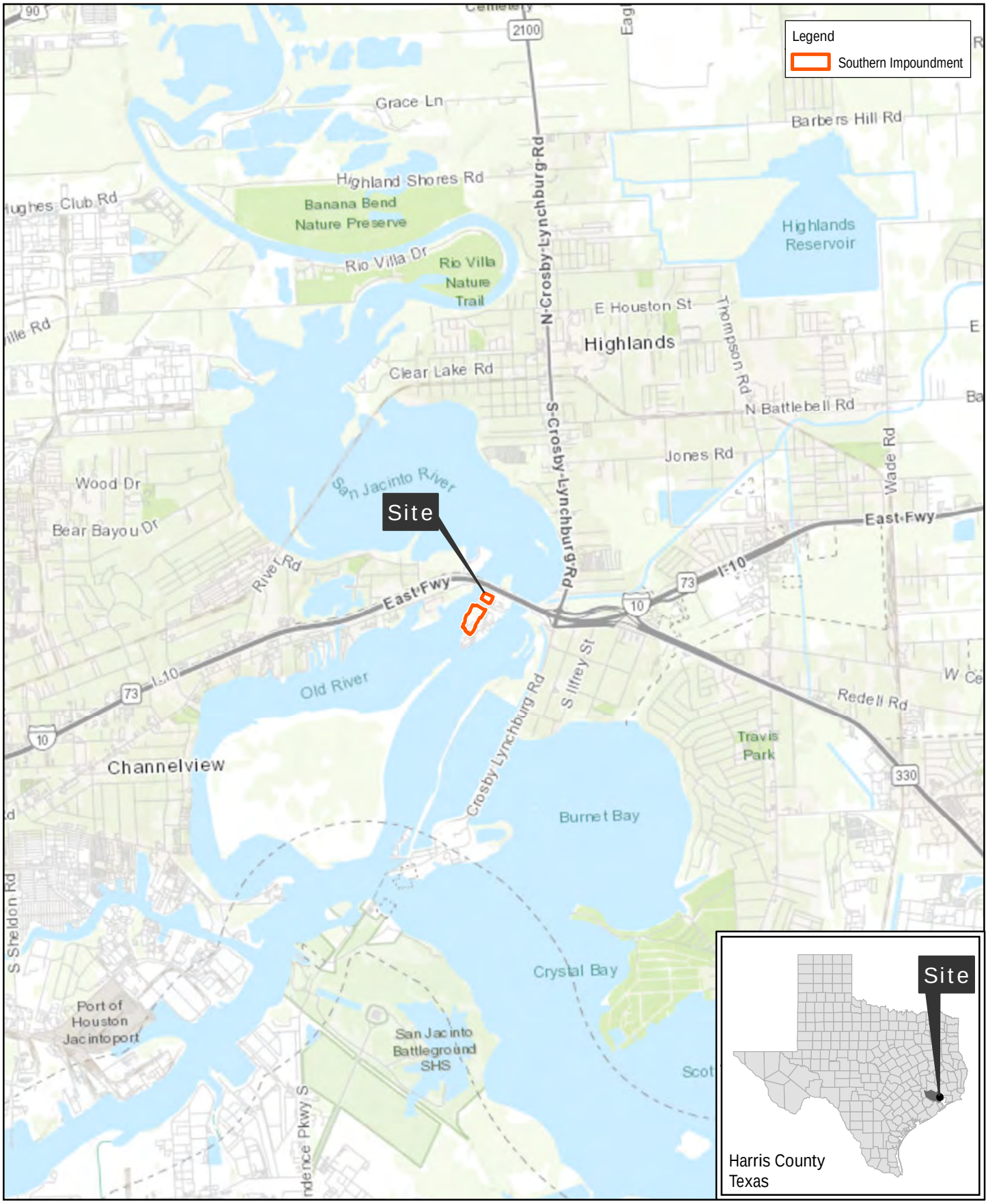
– Remove the site notice.

For at least three years from the date that coverage is terminated, the primary operator will maintain the following records:

- A copy of this SWPPP.
- All reports and actions required by the General Permit, including a copy of the completed Large Construction Site Primary Operator Notice.
- All records of submittal of forms submitted to the secondary operator of a large construction site, if applicable.

11. References

- EPA, 2017. Record of Decision, San Jacinto River Waste Pits. Harris County, Texas. EPA ID: TXN000606611. U.S. Environmental Protection Agency, Region 6. Dallas, Texas. October 2017.
- 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.
- GHD, 2021b. *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. April 19, 2021.
- Integral and Anchor QEA, 2013. Remedial Investigation Report Addendum 1, San Jacinto River Waste Pits Superfund Site. Prepared for International Paper Company and U.S. Environmental Protection Agency, Region 6. November 2013.
- GHD, 2022a. *100% Remedial Design Addendum*, San Jacinto River Waste Pits Superfund Site. Prepared for International Paper Company and U.S. Environmental Protection Agency, Region 6. June 2, 2022.
- GHD, 2022b*. Threatened & Endangered Species Habitat Suitability Assessment*, San Jacinto Waste Pits Superfund Site-Southern Impoundment. Prepared for International Paper Company and U.S. Environmental Protection Agency, Region 6. May 23, 2022.



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GHD

SAN JACINTO RIVER WASTE PITS
HARRIS COUNTY, TEXAS
WETLAND DELINEATION REPORT
SOUTHERN IMPOUNDMENT

Project No. 11215131
Date May 17, 2022

SITE VICINITY MAP

FIGURE 1

Q:\GIS\PROJECTS\11215000s\11215131\Wetland Delineation (Southern)\11215131_202204_WetlandDelineation(Southern)_GIS001.mxd

Data source: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community.

Appendices

Appendix A

General Permit to Discharge under the Texas Pollutant Discharge Elimination System

Texas Commission on Environmental Quality

P.O. Box 13087, Austin, Texas 78711-3087

GENERAL PERMIT TO DISCHARGE UNDER THE

TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM

under provisions of
Section 402 of the Clean Water Act
and Chapter 26 of the Texas Water Code

This permit supersedes and replaces
TPDES General Permit No. TXR150000, effective March 5, 2018

and

EPA-issued 2017 NPDES General Permit No. TXR10F000, modified June 27, 2019

Construction sites that discharge stormwater associated with construction activity located in the state of Texas may discharge to surface water in the state only according to monitoring requirements and other conditions set forth in this general permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ or Commission), the laws of the State of Texas, and other orders of the Commission of the TCEQ. The issuance of this general permit does not grant to the permittee the right to use private or public property for conveyance of stormwater and certain non-stormwater discharges along the discharge route. This includes property belonging to but not limited to any individual, partnership, corporation or other entity. Neither does this general permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the discharge route.

This general permit and the authorization contained herein shall expire at midnight, on March 5, 2023.

EFFECTIVE DATE: January 28, 2022

ISSUED DATE: January 28, 2022

For the Commission

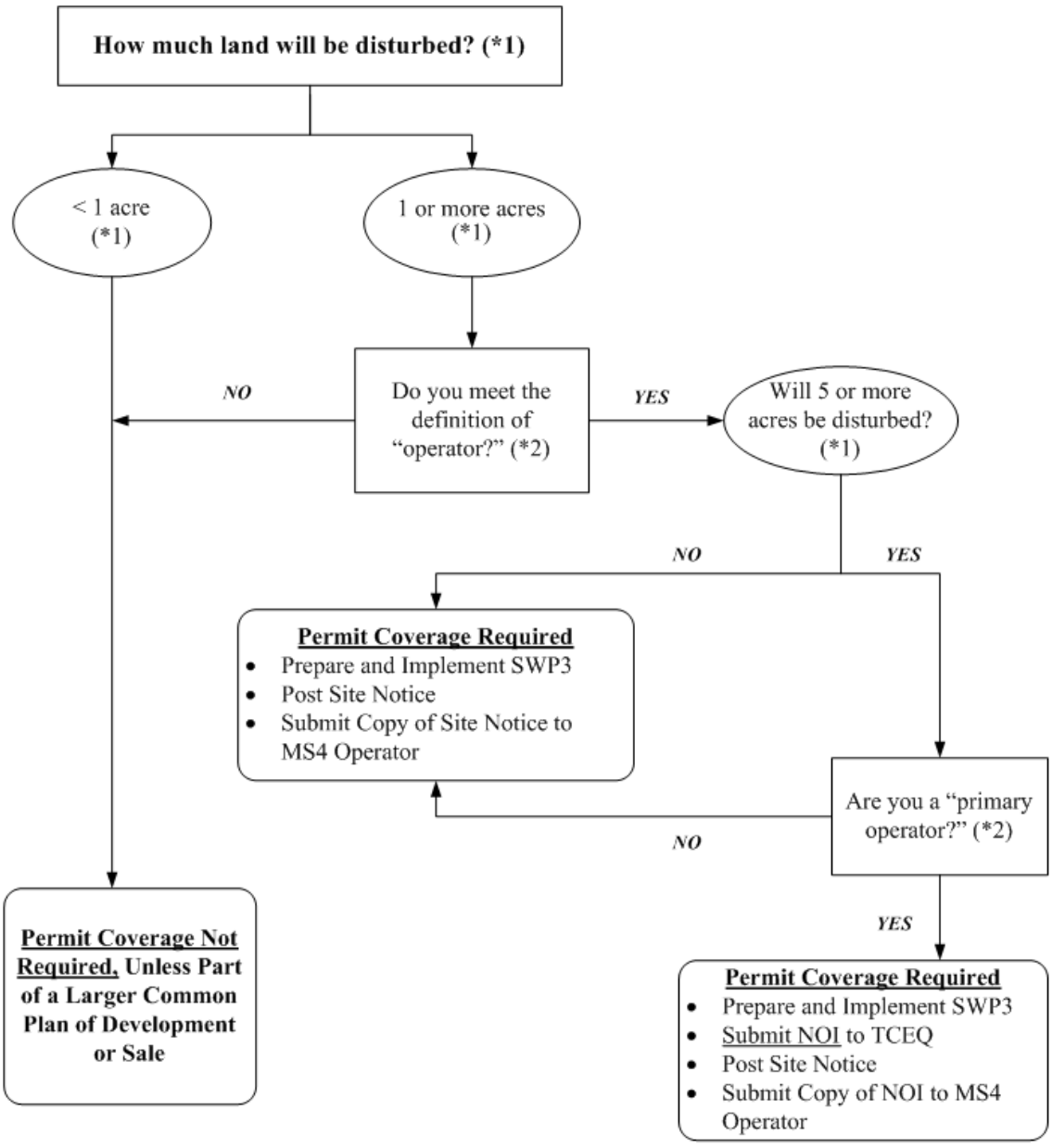
TPDES GENERAL PERMIT NUMBER TXR150000 RELATING TO STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES

Table of Contents

Part I. Flow Chart and Definitions

Section A. Flow Chart to Determine Whether Coverage is Required

When calculating the acreage of land area disturbed, include the disturbed land-area of all construction and construction support activities.



***(*1)** To determine the size of the construction project, use the size of the entire area to be disturbed, and include the size of the larger common plan of development or sale, if the project is part of a larger project (refer to Part I.B., "Definitions," for an explanation of "common plan of development or sale").*

***(*2)** Refer to the definitions for "operator," "primary operator," and "secondary operator" in Part I., Section B. of this permit.*

Section B. Definitions

Arid Areas - Areas with an average annual rainfall of 0 to 10 inches.

Best Management Practices (BMPs) - Schedules of activities, prohibitions of practices, maintenance procedures, structural controls, local ordinances, and other management practices to prevent or reduce the discharge of pollutants. BMPs also include treatment requirements, operating procedures, and practices to control construction site runoff, spills or leaks, waste disposal, or drainage from raw material storage areas.

Commencement of Construction - The initial disturbance of soils associated with clearing, grading, or excavation activities, as well as other construction-related activities (e.g., stockpiling of fill material, demolition).

Common Plan of Development - A construction activity that is completed in separate stages, separate phases, or in combination with other construction activities. A common plan of development (also known as a "common plan of development or sale") is identified by the documentation for the construction project that identifies the scope of the project, and may include plats, blueprints, marketing plans, contracts, building permits, a public notice or hearing, zoning requests, or other similar documentation and activities. A common plan of development does not necessarily include all construction projects within the jurisdiction of a public entity (e.g., a city or university). Construction of roads or buildings in different parts of the jurisdiction would be considered separate "common plans," with only the interconnected parts of a project being considered part of a "common plan" (e.g., a building and its associated parking lot and driveways, airport runway and associated taxiways, a building complex, etc.). Where discrete construction projects occur within a larger common plan of development or sale but are located ¼ mile or more apart, and the area between the projects is not being disturbed, each individual project can be treated as a separate plan of development or sale, provided that any interconnecting road, pipeline or utility project that is part of the same "common plan" is not included in the area to be disturbed.

Construction Activity - Includes soil disturbance activities, including clearing, grading, excavating, construction-related activity (e.g., stockpiling of fill material, demolition), and construction support activity. This does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site (e.g., the routine grading of existing dirt roads, asphalt overlays of existing roads, the routine clearing of existing rights-of-way, and similar maintenance activities). Regulated construction activity is defined in terms of small and large construction activity.

Construction Support Activity – A construction-related activity that specifically supports construction activity, which can involve earth disturbance or pollutant-generating activities of its own, and can include, but are not limited to, activities associated with concrete or asphalt batch plants, rock crushers, equipment staging or storage areas, chemical storage areas, material storage areas, material borrow areas, and excavated material disposal areas. Construction support activity must only directly support the construction activity authorized under this general permit.

Dewatering – The act of draining rainwater or groundwater from building foundations, vaults, and trenches.

Discharge – For the purposes of this permit, the drainage, release, or disposal of pollutants in stormwater and certain non-stormwater from areas where soil disturbing activities (e.g., clearing, grading, excavation, stockpiling of fill material, and demolition), construction materials or equipment storage or maintenance (e.g., fill piles, borrow area, concrete truck wash out, fueling), or other industrial stormwater directly related to the construction process (e.g., concrete or asphalt batch plants) are located.

Drought-Stricken Area – For the purposes of this permit, an area in which the National Oceanic and Atmospheric Administration's U.S. Seasonal Drought Outlook indicates for the period during which the construction will occur that any of the following conditions are

likely: (1) "Drought to persist or intensify", (2) "Drought ongoing, some improvement", (3) "Drought likely to improve, impacts ease", or (4) "Drought development likely". See http://www.cpc.ncep.noaa.gov/products/expert_assessment/seasonal_drought.html.

Edwards Aquifer - As defined under Texas Administrative Code (TAC) § 213.3 of this title (relating to the Edwards Aquifer), that portion of an arcuate belt of porous, water-bearing, predominantly carbonate rocks known as the Edwards and Associated Limestones in the Balcones Fault Zone trending from west to east to northeast in Kinney, Uvalde, Medina, Bexar, Comal, Hays, Travis, and Williamson Counties; and composed of the Salmon Peak Limestone, McKnight Formation, West Nueces Formation, Devil's River Limestone, Person Formation, Kainer Formation, Edwards Formation, and Georgetown Formation. The permeable aquifer units generally overlie the less-permeable Glen Rose Formation to the south, overlie the less-permeable Comanche Peak and Walnut Formations north of the Colorado River, and underlie the less-permeable Del Rio Clay regionally.

Edwards Aquifer Recharge Zone - Generally, that area where the stratigraphic units constituting the Edwards Aquifer crop out, including the outcrops of other geologic formations in proximity to the Edwards Aquifer, where caves, sinkholes, faults, fractures, or other permeable features would create a potential for recharge of surface waters into the Edwards Aquifer. The recharge zone is identified as that area designated as such on official maps located in the offices of the Texas Commission on Environmental Quality (TCEQ) and the appropriate regional office. The Edwards Aquifer Map Viewer, located at http://www.tceq.texas.gov/compliance/field_ops/eapp/mapdisclaimer.html, can be used to determine where the recharge zone is located.

Edwards Aquifer Contributing Zone - The area or watershed where runoff from precipitation flows downgradient to the recharge zone of the Edwards Aquifer. The contributing zone is located upstream (upgradient) and generally north and northwest of the recharge zone for the following counties: all areas within Kinney County, except the area within the watershed draining to Segment No. 2304 of the Rio Grande Basin; all areas within Uvalde, Medina, Bexar, and Comal Counties; all areas within Hays and Travis Counties, except the area within the watersheds draining to the Colorado River above a point 1.3 miles upstream from Tom Miller Dam, Lake Austin at the confluence of Barrow Brook Cove, Segment No. 1403 of the Colorado River Basin; and all areas within Williamson County, except the area within the watersheds draining to the Lampasas River above the dam at Stillhouse Hollow reservoir, Segment No. 1216 of the Brazos River Basin. The contributing zone is illustrated on the Edwards Aquifer map viewer at http://www.tceq.texas.gov/compliance/field_ops/eapp/mapdisclaimer.html.

Effluent Limitations Guideline (ELG) – Defined in 40 Code of Federal Regulations (CFR) § 122.2 as a regulation published by the Administrator under § 304(b) of the Clean Water Act (CWA) to adopt or revise effluent limitations.

Facility or Activity – For the purpose of this permit, referring to a construction site, the location of construction activity, or a construction support activity that is regulated under this general permit, including all contiguous land and fixtures (for example, ponds and materials stockpiles), structures, or appurtenances used at a construction site or industrial site.

Final Stabilization - A construction site status where any of the following conditions are met:

(a) All soil disturbing activities at the site have been completed and a uniform (that is, evenly distributed, without large bare areas) perennial vegetative cover with a density of at least 70% of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

(b) For individual lots in a residential construction site by either:

(1) the homebuilder completing final stabilization as specified in condition (a) above; or

(2) the homebuilder establishing temporary stabilization for an individual lot prior to the time of transfer of the ownership of the home to the buyer and after informing the homeowner of the need for, and benefits of, final stabilization. If temporary stabilization is not feasible, then the homebuilder may fulfill this requirement by retaining perimeter controls or BMPs, and informing the homeowner of the need for removal of temporary controls and the establishment of final stabilization. Fulfillment of this requirement must be documented in the homebuilder's stormwater pollution prevention plan (SWP3).

(c) For construction activities on land used for agricultural purposes (such as pipelines across crop or range land), final stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to surface water and areas that are not being returned to their preconstruction agricultural use must meet the final stabilization conditions of condition (a) above.

(d) In arid, semi-arid, and drought-stricken areas only, all soil disturbing activities at the site have been completed and both of the following criteria have been met:

(1) Temporary erosion control measures (for example, degradable rolled erosion control product) are selected, designed, and installed along with an appropriate seed base to provide erosion control for at least three years without active maintenance by the operator, and

(2) The temporary erosion control measures are selected, designed, and installed to achieve 70% of the native background vegetative coverage within three years.

Hyperchlorination of Waterlines – Treatment of potable water lines or tanks with chlorine for disinfection purposes, typically following repair or partial replacement of the waterline or tank, and subsequently flushing the contents.

Impaired Water - A surface water body that is identified as impaired on the latest approved CWA §303(d) List or waters with an EPA-approved or established total maximum daily load (TMDL) that are found on the latest EPA approved *Texas Integrated Report of Surface Water Quality for CWA Sections 305(b) and 303(d)*, which lists the category 4 and 5 water bodies.

Indian Country Land – All land within the limits of any Indian reservation under the jurisdiction of the United States government, notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation; (2) all dependent Indian communities with the borders of the United States whether within the originally or subsequently acquired territory thereof, and whether within or without the limits of a state; and (3) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same. (40 CFR §122.2)

Indian Tribe - Any Indian Tribe, band, group, or community recognized by the Secretary of the Interior and exercising governmental authority over a Federal Indian Reservation (40 CFR §122.2).

Infeasible –Not technologically possible, or not economically practicable and achievable in light of best industry practices. (40 CFR §450.11(b)).

Large Construction Activity - Construction activities including clearing, grading, and excavating that result in land disturbance of equal to or greater than five (5) acres of land. Large construction activity also includes the disturbance of less than five (5) acres of total

land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than five (5) acres of land. Large construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site (for example, the routine grading of existing dirt roads, asphalt overlays of existing roads, the routine clearing of existing right-of-ways, and similar maintenance activities.)

Linear Project – Includes the construction of roads, bridges, conduits, substructures, pipelines, sewer lines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities in a long, narrow area.

Low Rainfall Erosivity Waiver (LREW) - A written submission to the executive director from an operator of a construction site that is considered as small construction activity under the permit, which qualifies for a waiver from the requirements for small construction activities, only during the period of time when the calculated rainfall erosivity factor is less than five (5).

Minimize - To reduce or eliminate to the extent achievable using stormwater controls that are technologically available and economically practicable and achievable in light of best industry practices.

Municipal Separate Storm Sewer System (MS4) - A separate storm sewer system owned or operated by the United States, a state, city, town, county, district, association, or other public body (created by or pursuant to state law) having jurisdiction over the disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, that discharges to surface water in the state.

Notice of Change (NOC) – Written notification to the executive director from a discharger authorized under this permit, providing changes to information that was previously provided to the agency in a notice of intent form.

Notice of Intent (NOI) - A written submission to the executive director from an applicant requesting coverage under this general permit.

Notice of Termination (NOT) - A written submission to the executive director from a discharger authorized under this general permit requesting termination of coverage.

Operator - The person or persons associated with a large or small construction activity that is either a primary or secondary operator as defined below:

Primary Operator – the person or persons associated with construction activity that meets either of the following two criteria:

(a) the person or persons have on-site operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or

(b) the person or persons have day-to-day operational control of those activities at a construction site that are necessary to ensure compliance with a Storm Water Pollution Prevention Plan (SWP3) for the site or other permit conditions (for example, they are authorized to direct workers at a site to carry out activities required by the SWP3 or comply with other permit conditions).

Secondary Operator – The person or entity, often the property owner, whose operational control is limited to:

(a) the employment of other operators, such as a general contractor, to perform or supervise construction activities; or

(b) the ability to approve or disapprove changes to construction plans and specifications, but who does not have day-to-day on-site operational control over construction activities at the site.

Secondary operators must either prepare their own SWP3 or participate in a shared SWP3 that covers the areas of the construction site, where they have control over the construction plans and specifications.

If there is not a primary operator at the construction site, then the secondary operator is defined as the primary operator and must comply with the requirements for primary operators.

Outfall - For the purpose of this permit, a point source at the point where stormwater runoff associated with construction activity discharges to surface water in the state and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels, or other conveyances that connect segments of the same stream or other water of the U.S. and are used to convey waters of the U.S.

Permittee - An operator authorized under this general permit. The authorization may be gained through submission of a notice of intent, by waiver, or by meeting the requirements for automatic coverage to discharge stormwater runoff and certain non-stormwater discharges from construction activity.

Point Source –Any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are, or may be, discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff (40 CFR §122.2).

Pollutant - Dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, filter backwash, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into any surface water in the state. The term "pollutant" does not include tail water or runoff water from irrigation or rainwater runoff from cultivated or uncultivated rangeland, pastureland, and farmland. For the purpose of this permit, the term "pollutant" includes sediment.

Pollution - The alteration of the physical, thermal, chemical, or biological quality of, or the contamination of, any surface water in the state that renders the water harmful, detrimental, or injurious to humans, animal life, vegetation, or property or to public health, safety, or welfare, or impairs the usefulness or the public enjoyment of the water for any lawful or reasonable purpose (Texas Water Code (TWC) §26.001(14)).

Rainfall Erosivity Factor (R factor) - the total annual erosive potential that is due to climatic effects, and is part of the Revised Universal Soil Loss Equation (RUSLE).

Receiving Water - A "Water of the United States" as defined in 40 CFR §122.2 or a surface water in the state into which the regulated stormwater discharges.

Semiarid Areas - areas with an average annual rainfall of 10 to 20 inches.

Separate Storm Sewer System - A conveyance or system of conveyances (including roads with drainage systems, streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains), designed or used for collecting or conveying stormwater; that is not a combined sewer, and that is not part of a publicly owned treatment works (POTW).

Small Construction Activity - Construction activities including clearing, grading, and excavating that result in land disturbance of equal to or greater than one (1) acre and less than five (5) acres of land. Small construction activity also includes the disturbance of less than one (1) acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one (1) and

less than five (5) acres of land. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site (for example, the routine grading of existing dirt roads, asphalt overlays of existing roads, the routine clearing of existing right-of-ways, and similar maintenance activities).

Steep Slopes – Where a state, Tribe, local government, or industry technical manual (e.g. stormwater BMP manual) has defined what is to be considered a "steep slope", this permit's definition automatically adopts that definition. Where no such definition exists, steep slopes are automatically defined as those that are 15 percent or greater in grade.

Stormwater (or Stormwater Runoff) - Rainfall runoff, snow melt runoff, and surface runoff and drainage.

Stormwater Associated with Construction Activity - Stormwater runoff, as defined above, from a construction activity.

Structural Control (or Practice) - A pollution prevention practice that requires the construction of a device, or the use of a device, to reduce or prevent pollution in stormwater runoff. Structural controls and practices may include but are not limited to: silt fences, earthen dikes, drainage swales, sediment traps, check dams, subsurface drains, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins.

Surface Water in the State - Lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, wetlands, marshes, inlets, canals, the Gulf of Mexico inside the territorial limits of the state (from the mean high water mark (MHWM) out 10.36 miles into the Gulf), and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or non-navigable, and including the beds and banks of all water-courses and bodies of surface water, that are wholly or partially inside or bordering the state or subject to the jurisdiction of the state; except that waters in treatment systems which are authorized by state or federal law, regulation, or permit, and which are created for the purpose of waste treatment are not considered to be water in the state.

Temporary Stabilization - A condition where exposed soils or disturbed areas are provided a protective cover or other structural control to prevent the migration of pollutants. Temporary stabilization may include temporary seeding, geotextiles, mulches, and other techniques to reduce or eliminate erosion until either permanent stabilization can be achieved or until further construction activities take place.

Thawing Conditions – for the purposes of this permit, thawing conditions are expected based on the historical likelihood of two or more days with daytime temperatures greater than 32°F. This date can be determined by looking at historical weather data.

Note: The estimation of thawing conditions is for planning purposes only. During construction, the permittee will be required to conduct site inspections based upon actual conditions (i.e., if thawing conditions occur sooner than expected, the permittee will be required to conduct inspections at the regular frequency).

Total Maximum Daily Load (TMDL) - The total amount of a pollutant that a water body can assimilate and still meet the Texas Surface Water Quality Standards.

Turbidity – A condition of water quality characterized by the presence of suspended solids and/or organic material.

Waters of the United States - Waters of the United States or waters of the U.S. means:

(a) all waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(b) all interstate waters, including interstate wetlands;

(c) all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds that the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

(1) which are or could be used by interstate or foreign travelers for recreational or other purposes;

(2) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

(3) which are used or could be used for industrial purposes by industries in interstate commerce;

(d) all impoundments of waters otherwise defined as waters of the United States under this definition;

(e) tributaries of waters identified in paragraphs (a) through (d) of this definition;

(f) the territorial sea; and

(g) wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA are not waters of the U.S. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the U.S. (such as disposal area in wetlands) nor resulted from the impoundment of waters of the U.S. Waters of the U.S. do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with EPA.

Part II. Permit Applicability and Coverage

Section A. Discharges Eligible for Authorization

1. Stormwater Associated with Construction Activity

Discharges of stormwater runoff and certain non-stormwater discharges from small and large construction activities may be authorized under this general permit, except as described in Part II.C. of this permit.

2. Discharges of Stormwater Associated with Construction Support Activities

Discharges of stormwater runoff and certain non-stormwater discharges from construction support activities as defined in Part I.B of this general permit may be authorized, provided that the following conditions are met:

(a) the construction support activities are located within one (1) mile from the boundary of the construction site where the construction activity authorized under the permit is being conducted that requires the support of these activities;

(b) an SWP3 is developed and implemented for the permitted construction site according to the provisions in Part III.F of this general permit, including appropriate controls and measures to reduce erosion and the discharge of pollutants in stormwater runoff according to the provisions in Part III.G of this general permit;

(c) the activities are directly related to the construction site;

(d) the activities are not a commercial operation, nor serve other unrelated construction projects; and

(e) the activities do not continue to operate beyond the completion of the construction activity at the project it supports.

Construction support activities that operate outside the terms provided in (a) through (e) above must obtain authorization under a separate Texas Pollutant Discharge Elimination System (TPDES) permit, which may include the TPDES Multi Sector General Permit (MSGP), TXR050000 (related to stormwater discharges associated with industrial activity), an alternative general permit (if available), or an individual water quality permit.

3. Non-Stormwater Discharges

The following non-stormwater discharges from sites authorized under this general permit are also eligible for authorization under this general permit:

(a) discharges from fire-fighting activities (fire-fighting activities do not include washing of trucks, run-off water from training activities, test water from fire suppression systems, or similar activities);

(b) uncontaminated fire hydrant flushings (excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life), which include flushings from systems that utilize potable water, surface water, or groundwater that does not contain additional pollutants (uncontaminated fire hydrant flushings do not include systems utilizing reclaimed wastewater as a source water);

(c) water from the routine external washing of vehicles, the external portion of buildings or structures, and pavement, where solvents, detergents, and soaps are not used, where spills or leaks of toxic or hazardous materials have not occurred (unless spilled materials have been removed; and if local state, or federal regulations are

applicable, the materials are removed according to those regulations), and where the purpose is to remove mud, dirt, or dust;

(d) uncontaminated water used to control dust;

(e) potable water sources, including waterline flushings, but excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life;

(f) uncontaminated air conditioning condensate;

(g) uncontaminated ground water or spring water, including foundation or footing drains where flows are not contaminated with industrial materials such as solvents; and

(h) lawn watering and similar irrigation drainage.

4. Other Permitted Discharges

Any discharge authorized under a separate National Pollutant Discharge Elimination System (NPDES), TPDES, or TCEQ permit may be combined with discharges authorized by this general permit, provided those discharges comply with the associated permit.

Section B. Concrete Truck Wash Out

The wash out of concrete trucks at regulated construction sites must be performed in accordance with the requirements of Part V of this general permit.

Section C. Limitations on Permit Coverage

1. Post Construction Discharges

Discharges that occur after construction activities have been completed, and after the construction site and any supporting activity site have undergone final stabilization, are not eligible for coverage under this general permit. Discharges originating from the sites are not authorized under this general permit following the submission of the notice of termination (NOT) or removal of the appropriate site notice, as applicable, for the regulated construction activity.

2. Prohibition of Non-Stormwater Discharges

Except as otherwise provided in Part II.A of this general permit, only discharges that are composed entirely of stormwater associated with construction activity may be authorized under this general permit.

3. Compliance with Water Quality Standards

Discharges to surface water in the state that would cause, have the reasonable potential to cause, or contribute to a violation of water quality standards or that would fail to protect and maintain existing designated uses of surface water in the state are not eligible for coverage under this general permit. The executive director may require an application for an individual permit or alternative general permit (see Parts II.H.2 and 3.) to authorize discharges to surface water in the state if the executive director determines that any activity will cause, has the reasonable potential to cause, or contribute to a violation of water quality standards or is found to cause, has the reasonable potential to cause, or contribute to, the impairment of a designated use. The executive director may also require an application for an individual permit considering factors described in Part II.H.3 of this general permit.

4. Impaired Receiving Waters and Total Maximum Daily Load (TMDL) Requirements

The permittee shall determine whether the authorized discharge is to an impaired water body on the latest EPA-approved CWA Section 303(d) List or waters with an EPA-approved or established TMDL that are found on the latest EPA-approved *Texas Integrated Report of Surface Water Quality for CWA Sections 305(b) and 303(d)*, which lists the category 4 and 5 water bodies.

New sources or new discharges of the pollutants of concern to impaired waters are not authorized by this permit unless otherwise allowable under 30 TAC Chapter 305 and applicable state law. Impaired waters are those that do not meet applicable water quality standard(s) and are listed as category 4 or 5 in the current version of the *Texas Integrated Report of Surface Water Quality*, and waterbodies listed on the CWA § 303(d) list. Pollutants of concern are those for which the water body is listed as impaired.

Discharges of the pollutants of concern to impaired water bodies for which there is a TMDL are not eligible for coverage under this general permit unless they are consistent with the approved TMDL. Permittees must incorporate the conditions and requirements applicable to their discharges into their SWP3, in order to be eligible for coverage under this general permit. For consistency with the construction stormwater-related items in an approved TMDL, the SWP3 must be consistent with any applicable condition, goal, or requirement in the TMDL, TMDL Implementation Plan (I-Plan), or as otherwise directed by the executive director.

5. Discharges to the Edwards Aquifer Recharge or Contributing Zone

Discharges cannot be authorized by this general permit where prohibited by 30 TAC Chapter 213 (relating to Edwards Aquifer). In addition, commencement of construction (i.e., the initial disturbance of soils associated with clearing, grading, or excavating activities, as well as other construction-related activities such as stockpiling of fill material and demolition) at a site regulated under 30 TAC Chapter 213, may not begin until the appropriate Edwards Aquifer Protection Plan (EAPP) has been approved by the TCEQ's Edwards Aquifer Protection Program.

(a) For new discharges located within the Edwards Aquifer Recharge Zone, or within that area upstream from the recharge zone and defined as the Contributing Zone (CZ), operators must meet all applicable requirements of, and operate according to, 30 TAC Chapter 213 (Edwards Aquifer Rule) in addition to the provisions and requirements of this general permit.

(b) For existing discharges located within the Edwards Aquifer Recharge Zone, the requirements of the agency-approved Water Pollution Abatement Plan (WPAP) under the Edwards Aquifer Rule is in addition to the requirements of this general permit. BMPs and maintenance schedules for structural stormwater controls, for example, may be required as a provision of the rule. All applicable requirements of the Edwards Aquifer Rule for reductions of suspended solids in stormwater runoff are in addition to the requirements in this general permit for this pollutant.

(c) For discharges located within ten stream miles upstream of the Edwards Aquifer recharge zone, applicants shall also submit a copy of the NOI to the appropriate TCEQ regional office.

Counties: Comal, Bexar, Medina, Uvalde, and Kinney

Contact: TCEQ Water Program Manager
San Antonio Regional Office
14250 Judson Road
San Antonio, Texas 78233-4480
(210) 490-3096

Counties: Williamson, Travis, and Hays

Contact: TCEQ Water Program Manager
Austin Regional Office
12100 Park 35 Circle
Room 179, Building A
Austin, Texas 78753
(512) 339-2929

6. Discharges to Specific Watersheds and Water Quality Areas

Discharges otherwise eligible for coverage cannot be authorized by this general permit where prohibited by 30 TAC Chapter 311 (relating to Watershed Protection) for water quality areas and watersheds.

7. Protection of Streams and Watersheds by Other Governmental Entities

This general permit does not limit the authority or ability of federal, other state, or local governmental entities from placing additional or more stringent requirements on construction activities or discharges from construction activities. For example, this permit does not limit the authority of a home-rule municipality provided by Texas Local Government Code §401.002.

8. Indian Country Lands

Stormwater runoff from construction activities occurring on Indian Country lands are not under the authority of the TCEQ and are not eligible for coverage under this general permit. If discharges of stormwater require authorization under federal NPDES regulations, authority for these discharges must be obtained from the U.S. Environmental Protection Agency (EPA).

9. Exempt Oil and Gas Activities

The CWA § 402(l)(2) provides that stormwater discharges from construction activities related to oil and gas exploration, production, processing, or treatment, or transmission facilities are exempt from regulation under this permit. The term "oil and gas exploration, production, processing, or treatment operations, or transmission facilities" is defined in 33 United States Code Annotated § 1362(24).

The exemption in CWA § 402(l)(2) *includes* stormwater discharges from construction activities regardless of the amount of disturbed acreage, which are necessary to prepare a site for drilling and the movement and placement of drilling equipment, drilling waste management pits, in field treatment plants, and in field transportation infrastructure (e.g., crude oil pipelines, natural gas treatment plants, and both natural gas transmission pipeline compressor and crude oil pumping stations) necessary for the operation of most producing oil and gas fields. Construction activities are defined in 33 U.S. Code § 1362(24) and interpreted by EPA in the final rule. *See* June 12, 2006 Amendments to the NPDES Regulations for Storm Water Discharges Associated with Oil and Gas Exploration, Production, Processing, or Treatment Operations or Transmission Facilities (71 FR 33628, Part V. Terminology).

The exemption *does not include* stormwater discharges from the construction of administrative buildings, parking lots, and roads servicing an administrative building at an oil and gas site, as these are considered traditional construction activities.

As described in 40 CFR § 122.26(c)(1)(iii) [*regulations prior to 2006*], discharges from oil and gas construction activities are waived from CWA Section 402(l)(2) permit coverage *unless* the construction activity (or construction support activity) has had a discharge of stormwater resulting in the discharge of a reportable quantity of oil or

hazardous substances or the discharge contributes to a violation of water quality standards.

Exempt oil and gas activities which have lost their exemption as a result of one of the above discharges, must obtain permit coverage under this general permit, an alternative general permit, or a TPDES individual permit prior to the next discharge.

10. Stormwater Discharges from Agricultural Activities

Stormwater discharges from agricultural activities that are not point source discharges of stormwater are not subject to TPDES permit requirements. These activities may include clearing and cultivating ground for crops, construction of fences to contain livestock, construction of stock ponds, and other similar agricultural activities. Discharges of stormwater runoff associated with the construction of facilities that are subject to TPDES regulations, such as the construction of concentrated animal feeding operations, would be point sources regulated under this general permit.

11. Endangered Species Act

Discharges that would adversely affect a listed endangered or threatened aquatic or aquatic-dependent species or its critical habitat are not authorized by this permit, unless the requirements of the Endangered Species Act are satisfied. Federal requirements related to endangered species apply to all TPDES permitted discharges and site-specific controls may be required to ensure that protection of endangered or threatened species is achieved. If a permittee has concerns over potential impacts to listed species, the permittee may contact TCEQ for additional information.

12. Other

Nothing in Part II of the general permit is intended to negate any person's ability to assert *force majeure* (act of God, war, strike, riot, or other catastrophe) defenses found in 30 TAC §70.7.

Section D. Deadlines for Obtaining Authorization to Discharge

1. Large Construction Activities

(a) New Construction - Discharges from sites where the commencement of construction activity occurs on or after the effective date of this general permit must be authorized, either under this general permit or a separate TPDES permit, prior to the commencement of those construction activities.

(b) Ongoing Construction - Operators of large construction activities currently authorized under the TPDES Construction General Permit TXR150000 (effective on March 5, 2018), are not required to submit a new or renewal NOI. These operators may continue to discharge under the terms and conditions of the 2018 general permit and shall maintain a copy of that general permit and authorization issued under that general permit at the facility.

(c) Facilities Authorized under EPA-issued NPDES Construction General Permit TXR10F000 – Existing operators of large construction activities needing permit coverage after the effective date of this permit, and currently authorized under the EPA-issued 2017 NPDES Construction General Permit TXR10F000 (modified on June 27, 2019), must submit an NOI to obtain authorization under this general permit or a separate TPDES permit, within 90 days of the effective date of this general permit. During this interim or grace period, the operator must continue to meet the conditions and requirements of the EPA-issued 2017 NPDES Construction General Permit.

2. Small Construction Activities

(a) New Construction - Discharges from sites where the commencement of construction activity occurs on or after the effective date of this general permit must be authorized, either under this general permit or a separate TPDES permit, prior to the commencement of those construction activities.

(b) Ongoing Construction - Discharges from ongoing small construction activities that commenced prior to the effective date of this general permit, may continue to discharge under the terms and conditions of the TPDES Construction General Permit TXR150000 (effective on March 5, 2018) and shall maintain a copy of that general permit at the facility.

(c) Facilities Authorized under EPA-issued NPDES Construction General Permit TXR10F000 – Existing operators of small construction activities needing permit coverage after the effective date of this permit, and currently authorized under the EPA-issued 2017 NPDES Construction General Permit TXR10F000 (modified on June 27, 2019), must meet the requirements to be authorized under this general permit or a separate TPDES permit, within 90 days of the effective date of this general permit. During this interim or grace period, the operator must continue to meet the conditions and requirements of the EPA-issued 2017 NPDES Construction General Permit.

Section E. Obtaining Authorization to Discharge

1. Automatic Authorization for Small Construction Activities with Low Potential for Erosion:

Operators of small construction activity, as defined in Part I.B of this general permit, shall not submit an NOI for coverage, unless otherwise required by the executive director.

Operators of small construction activities, which occur in certain counties and during periods of low potential for erosion that do not meet the conditions of the waiver described in Part II.G of this general permit, may be automatically authorized under this general permit if all the following conditions are met.

(a) the construction activity occurs in a county and during the corresponding date range(s) listed in Appendix A;

(b) the construction activity is initiated and completed, including either final or temporary stabilization of all disturbed areas, within the time frame identified in Appendix A for the location of the construction site;

(c) all temporary stabilization is adequately maintained to effectively reduce or prohibit erosion, permanent stabilization activities have been initiated, and a condition of final stabilization is completed no later than 30 days following the end date of the time frame identified in Appendix A for the location of the construction site;

(d) the permittee signs a completed TCEQ small construction site notice for low potential for erosion, including the certification statement;

(e) a signed and certified copy of the small construction site notice for low potential for erosion is posted at the construction site in a location where it is readily available for viewing by the general public, local, state, and federal authorities prior to commencing construction activities, and maintained in that location until completion of the construction activity;

NOTE: Posted site notices may have a redacted signature as long as there is an original signed and certified site notice, with a viewable signature, located on-site and available for review by any applicable regulatory authority.

(f) a copy of the signed and certified small construction site notice for low potential for erosion is provided to the operator of any MS4 receiving the discharge at least two days prior to commencement of construction activities;

(g) discharges of stormwater runoff or other non-stormwater discharges from any supporting concrete batch plant or asphalt batch plant is separately authorized under an individual TPDES permit, another TPDES general permit, or under an individual TCEQ permit where stormwater and non-stormwater is disposed of by evaporation or irrigation (discharges are adjacent to water in the state); and

(h) any non-stormwater discharges are either authorized under a separate permit or authorization, are not considered by TCEQ to be a wastewater, or are captured and routed for disposal at a publicly operated treatment works or licensed waste disposal facility.

If all of the conditions in (a) – (h) above are met, then the operator(s) of small construction activities with low potential for erosion are not required to develop a SWP3.

If an operator is conducting small construction activities and any of the above conditions (a) – (h) are not met, the operator cannot declare coverage under the automatic authorization for small construction activities with low potential for erosion and must meet the requirements for automatic authorization (all other) small construction activities, described below in Part II.E.2.

For small construction activities that occur during a period with a low potential for erosion, where automatic authorization under this section is not available, an operator may apply for and obtain a waiver from permitting (Low Rainfall Erosivity Waiver – LREW), as described in Part II.G of this general permit. Waivers from coverage under the LREW do not allow for any discharges of non-stormwater and the operator must ensure that discharges on non-stormwater are either authorized under a separate permit or authorization.

2. Automatic Authorization for Small Construction Activities:

Operators of small construction activities as defined in Part I.B of this general permit shall not submit an NOI for coverage, unless otherwise required by the executive director.

Operators of small construction activities, as defined in Part I.B of this general permit or as defined but who do not meet in the conditions and requirements located in Part II.E.1 above, may be automatically authorized for small construction activities, provided that they meet all of the following conditions:

(a) develop a SWP3 according to the provisions of this general permit, that covers either the entire site or all portions of the site for which the applicant is the operator, and implement the SWP3 prior to commencing construction activities;

(b) all operators of regulated small construction activities must post a copy of a signed and certified Small Construction site notice, the notice must be posted at the construction site in a location where it is safely and readily available for viewing by the general public, local, state, and federal authorities, at least two days prior to commencing construction activity , and maintain the notice in that location until completion of the construction activity (for linear construction activities, e.g. pipeline or highway, the site notice must be placed in a publicly accessible location near where construction is actively underway; notice for these linear sites may be relocated, as necessary, along the length of the project, and the notice must be safely and readily available for viewing by the general public; local, state, and federal authorities);

(c) operators must maintain a posted site notice at the construction site until final stabilization has been achieved; and

NOTE: Posted site notices may have a redacted signature as long as there is an original signed and certified Small Construction site notice, with a viewable signature, located on-site and available for review by an applicable regulatory authority.

(d) provide a copy of the signed and certified construction site notice to the operator of any municipal separate storm sewer system (MS4) receiving the discharge at least two days prior to commencement of construction activities.

As described in Part I.B of this general permit, large construction activities include those that will disturb less than five (5) acres of land, but that are part of a larger common plan of development or sale that will ultimately disturb five (5) or more acres of land, and must meet the requirements of Part II.E.3. below.

3. Authorization for Large Construction Activities:

Operators of large construction activities that qualify for coverage under this general permit must meet all of the following conditions:

(a) develop a SWP3 according to the provisions of this general permit that covers either the entire site or all portions of the site where the applicant is the operator. The SWP3 must be developed and implemented prior to obtaining coverage and prior to commencing construction activities;

(b) primary operators of large construction activities must submit an NOI prior to commencing construction activity at a construction site. A completed NOI must be submitted to TCEQ electronically using the online e-Permits system on TCEQ's website. Operators with an electronic reporting waiver must submit a completed NOI to TCEQ at least seven (7) days prior to prior to commencing construction activity to obtain provisional coverage seven (7) days from the postmark date for delivery to the TCEQ. An authorization is no longer provisional when the executive director finds the NOI is administratively complete and an authorization number is issued to the permittee for the construction site indicated on the NOI.

If an additional primary operator is added after the initial NOI is submitted, the additional primary operator must meet the same requirements for existing primary operator(s), as indicated above.

If the primary operator changes due to responsibility at the site being transferred from one primary operator to another after the initial NOI is submitted, the new primary operator must submit a paper NOI or an electronic NOI at least ten (10) days prior to assuming operational control of a construction site and commencing construction activity.

Operators that submit NOIs electronically must use the online e-Permits system available through the TCEQ website.

(c) all operators of large construction activities must post a site notice in accordance with Part III.D.2 of this permit. The site notice must be located where it is safely and readily available for viewing by the general public, local, state, and federal authorities prior to commencing construction activities, and must be maintained in that location until completion of the construction activity (for linear construction activities, e.g. pipeline or highway, the site notice must be placed in a publicly accessible location near where construction is actively underway; notice for these linear sites may be relocated, as necessary, along the length of the project, and the notice must be safely and readily available for viewing by the general public, local, state, and federal authorities);

(d) two days prior to commencing construction activities, all primary operators must:

i. provide a copy of the signed NOI to the operator of any MS4 receiving the discharge and to any secondary construction operator, and

ii. list in the SWP3 the names and addresses of all MS4 operators receiving a copy;

(e) all persons meeting the definition of "secondary operator" in Part I of this permit are hereby notified that they are regulated under this general permit, but are not required to submit an NOI, provided that a primary operator at the site has submitted an NOI, or prior to commencement of construction activities, a primary operator is required to submit an NOI and the secondary operator has provided notification to the operator(s) of the need to obtain coverage (with records of notification available upon request). Any secondary operator notified under this provision may alternatively submit an NOI under this general permit, may seek coverage under an alternative TPDES individual permit, or may seek coverage under an alternative TPDES general permit if available; and

(f) all secondary operators of large construction activities must post a copy of the signed and certified Secondary Operator construction site notice and provide a copy of the signed and certified site notice to the operator of any MS4 receiving the discharge at least two days prior to the commencement construction activities.

NOTE: Posted site notices may have a redacted signature as long as there is an original signed and certified Secondary Operator construction site notice, with a viewable signature, located on-site and available for review by an applicable regulatory authority.

Effective September 1, 2018, applicants must submit an NOI using the online e-Permits system available through the TCEQ website, or request and obtain a waiver from electronic reporting from the TCEQ. Waivers from electronic reporting are not transferrable and expire on the same date as the authorization to discharge.

4. Waivers for Small Construction Activities:

Operators of certain small construction activities may obtain a waiver from coverage under this general permit, if applicable. The requirements are outlined in Part II.G below.

5. Effective Date of Coverage

(a) Operators of small construction activities as described in either Part II.E.1 or II.E.2 above are authorized immediately following compliance with the applicable conditions of Part II.E.1 or II.E.2. Secondary operators of large construction activities as described in Part II.E.3 above are authorized immediately following compliance with the applicable conditions in Part II.E.3. For activities located in areas regulated by 30 TAC Chapter 213, related to the Edwards Aquifer, this authorization to discharge is separate from the requirements of the operator's responsibilities under that rule. Construction may not commence for sites regulated under 30 TAC Chapter 213 until all applicable requirements of that rule are met.

(b) Primary operators of large construction activities as described in Part II.E.3 above that electronically submit an NOI are authorized immediately following confirmation of receipt of the electronic form by the TCEQ, unless otherwise notified by the executive director. Operators with an electronic reporting waiver are provisionally authorized seven (7) days from the date that a completed paper NOI is postmarked for delivery to the TCEQ, unless otherwise notified by the executive director. An authorization is no longer provisional when the executive director finds the NOI is administratively complete and an authorization number is issued to the permittee for the construction site indicated on the NOI.

For construction activities located in areas regulated by 30 TAC Chapter 213, related to the Edwards Aquifer, this authorization to discharge is separate from the requirements of the operator's responsibilities under that rule. Construction activities may not commence for sites regulated under 30 TAC Chapter 213 until all applicable requirements of that rule are met.

(c) Operators are not prohibited from submitting late NOIs or posting late notices to obtain authorization under this general permit. The TCEQ reserves the right to take appropriate enforcement action for any unpermitted activities that may have occurred between the time construction commenced and authorization was obtained.

(d) If operators that submitted NOIs have active authorizations for construction activities that are ongoing when this general permit expires on March 5, 2023 and a new general permit is issued, a 90-day interim (grace) period is granted to provide coverage that is administratively continued until operators with active authorizations can obtain coverage under the newly issued construction general permit (CGP). The 90-day grace period starts on the effective date of the newly issued CGP.

6. Notice of Change (NOC)

If relevant information provided in the NOI changes, the operator that has submitted the NOI must submit an NOC to TCEQ at least fourteen (14) days before the change occurs, if possible. Where a 14-day advance notice is not possible, the operator must submit an NOC to TCEQ within 14-days of discovery of the change. If the operator becomes aware that it failed to submit any relevant facts or submitted incorrect information in an NOI, the correct information must be submitted to TCEQ in an NOC within 14 days after discovery. The NOC shall be submitted on a form provided by the executive director, or by letter if an NOC form is not available. A copy of the NOC form or letter must also be placed in the SWP3 and provided to the operator of any MS4 receiving the discharge. A list that includes the names and addresses of all MS4 operators receiving a copy of the NOC (or NOC letter) must be included in the SWP3.

Information on an NOC may include, but is not limited to, the following: a change in the description of the construction project; an increase in the number of acres disturbed (for increases of one or more acres); or the name of the operator (where the name of the operator has changed).

A transfer of operational control from one operator to another, including a transfer of the ownership of a company. Coverage under this general permit is not transferable from one operator to another or one company to another, and may not be included in an NOC.

A transfer of ownership of a company may include, but is not limited to, the following: changes to the structure of a company, such as changing from a partnership to a corporation or changing corporation types, so that the filing number (or charter number) that is on record with the Texas Secretary of State must be changed.

An NOC is not required for notifying TCEQ of a decrease in the number of acres disturbed. This information must be included in the SWP3 and retained on site.

Effective September 1, 2018, applicants must submit an NOC using the online e-Permits system available through the TCEQ website, or request and obtain a waiver from electronic reporting from the TCEQ. Waivers from electronic reporting are not transferrable and expire on the same date as the authorization to discharge.

7. Signatory Requirement for NOI Forms, Notice of Termination (NOT) Forms, NOC Letters, and Construction Site Notices

NOI forms, NOT forms, NOC letters, and Construction Site Notices that require a signature must be signed according to 30 TAC § 305.44 (relating to Signatories for Applications).

8. Contents of the NOI

The NOI form shall require, at a minimum, the following information:

(a) the TPDES CGP authorization number for existing authorizations under this general permit, where the operator submits an NOI to renew coverage within 90 days of the effective date of this general permit;

(b) the name, address, and telephone number of the operator filing the NOI for permit coverage;

(c) the name (or other identifier), address, county, and latitude/longitude of the construction project or site;

(d) the number of acres that will be disturbed by the applicant;

(e) confirmation that the project or site will not be located on Indian Country lands;

(f) confirmation that a SWP3 has been developed in accordance with this general permit, that it will be implemented prior to commencement of construction activities, and that it is compliant with any applicable local sediment and erosion control plans; for multiple operators who prepare a shared SWP3, the confirmation for an operator may be limited to its obligations under the SWP3 provided all obligations are confirmed by at least one operator;

(g) name of the receiving water(s);

(h) the classified segment number for each classified segment that receives discharges from the regulated construction activity (if the discharge is not directly to a classified segment, then the classified segment number of the first classified segment that those discharges reach); and

(i) the name of all surface waters receiving discharges from the regulated construction activity that are on the latest EPA-approved CWA § 303(d) List of impaired waters or Texas Integrated Report of Surface Water Quality for CWA Sections 305(b) and 303(d) as not meeting applicable state water quality standards.

Section F. Terminating Coverage

1. Notice of Termination (NOT) Required

Each operator that has submitted an NOI for authorization of large construction activities under this general permit must apply to terminate that authorization following the conditions described in this section of the general permit.

Authorization of large construction must be terminated by submitting an NOT on a paper form to TCEQ supplied by the executive director or electronically via the online e-Permits system available through the TCEQ website. Authorization to discharge under this general permit terminates at midnight on the day a paper NOT is postmarked for delivery to the TCEQ or immediately following confirmation of the receipt of the NOT submitted electronically by the TCEQ. Compliance with the conditions and requirements of this permit is required until an NOT is submitted.

Effective September 1, 2018, applicants must submit an NOT using the online e-Permits system available through the TCEQ website, or request and obtain a waiver from

electronic reporting from the TCEQ. Waivers from electronic reporting are not transferrable and expire on the same date as the authorization to discharge.

The NOT must be submitted to TCEQ, and a copy of the NOT provided to the operator of any MS4 receiving the discharge (with a list in the SWP3 of the names and addresses of all MS4 operators receiving a copy), within 30 days after any of the following conditions are met:

(a) final stabilization has been achieved on all portions of the site that are the responsibility of the operator;

(b) a transfer of operational control has occurred (See Section II.F.4 below); or

(c) the operator has obtained alternative authorization under an individual TPDES permit or alternative TPDES general permit.

2. Minimum Contents of the NOT

The NOT form shall require, at a minimum, the following information:

(a) if authorization for construction activity was granted following submission of an NOI, the permittee's site-specific TPDES authorization number for a specific construction site;

(b) an indication of whether final stabilization has been achieved at the site and a NOT has been submitted or if the permittee is simply no longer an operator at the site;

(c) the name, address, and telephone number of the permittee submitting the NOT;

(d) the name (or other identifier), address, county, and location (latitude/longitude) of the construction project or site; and

(e) a signed certification that either all stormwater discharges requiring authorization under this general permit will no longer occur, or that the applicant is no longer the operator of the facility or construction site, and that all temporary structural erosion controls have either been removed, will be removed on a schedule defined in the SWP3, or have been transferred to a new operator if the new operator has applied for permit coverage. Erosion controls that are designed to remain in place for an indefinite period, such as mulches and fiber mats, are not required to be removed or scheduled for removal.

3. Termination of Coverage for Small Construction Sites and for Secondary Operators at Large Construction Sites

(a) Each operator that has obtained automatic authorization for small construction or is a secondary operator for large construction must perform the following when terminating coverage under the permit:

i. remove the site notice;

ii. complete the applicable portion of the site notice related to removal of the site notice; and

iii. submit a copy of the completed site notice to the operator of any MS4 receiving the discharge (or provide alternative notification as allowed by the MS4 operator, with documentation of such notification included in the SWP3).

(b) The activities described in Part II.F.3.(a) above must be completed by the operator within 30 days of meeting any of the following conditions:

i. final stabilization has been achieved on all portions of the site that are the responsibility of the operator;

ii. a transfer of day-to-day operational control over activities necessary to ensure compliance with the SWP3 and other permit conditions has occurred (See Section II.F.4. below); or

iii. the operator has obtained alternative authorization under an individual or general TPDES permit.

Authorization to discharge under this general permit terminates immediately upon removal of the applicable site notice. Compliance with the conditions and requirements of this permit is required until the site notice is removed.

4. Transfer of Day-to-Day Operational Control

(a) When the primary operator of a large construction activity changes or operational control over activities necessary to ensure compliance with the SWP3 and other permit conditions is transferred to another primary operator, the original operator must do the following:

i. submit an NOT within ten (10) days prior to the date that responsibility for operations terminates, and the new operator must submit an NOI at least ten (10) days prior to the transfer of operational control, in accordance with condition (c) below; and

ii. submit a copy of the NOT from the primary operator terminating its coverage under the permit and its operational control of the construction site and submit a copy of the NOI from the new primary operator to the operator of any MS4 receiving the discharge in accordance with Part II.F.1 above.

(b) For transfer of operational control, operators of small construction activities and secondary operators of large construction activities who are not required to submit an NOI must do the following:

i. the existing operator must remove the original site notice, and the new operator must post the required site notice prior to the transfer of operational control, in accordance with the conditions in Part II.F.4.(c) i or ii below; and

ii. a copy of the site notice, which must be completed and provided to the operator of any MS4 receiving the discharge, in accordance with Part II.F.3 above.

(c) Each operator is responsible for determining its role as an operator as defined in Part I.B and obtaining authorization under the permit, as described above in Part II.E. 1 – 3. Where authorization has been obtained by submitting an NOI for coverage under this general permit, permit coverage is not transferable from one operator to another. A transfer of operational control can include changes to the structure of a company, such as changing from a partnership to a corporation, or changing to a different corporation type such that a different filing (or charter) number is established with the Texas Secretary of State. A transfer of operational control can also occur when of the following criteria is met, as applicable:

i. Another operator has assumed control over all areas of the site that do not meet the definition for final stabilization;

ii. all silt fences and other temporary erosion controls have either been removed, scheduled for removal as defined in the SWP3, or transferred to a new operator, provided that the original permitted operator has attempted to notify the new operator in writing of the requirement to obtain permit coverage. Records of this notification (or attempt at notification) shall be retained by the operator transferring operational control to another operator in accordance with Part VI of this permit. Erosion controls that are designed to remain in place for an indefinite period, such as mulches and fiber mats, are not required to be removed or scheduled for removal; or

iii. a homebuilder has purchased one or more lots from an operator who obtained coverage under this general permit for a common plan of development or sale. The homebuilder is considered a new operator and shall comply with the requirements of this permit. Under these circumstances, the homebuilder is only responsible for compliance with the general permit requirements as they apply to the lot(s) it has operational control over in a larger common plan of development, and the original operator remains responsible for common controls or discharges, and must amend its SWP3 to remove the lot(s) transferred to the homebuilder.

Section G. Waivers from Coverage

The executive director may waive the otherwise applicable requirements of this general permit for stormwater discharges from small construction activities under the terms and conditions described in this section.

1. Waiver Applicability and Coverage

Operators of small construction activities may apply for and receive a waiver from the requirements to obtain authorization under this general permit, when the calculated rainfall erosivity (R) factor for the entire period of the construction project is less than five (5).

The operator must submit either a signed paper Low Rainfall Erosivity Waiver (LREW) certification form to the TCEQ, supplied by the executive director, or complete the form electronically via the online e-Permits system available through the TCEQ website. The form is a certification by the operator that the small construction activity will commence and be completed within a period when the value of the calculated R factor is less than five (5).

The paper LREW certification form must be postmarked for delivery to the TCEQ at least seven (7) days before construction activity begins or, if submitted electronically, construction may begin at any time following the receipt of written confirmation from TCEQ that a complete electronic application was submitted and acknowledged.

This waiver from coverage does not apply to any non-stormwater discharges, including what is allowed under this permit. The operator must insure that all non-stormwater discharges are either authorized under a separate permit or authorization, or are captured and routed to an authorized treatment facility for disposal.

Effective September 1, 2018, applicants must submit an LREW using the online e-Permits system available through the TCEQ website, or request and obtain a waiver from electronic reporting from the TCEQ. Waivers from electronic reporting are not transferrable and expire on the same date as the authorization to discharge.

2. Steps to Obtaining a Waiver

The construction site operator may calculate the R factor to request a waiver using the following steps:

(a) Estimate the construction start date and the construction end date. The construction end date is the date that final stabilization will be achieved.

(b) Find the appropriate Erosivity Index (EI) zone in Appendix B of this permit.

(c) Find the EI percentage for the project period by adding the results for each period of the project using the table provided in Appendix D of this permit, in EPA Fact Sheet 2.1, or in USDA Handbook 703, by subtracting the start value from the end value to find the percent EI for the site.

(d) Refer to the Isoerodent Map (Appendix C of this permit) and interpolate the annual isoerodent value for the proposed construction location.

(e) Multiply the percent value obtained in Step (c) above by the annual isoerodent value obtained in Step (d). This is the R factor for the proposed project. If the value is less than 5, then a waiver may be obtained. If the value is five (5) or more, then a waiver may not be obtained, and the operator must obtain coverage under Part II.E.2. of this permit.

Alternatively, the operator may calculate a site-specific R factor utilizing the following online calculator: http://ei.tamu.edu/index.html, or using another available resource.

A copy of the LREW certification form is not required to be posted at the small construction site.

3. Effective Date of a LREW

Unless otherwise notified by the executive director, operators of small construction activities seeking coverage under a LREW are provisionally waived from the otherwise applicable requirements of this general permit seven (7) days from the date that a completed paper LREW certification form is postmarked for delivery to TCEQ, or immediately upon receiving confirmation of approval of an electronic submittal, made via the online e-Permits system available through the TCEQ website.

Effective September 1, 2018, applicants seeking coverage under a LREW must submit an application for a LREW using the online e-Permits system available through the TCEQ website, or request and obtain a waiver from electronic reporting from the TCEQ. Waivers from electronic reporting are not transferrable and expire on the same date as the authorization to discharge.

4. Activities Extending Beyond the LREW Period

If a construction activity extends beyond the approved waiver period due to circumstances beyond the control of the operator, the operator must either:

(a) recalculate the R factor using the original start date and a new projected ending date, and if the R factor is still under five (5), submit a new waiver certification form at least two (2) days before the end of the original waiver period; or

(b) obtain authorization under this general permit according to the requirements for automatic authorization for small construction activities in Part II.E.2 of this permit, prior to the end of the approved LREW period.

Section H. Alternative TPDES Permit Coverage

1. Individual Permit Alternative

Any discharge eligible for coverage under this general permit may alternatively be authorized under an individual TPDES permit according to 30 TAC §305 (relating to Consolidated Permits). Applications for individual permit coverage must be submitted at least three hundred and thirty (330) days prior to commencement of construction activities to ensure timely authorization. Existing coverage under this general permit should not be terminated until an individual permit is issued and in effect.

2. Alternative Authorizations for Certain Discharges

Certain discharges eligible for authorization under this general permit may alternatively be authorized under a separate general permit according to 30 TAC Chapter 205 (relating to General Permits for Waste Discharges), as applicable.

3. Individual Permit Required

The executive director may require an operator of a construction site, otherwise eligible for authorization under this general permit, to apply for an individual TPDES permit in the following circumstances:

(a) the conditions of an approved TMDL or TMDL I-Plan on the receiving water;

(b) the activity being determined to cause, has a reasonable potential to cause, or contribute to a violation of water quality standards or being found to cause, or contribute to, the loss of a designated use of surface water in the state: and

(c) any other consideration defined in 30 TAC Chapter 205 (relating to General Permits for Waste Discharges) including 30 TAC Chapter 205.4(c)(3)(D), which allows the commission to deny authorization under the general permit and require an individual permit if a discharger has been determined by the executive director to have been out of compliance with any rule, order, or permit of the commission, including non-payment of fees assessed by the executive director.

A discharger with a TCEQ compliance history rating of "unsatisfactory" is ineligible for coverage under this general permit. In that case, 30 TAC § 60.3 requires the executive director to deny or suspend an authorization to discharge under a general permit. However, per TWC § 26.040(h), a discharger is entitled to a hearing before the commission prior to having an authorization denied or suspended for having an "unsatisfactory" compliance history.

Denial of authorization to discharge under this general permit or suspension of a permittee's authorization under this general permit for reasons other than compliance history shall be done according to commission rules in 30 TAC Chapter 205 (relating to General Permits for Waste Discharges).

4. Alternative Discharge Authorization

Any discharge eligible for authorization under this general permit may alternatively be authorized under a separate general permit according to 30 TAC Chapter 205 (relating to General Permits for Waste Discharges), if applicable.

Section I. Permit Expiration

1. This general permit is effective until March 5, 2023. All active discharge authorizations expire on the date provided on page one (1) of this permit. Following public notice and comment, as provided by 30 TAC §205.3 (relating to Public Notice, Public Meetings, and Public Comment), the commission may amend, revoke, cancel, or renew this general permit. All authorizations that are active at the time the permit term expires will be administratively continued as indicated in Part II.I.2 below and in Part II.D.1(b) and D.2(b) of this permit.

2. If the executive director publishes a notice of the intent to renew or amend this general permit before the expiration date, the permit will remain in effect for existing, authorized discharges until the commission takes final action on the permit. Upon issuance of a renewed or amended permit, permittees may be required to submit an NOI within 90 days following the effective date of the renewed or amended permit, unless that permit provides for an alternative method for obtaining authorization.

3. If the commission does not propose to reissue this general permit within 90 days before the expiration date, permittees shall apply for authorization under an individual permit or an alternative general permit. If the application for an individual permit is submitted before the expiration date, authorization under this expiring general permit remains in effect until the issuance or denial of an individual

permit. No new NOIs will be accepted nor new authorizations honored under the general permit after the expiration date.

Part III. Stormwater Pollution Prevention Plans (SWP3)

All regulated construction site operators shall prepare an SWP3, prior to submittal of an NOI, to address discharges authorized under Parts II.E.2 and II.E.3 of this general permit that will reach Waters of the U.S. This includes discharges to MS4s and privately owned separate storm sewer systems that drain into surface water in the state or Waters of the U.S.

Individual operators at a site may develop separate SWP3s that cover only their portion of the project, provided reference is made to the other operators at the site. Where there is more than one SWP3 for a site, operators must coordinate to ensure that BMPs and controls are consistent and do not negate or impair the effectiveness of each other. Regardless of whether a single comprehensive SWP3 is developed or separate SWP3s are developed for each operator, it is the responsibility of each operator to ensure compliance with the terms and conditions of this general permit in the areas of the construction site where that operator has control over construction plans and specifications or day-to-day operations.

An SWP3 must describe the implementation of practices that will be used to minimize to the extent practicable the discharge of pollutants in stormwater associated with construction activity and non-stormwater discharges described in Part II.A.3, in compliance with the terms and conditions of this permit.

An SWP3 must also identify any potential sources of pollution that have been determined to cause, have a reasonable potential to cause, or contribute to a violation of water quality standards or have been found to cause or contribute to the loss of a designated use of surface water in the state from discharges of stormwater from construction activities and construction support activities. Where potential sources of these pollutants are present at a construction site, the SWP3 must also contain a description of the management practices that will be used to prevent these pollutants from being discharged into surface water in the state or Waters of the U.S.

NOTE: Construction support activities can also include vehicle repair areas, fueling areas, etc. that are present at a construction site solely for the support construction activities and are only used by operators at the construction site.

The SWP3 is intended to serve as a road map for how the construction operator will comply with the effluent limits and other conditions of this permit and does not establish the effluent limits that apply to the construction site's discharges. These limits are established in Part III.G of the permit.

Section A. Shared SWP3 Development

For more effective coordination of BMPs and opportunities for cost sharing, a cooperative effort by the different operators at a site is encouraged. Operators of small and large construction activities must independently obtain authorization under this permit, but may work together with other regulated operators at the construction site to prepare and implement a single, comprehensive SWP3, which can be shared by some or all operators, for the construction activities that each of the operators are performing at the entire construction site.

1. The SWP3 must include the following:
   (a) for small construction activities – the name of each operator that participates in the shared SWP3;
   (b) for large construction activities - the name of each operator that participates in the shared SWP3, the general permit authorization numbers of each operator

(or the date that the NOI was submitted to TCEQ by each operator that has not received an authorization number for coverage under this permit); and

(c) for large and small construction activities - the signature of each operator participating in the shared SWP3.

2. The SWP3 must clearly indicate which operator is responsible for satisfying each shared requirement of the SWP3. If the responsibility for satisfying a requirement is not described in the plan, then each permittee is entirely responsible for meeting the requirement within the boundaries of the construction site where they perform construction activities. The SWP3 must clearly describe responsibilities for meeting each requirement in shared or common areas.
3. The SWP3 may provide that one operator is responsible for preparation of a SWP3 in compliance with the CGP, and another operator is responsible for implementation of the SWP3 at the project site.

Section B. Responsibilities of Operators

1. Secondary Operators and Primary Operators with Control Over Construction Plans and Specifications

   All secondary operators and primary operators with control over construction plans and specifications shall:

   (a) ensure the project specifications allow or provide that adequate BMPs are developed to meet the requirements of Part III of this general permit;

   (b) ensure that the SWP3 indicates the areas of the project where they have control over project specifications, including the ability to make modifications in specifications;

   (c) ensure that all other operators affected by modifications in project specifications are notified in a timely manner so that those operators may modify their BMP s as necessary to remain compliant with the conditions of this general permit; and

   (d) ensure that the SWP3 for portions of the project where they are operators indicates the name and site-specific TPDES authorization number(s) for operators with the day-to-day operational control over those activities necessary to ensure compliance with the SWP3 and other permit conditions. If a primary operator has not been authorized or has abandoned the site, the secondary operator is considered to be the responsible party and must obtain authorization as a primary operator under the permit, until the authority for day-to-day operational control is transferred to another primary operator. The new primary operator must update or develop a new SWP3 that will reflect the transfer of operational control and include any additional updates to the SWP3 to meet requirements of the permit.

2. Primary Operators with Day-to-Day Operational Control

   Primary operators with day-to-day operational control of those activities at a project that are necessary to ensure compliance with an SWP3 and other permit conditions must ensure that the SWP3 accomplishes the following requirements:

   (a) meets the requirements of this general permit for those portions of the project where they are operators;

   (b) identifies the parties responsible for implementation of BMPs described in the SWP3;

(c) indicates areas of the project where they have operational control over day-to-day activities; and

(d) the name and site-specific TPDES authorization number of the parties with control over project specifications, including the ability to make modifications in specifications for areas where they have operational control over day-to-day activities.

Section C. Deadlines for SWP3 Preparation, Implementation, and Compliance

The SWP3 must be prepared prior to obtaining authorization under this general permit, and implemented prior to commencing construction activities that result in soil disturbance. The SWP3 must be prepared so that it provides for compliance with the terms and conditions of this general permit.

Section D. Plan Review and Making Plans Available

1. The SWP3 must be retained on-site at the construction site or, if the site is inactive or does not have an on-site location to store the plan, a notice must be posted describing the location of the SWP3. The SWP3 must be made readily available at the time of an on-site inspection to: the executive director; a federal, state, or local agency approving sediment and erosion plans, grading plans, or stormwater management plans; local government officials; and the operator of a municipal separate storm sewer receiving discharges from the site. If the SWP3 is retained off-site, then it shall be made available as soon as reasonably possible. In most instances, it is reasonable that the SWP3 shall be made available within 24 hours of the request.
2. Operators with authorization for construction activity under this general permit must post a TCEQ site notice at the construction site at a place readily available for viewing by the general public, and local, state, and federal authorities.
   (a) Primary and secondary operators of large construction activities must each post a TCEQ construction site notice, respective to their role as an operator at the construction site, as required above and according to requirements in Part II.E.3 of this general permit.
   (b) Primary and secondary operators of small construction activities must post the TCEQ site notice as required in Part III.D.2.(a) above and for the specific type of small construction described in Part II.E.1 and 2 of the permit.
   (c) If the construction project is a linear construction project, such as a pipeline or highway, the notices must be placed in a publicly accessible location near where construction is actively underway. Site notices for small and large construction activities at these linear construction sites may be located, as necessary, along the length of the project, but must still be readily available for viewing by the general public; local, state, and federal authorities; and contain the following information:
      i. the site-specific TPDES authorization number for the project if assigned;
      ii. the operator name, contact name, and contact phone number;
      iii. a brief description of the project; and
      iv. the location of the SWP3.
3. This permit does not provide the general public with any right to trespass on a construction site for any reason, including inspection of a site; nor does this permit require that permittees allow members of the general public access to a construction site.

Section E. Revisions and Updates to SWP3s

The permittee must revise or update the SWP3 within seven days of when any of the following occurs:

1. a change in design, construction, operation, or maintenance that has a significant effect on the discharge of pollutants and that has not been previously addressed in the SWP3;
2. changing site conditions based on updated plans and specifications, new operators, new areas of responsibility, and changes in BMPs; or
3. results of inspections or investigations by construction site personnel authorized by the permittee, operators of a municipal separate storm sewer system receiving the discharge, authorized TCEQ personnel, or a federal, state or local agency approving sediment and erosion plans indicate the SWP3 is proving ineffective in eliminating or significantly minimizing pollutants in discharges authorized under this general permit.

Section F. Contents of SWP3

The SWP3 must be developed and implemented by primary operators of small and large construction activities and include, at a minimum, the information described in this section and must comply with the construction and development effluent guidelines in Part III, Section G of the general permit.

1. A site or project description, which includes the following information:
   (a) a description of the nature of the construction activity;
   (b) a list of potential pollutants and their sources;
   (c) a description of the intended schedule or sequence of activities that will disturb soils for major portions of the site, including estimated start dates and duration of activities;
   (d) the total number of acres of the entire property and the total number of acres where construction activities will occur, including areas where construction support activities (defined in Part I.B of this general permit) occur;
   (e) data describing the soil or the quality of any discharge from the site;
   (f) a map showing the general location of the site (e.g. a portion of a city or county map);
   (g) a detailed site map (or maps) indicating the following:
      i. drainage patterns and approximate slopes anticipated after major grading activities;
      ii. areas where soil disturbance will occur;
      iii. locations of all controls and buffers, either planned or in place;
      iv. locations where temporary or permanent stabilization practices are expected to be used;
      v. locations of construction support activities, including those located off-site;
      vi. surface waters (including wetlands) either at, adjacent, or in close proximity to the site, and also indicate whether those waters are impaired;
      vii. locations where stormwater discharges from the site directly to a surface water body or a municipal separate storm sewer system;
      viii. vehicle wash areas; and

ix. designated points on the site where vehicles will exit onto paved roads (for instance, this applies to construction transition from unstable dirt areas to exterior paved roads).

Where the amount of information required to be included on the map would result in a single map being difficult to read and interpret, the operator shall develop a series of maps that collectively include the required information.

(h) the location and description of support activities authorized under the permittee's NOI, including asphalt plants, concrete plants, and other activities providing support to the construction site that is authorized under this general permit;

(i) the name of receiving waters at or near the site that may be disturbed or that may receive discharges from disturbed areas of the project;

(j) a copy of this TPDES general permit;

(k) the NOI and the acknowledgement of provisional and non-provisional authorization for primary operators of large construction sites, and the site notice for small construction sites and for secondary operators of large construction sites;

(l) stormwater and allowable non-stormwater discharge locations, including storm drain inlets on site and in the immediate vicinity of the construction site where construction support activities will occur; and

(m) locations of all pollutant-generating activities at the construction site and where construction support activities will occur, such as the following: Paving operations; concrete, paint and stucco washout and water disposal; solid waste storage and disposal; and dewatering operations.

2. A description of the BMPs that will be used to minimize pollution in runoff.

The description must identify the general timing or sequence for implementation. At a minimum, the description must include the following components:

(a) General Requirements

i. Erosion and sediment controls must be designed to retain sediment on-site to the extent practicable with consideration for local topography, soil type, and rainfall.

ii. Control measures must be properly selected, installed, and maintained according to the manufacturer's or designer's specifications.

iii. Controls must be developed to minimize the offsite transport of litter, construction debris, and construction materials.

(b) Erosion Control and Stabilization Practices

The SWP3 must include a description of temporary and permanent erosion control and stabilization practices for the construction site, where small or large construction activity will occur. The erosion control and stabilization practices selected by the permittee must be compliant with the requirements for sediment and erosion control, located in Part III.G of this permit. The description of the SWP3 must also include a schedule of when the practices will be implemented. Site plans must ensure that existing vegetation at the construction site is preserved where it is possible.

i. Erosion control and stabilization practices may include but are not limited to: establishment of temporary or permanent vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of existing

trees and vegetation, slope texturing, temporary velocity dissipation devices, flow diversion mechanisms, and other similar measures.

ii. The following records must be maintained and either attached to or referenced in the SWP3, and made readily available upon request to the parties listed in Part III.D.1 of this general permit:

(A) the dates when major grading activities occur;

(B) the dates when construction activities temporarily or permanently cease on a portion of the site; and

(C) the dates when stabilization measures are initiated.

iii. Erosion control and stabilization measures must be initiated immediately in portions of the site where construction activities have temporarily ceased and will not resume for a period exceeding 14 calendar days. Stabilization measures that provide a protective cover must be initiated immediately in portions of the site where construction activities have permanently ceased. The term "immediately" is used to define the deadline for initiating stabilization measures. In the context of this requirement, "immediately" means as soon as practicable, but no later than the end of the next work day, following the day when the earth-disturbing activities have temporarily or permanently ceased. Except as provided in (A) through (D) below, these measures must be completed as soon as practicable, but no more than 14 calendar days after the initiation of soil stabilization measures:

(A) Where the immediate initiation of vegetative stabilization measures after construction activity has temporarily or permanently ceased due to frozen conditions, non-vegetative controls must be implemented until thawing conditions (as defined in Part I.B of this general permit) are present, and vegetative stabilization measures can be initiated as soon as practicable.

(B) In arid areas, semi-arid areas, or drought-stricken areas, as they are defined in Part I.B of this general permit, where the immediate initiation of vegetative stabilization measures after construction activity has temporarily or permanently ceased or is precluded by arid conditions, other types of erosion control and stabilization measures must be initiated at the site as soon as practicable. Where vegetative controls are infeasible due to arid conditions, and within 14 calendar days of a temporary or permanent cessation of construction activity in any portion of the site, the operator shall immediately install non-vegetative erosion controls in areas of the construction site where construction activity is complete or has ceased. If non-vegetative controls are infeasible, the operator shall install temporary sediment controls as required in Part III.F.2.(b).iii.(C) below.

(C) In areas where non-vegetative controls are infeasible, the operator may alternatively utilize temporary perimeter controls. The operator must document in the SWP3 the reason why stabilization measures are not feasible, and must demonstrate that the perimeter controls will retain sediment on site to the extent practicable. The operator must continue to inspect the BMPs at the frequencies established in Part III.F.7.(c) for unstabilized sites.

(D) The requirement for permittees to initiate stabilization is triggered as soon as it is known with reasonable certainty that construction activity at the site or in certain areas of the site will be stopped for 14 or more

additional calendar days. If the initiation or completion of vegetative stabilization is prevented by circumstances beyond the control of the permittee, the permittee must employ and implement alternative stabilization measures immediately. When conditions at the site changes that would allow for vegetative stabilization, then the permittee must initiate or complete vegetative stabilization as soon as practicable.

iv. Final stabilization must be achieved prior to termination of permit coverage.

v. TCEQ does not expect that temporary or permanent stabilization measures to be applied to areas that are intended to be left un-vegetated or un-stabilized following construction (e.g., dirt access roads, utility pole pads, areas being used for storage of vehicles, equipment, or materials).

(c) Sediment Control Practices

The SWP3 must include a description of any sediment control practices used to remove eroded soils from stormwater runoff, including the general timing or sequence for implementation of controls.

i. Sites With Drainage Areas of Ten or More Acres

(A) Sedimentation Basin(s)

(1) A sedimentation basin is required, where feasible, for a common drainage location that serves an area with ten (10) or more acres disturbed at one time. A sedimentation basin may be temporary or permanent, and must provide sufficient storage to contain a calculated volume of runoff from a 2-year, 24-hour storm from each disturbed acre drained. When calculating the volume of runoff from a 2-year, 24-hour storm event, it is not required to include the flows from offsite areas and flow from onsite areas that are either undisturbed or have already undergone permanent stabilization, if these flows are diverted around both the disturbed areas of the site and the sediment basin. Capacity calculations shall be included in the SWP3.

(2) Where rainfall data is not available or a calculation cannot be performed, the sedimentation basin must provide at least 3,600 cubic feet of storage per acre drained until final stabilization of the site.

(3) If a sedimentation basin is not feasible, then the permittee shall provide equivalent control measures until final stabilization of the site. In determining whether installing a sediment basin is feasible, the permittee may consider factors such as site soils, slope, available area, public safety, precipitation patterns, site geometry, site vegetation, infiltration capacity, geotechnical factors, depth to groundwater, and other similar considerations. The permittee shall document the reason that the sediment basins are not feasible, and shall utilize equivalent control measures, which may include a series of smaller sediment basins.

(4) Unless infeasible, when discharging from sedimentation basins and impoundments, the permittee shall utilize outlet structures that withdraw water from the surface.

(B) Perimeter Controls: At a minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope

boundaries of the construction area, and for those side slope boundaries deemed appropriate as dictated by individual site conditions.

ii. Controls for Sites With Drainage Areas Less than Ten Acres:

(A) Sediment traps and sediment basins may be used to control solids in stormwater runoff for drainage locations serving less than ten (10) acres. At a minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope boundaries of the construction area, and for those side slope boundaries deemed appropriate as dictated by individual site conditions.

(B) Alternatively, a sediment basin that provides storage for a calculated volume of runoff from a 2-year, 24-hour storm from each disturbed acre drained may be utilized. Where rainfall data is not available or a calculation cannot be performed, a temporary or permanent sediment basin providing 3,600 cubic feet of storage per acre drained may be provided. If a calculation is performed, then the calculation shall be included in the SWP3.

(C) If sedimentation basins or impoundments are used, the permittee shall comply with the requirements in Part III.G.6 of this general permit.

3. Description of Permanent Stormwater Controls

A description of any stormwater control measures that will be installed during the construction process to control pollutants in stormwater discharges that may occur after construction operations have been completed must be included in the SWP3. Permittees are responsible for the installation and maintenance of stormwater management measures, as follows:

(a) permittees authorized under the permit for small construction activities are responsible for the installation and maintenance of stormwater control measures prior to final stabilization of the site; or

(b) permittees authorized under the permit for large construction activities are responsible for the installation and maintenance of stormwater control measures prior to final stabilization of the site and prior to submission of an NOT.

4. Other Required Controls and BMPs

(a) Permittees shall minimize, to the extent practicable, the off-site vehicle tracking of sediments and the generation of dust. The SWP3 shall include a description of controls utilized to accomplish this requirement.

(b) The SWP3 must include a description of construction and waste materials expected to be stored on-site and a description of controls to minimize pollutants from these materials.

(c) The SWP3 must include a description of potential pollutant sources in discharges of stormwater from all areas of the construction site where construction activity, including construction support activities, will be located, and a description of controls and measures that will be implemented at those sites to minimize pollutant discharges.

(d) Permittees shall place velocity dissipation devices at discharge locations and along the length of any outfall channel (i.e., runoff conveyance) to provide a non-erosive flow velocity from the structure to a water course, so that the natural physical and biological characteristics and functions are maintained and protected.

(e) Permittees shall design and utilize appropriate controls to minimize the offsite transport of suspended sediments and other pollutants if it is necessary to pump or channel standing water from the site.

(f) Permittees shall ensure that all other required controls and BMPs comply with all of the requirements of Part III.G of this general permit.

(g) For demolition of any structure with at least 10,000 square feet of floor space that was built or renovated before January 1, 1980, and the receiving waterbody is impaired for polychlorinated biphenyls (PCBs):

i. Implement controls to minimize the exposure of PCB-containing building materials, including paint, caulk, and pre-1980 fluorescent lighting fixtures to precipitation and to stormwater; and

ii. Ensure that disposal of such materials is performed in compliance with applicable state, federal, and local laws.

5. Documentation of Compliance with Approved State and Local Plans

(a) Permittees must ensure that the SWP3 is consistent with requirements specified in applicable sediment and erosion site plans or site permits, or stormwater management site plans or site permits approved by federal, state, or local officials.

(b) SWP3s must be updated as necessary to remain consistent with any changes applicable to protecting surface water resources in sediment erosion site plans or site permits, or stormwater management site plans or site permits approved by state or local official for which the permittee receives written notice.

(c) If the permittee is required to prepare a separate management plan, including but not limited to a WPAP or Contributing Zone Plan in accordance with 30 TAC Chapter 213 (related to the Edwards Aquifer), then a copy of that plan must be either included in the SWP3 or made readily available upon request to authorized personnel of the TCEQ. The permittee shall maintain a copy of the approval letter for the plan in its SWP3.

6. Maintenance Requirements

(a) All protective measures identified in the SWP3 must be maintained in effective operating condition. If, through inspections or other means, as soon as the permittee determines that BMPs are not operating effectively, then the permittee shall perform maintenance as necessary to maintain the continued effectiveness of stormwater controls, and prior to the next rain event if feasible. If maintenance prior to the next anticipated storm event is impracticable, the reason shall be documented in the SWP3 and maintenance must be scheduled and accomplished as soon as practicable. Erosion and sediment controls that have been intentionally disabled, run-over, removed, or otherwise rendered ineffective must be replaced or corrected immediately upon discovery.

(b) If periodic inspections or other information indicates a control has been used incorrectly, is performing inadequately, or is damaged, then the operator shall replace or modify the control as soon as practicable after making the discovery.

(c) Sediment must be removed from sediment traps and sedimentation ponds no later than the time that design capacity has been reduced by 50%. For perimeter controls such as silt fences, berms, etc., the trapped sediment must be removed before it reaches 50% of the above-ground height.

(d) If sediment escapes the site, accumulations must be removed at a frequency that minimizes off-site impacts, and prior to the next rain event, if feasible. If the

permittee does not own or operate the off-site conveyance, then the permittee shall work with the owner or operator of the property to remove the sediment.

7. Inspections of Controls

(a) Personnel provided by the permittee must inspect disturbed areas (cleared, graded, or excavated) of the construction site that do not meet the requirements of final stabilization in this general permit, all locations where stabilization measures have been implemented, areas of construction support activity covered under this permit, stormwater controls (including pollution prevention controls) for evidence of, or the potential for, the discharge of pollutants, areas where stormwater typically flows within the construction site, and points of discharge from the construction site.

i. Personnel conducting these inspections must be knowledgeable of this general permit, the construction activities at the site, and the SWP3 for the site.

ii. Personnel conducting these inspections are not required to have signatory authority for inspection reports under 30 TAC §305.128.

(b) Requirements for Inspections

i. Inspect all stormwater controls (including sediment and erosion control measures identified in the SWP3) to ensure that they are installed properly, appear to be operational, and minimizing pollutants in discharges, as intended.

ii. Identify locations on the construction site where new or modified stormwater controls are necessary.

iii. Check for signs of visible erosion and sedimentation that can be attributed to the points of discharge where discharges leave the construction site or discharge into any surface water in the state flowing within or adjacent to the construction site.

iv. Identify any incidents of noncompliance observed during the inspection.

v. Inspect locations where vehicles enter or exit the site for evidence of off-site sediment tracking.

vi. If an inspection is performed when discharges from the construction site are occurring: identify all discharge points at the site, observe and document the visual quality of the discharge (i.e., color, odor, floating, settled, or suspended solids, foam, oil sheen, and other such indicators of pollutants in stormwater).

vii. Complete any necessary maintenance needed, based on the results of the inspection and in accordance with the requirements listed in Part III.F.6 above.

(c) Inspection frequencies:

i. Inspections of construction sites must be conducted at least once every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater, unless as otherwise provided below in Part III.F.7.(c).ii – v below.

ii. Inspection frequencies must be conducted at least once every month in areas of the construction site that meet final stabilization or have been temporarily stabilized.

iii. Inspection frequencies for construction sites, where runoff is unlikely due to the occurrence of frozen conditions at the site, must be conducted at least

once every month until thawing conditions begin to occur (See definitions for thawing conditions in Part I.B). The SWP3 must also contain a record of the approximate beginning and ending dates of when frozen conditions occurred at the site, which resulted in inspections being conducted monthly, while those conditions persisted, instead of at the interval of once every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater.

iv. In arid, semi-arid, or drought-stricken areas, inspections must be conducted at least once every month and within 24 hours after the end of a storm event of 0.5 inches or greater. The SWP3 must also contain a record of the total rainfall measured, as well as the approximate beginning and ending dates of when drought conditions occurred at the site, which resulted in inspections being conducted monthly, while those conditions persisted, instead of at the interval of once every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater.

v. As an alternative to the inspection schedule in Part III.F.7.(c).i above, the SWP3 may be developed to require that these inspections will occur at least once every seven (7) calendar days. If this alternative schedule is developed, then the inspection must occur regardless of whether or not there has been a rainfall event since the previous inspection.

vi. The inspection procedures described in Part III.F.7.(c).i. – v above can be performed at the frequencies and under the applicable conditions indicated for each schedule option, provided that the SWP3 reflects the current schedule and that any changes to the schedule are made in accordance with the following provisions: the inspection frequency schedule can only be changed a maximum of one time each month; the schedule change must be implemented at the beginning of a calendar month; and the reason for the schedule change documented in the SWP3 (e.g., end of "dry" season and beginning of "wet" season).

(d) Utility line installation, pipeline construction, and other examples of long, narrow, linear construction activities may provide inspection personnel with limited access to the areas described in Part III.F.7.(a) above.

i. Inspection of linear construction sites could require the use of vehicles that could compromise areas of temporary or permanent stabilization, cause additional disturbance of soils, and result in the increase the potential for erosion. In these circumstances, controls must be inspected at least once every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater, but representative inspections may be performed.

ii. For representative inspections, personnel must inspect controls along the construction site for 0.25 mile above and below each access point where a roadway, undisturbed right-of-way, or other similar feature intersects the construction site and allows access to the areas described in Part III.F.7.(a) above. The conditions of the controls along each inspected 0.25 mile portion may be considered as representative of the condition of controls along that reach extending from the end of the 0.25 mile portion to either the end of the next 0.25 mile inspected portion, or to the end of the project, whichever occurs first.

As an alternative to the inspection schedule described in Part III.F.7.(c).i above, the SWP3 may be developed to require that these inspections will occur at least once every seven (7) calendar days. If this alternative schedule is developed, the inspection must occur regardless of whether or not there has been a rainfall event since the previous inspection.

iii. The SWP3 for a linear construction site must reflect the current inspection schedule. Any changes to the inspection schedule must be made in accordance with the following provisions:

(A) the schedule may be changed a maximum of one time each month;

(B) the schedule change must be implemented at the beginning of a calendar month, and

(C) the reason for the schedule change must be documented in the SWP3 (e.g., end of "dry" season and beginning of "wet" season).

(e) In the event of flooding or other uncontrollable situations which prohibit access to the inspection sites, inspections must be conducted as soon as access is practicable.

(f) Inspection Reports

i. A report summarizing the scope of any inspection must be completed within 24-hours following the inspection. The report must also include the date(s) of the inspection and major observations relating to the implementation of the SWP3. Major observations in the report must include: the locations of where erosion and discharges of sediment or other pollutants from the site have occurred; locations of BMPs that need to be maintained; locations of BMPs that failed to operate as designed or proved inadequate for a particular location; and locations where additional BMPs are needed.

ii. Actions taken as a result of inspections must be described within, and retained as a part of, the SWP3. Reports must identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report must contain a certification that the facility or site is in compliance with the SWP3 and this permit. The report must be retained as part of the SWP3 and signed by the person and in the manner required by 30 TAC §305.128 (relating to Signatories to Reports).

iii. The names and qualifications of personnel making the inspections for the permittee may be documented once in the SWP3 rather than being included in each report.

(g) The SWP3 must be modified based on the results of inspections, as necessary, to better control pollutants in runoff. Revisions to the SWP3 must be completed within seven (7) calendar days following the inspection. If existing BMPs are modified or if additional BMPs are necessary, an implementation schedule must be described in the SWP3 and wherever possible those changes implemented before the next storm event. If implementation before the next anticipated storm event is impracticable, these changes must be implemented as soon as practicable.

8. The SWP3 must identify and ensure the implementation of appropriate pollution prevention measures for all eligible non-stormwater components of the discharge, as listed in Part II.A.3 of this permit.

9. The SWP3 must include the information required in Part III.B of this general permit.

10. The SWP3 must include pollution prevention procedures that comply with Part III.G.4 of this general permit.

Section G. Erosion and Sediment Control Requirements Applicable to All Sites

Except as provided in 40 CFR §§125.30-125.32, any discharge regulated under this general permit, with the exception of sites that obtained waivers based on low rainfall erosivity, must achieve, at a minimum, the following effluent limitations representing

the degree of effluent reduction attainable by application of the best practicable control technology currently available (BPT).

1. *Erosion and sediment controls*. Design, install, and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, such controls must be designed, installed, and maintained to:

   (a) Control stormwater volume and velocity within the site to minimize soil erosion in order to minimize pollutant discharges;

   (b) Control stormwater discharges, including both peak flowrates and total stormwater volume, to minimize channel and streambank erosion and scour in the immediate vicinity of discharge point(s);

   (c) Minimize the amount of soil exposed during construction activity;

   (d) Minimize the disturbance of steep slopes;

   (e) Minimize sediment discharges from the site. The design, installation, and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site;

   (f) If earth disturbance activities are located in close proximity to a surface water in the state, provide and maintain appropriate natural buffers if feasible and as necessary, around surface water in the state, depending on site-specific topography, sensitivity, and proximity to water bodies. Direct stormwater to vegetated areas and maximize stormwater infiltration to reduce pollutant discharges, unless infeasible. If providing buffers is infeasible, the permittee shall document the reason that natural buffers are infeasible and shall implement additional erosion and sediment controls to reduce sediment load;

   (g) Preserve native topsoil at the site, unless the intended function of a specific area of the site dictates that the topsoil be disturbed or removed, or it is infeasible; and

   (h) Minimize soil compaction. In areas of the construction site where final vegetative stabilization will occur or where infiltration practices will be installed, either:

      i. restrict vehicle and equipment use to avoid soil compaction; or

      ii. prior to seeding or planting areas of exposed soil that have been compacted, use techniques that condition the soils to support vegetative growth, if necessary and feasible;

   Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted.

   (i) TCEQ does not consider stormwater control features (e.g., stormwater conveyance channels, storm drain inlets, sediment basins) to constitute "surface water" for the purposes of triggering the buffer requirement in Part III.G.1.(f) above.

2. *Soil stabilization*. Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating, or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. In the context of this requirement, "immediately" means as soon as practicable, but no later than the end of the next work day, following the day when the earth-disturbing activities have temporarily or permanently ceased. Temporary stabilization must be completed no more than 14 calendar days after initiation of soil stabilization measures, and final stabilization must be achieved prior to termination of

permit coverage. In arid, semi-arid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative non-vegetative stabilization measures must be employed as soon as practicable. Refer to Part III.F.2.(b) for complete erosion control and stabilization practice requirements. In limited circumstances, stabilization may not be required if the intended function of a specific area of the site necessitates that it remain disturbed.

3. *Dewatering*. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are prohibited, unless managed by appropriate controls.
4. *Pollution prevention measures*. Design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented, and maintained to:
   (a) Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
   (b) Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials present on the site to precipitation and to stormwater;
   (c) Minimize the exposure of waste materials by closing waste container lids at the end of the work day. For waste containers that do not have lids, where the container itself is not sufficiently secure enough to prevent the discharge of pollutants absent a cover and could leak, the permittee must provide either a cover (e.g., a tarp, plastic sheeting, temporary roof) to minimize exposure of wastes to precipitation, or a similarly effective means designed to minimize the discharge of pollutants (e.g., secondary containment);and
   (d) Minimize the discharge of pollutants from spills and leaks, and implement chemical spill and leak prevention and response procedures.
5. *Prohibited discharges*. The following discharges are prohibited:
   (a) Wastewater from wash out of concrete, unless managed by an appropriate control;
   (b) Wastewater from wash out and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
   (c) Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;
   (d) Soaps or solvents used in vehicle and equipment washing; and
   (e) Toxic or hazardous substances from a spill or other release.
6. *Surface outlets*. When discharging from basins and impoundments, utilize outlet structures that withdraw water from the surface, unless infeasible.

Part IV. Stormwater Runoff from Concrete Batch Plants

Discharges of stormwater runoff from concrete batch plants present at regulated construction sites and operated as a construction support activity may be authorized under the provisions of this general permit, provided that the following requirements are met for concrete batch plant(s) authorized under this permit. Only the discharges of stormwater runoff and non-stormwater from concrete batch plants that meet the requirements of a

construction support activity can be authorized under this permit (see the requirements for "Non-Stormwater Discharges" in Part II.A.3 and "Discharges of Stormwater Associated with Construction Support Activity" in Part II.A.2).

If discharges of stormwater runoff or non-stormwater from concrete batch plants are not authorized under this general permit, then discharges must be authorized under an alternative general permit or individual permit [see the requirement in Part II.A.2.(c)].

This permit does not authorize the discharge or land disposal of any wastewater from concrete batch plants at regulated construction sites. Authorization for these wastes must be obtained under an individual permit or an alternative general permit.

Section A. Benchmark Sampling Requirements

1. Operators of concrete batch plants authorized under this general permit shall sample the stormwater runoff from the concrete batch plants according to the requirements of this section of this general permit, and must conduct evaluations on the effectiveness of the SWP3 based on the following benchmark monitoring values:

Table 1. Benchmark Parameters

Benchmark Parameter	Benchmark Value	Sampling Frequency	Sample Type
Oil and Grease (*1)	15 mg/L	1/quarter (*2) (*3)	Grab (*4)
Total Suspended Solids (*1)	50 mg/L	1/quarter (*2) (*3)	Grab (*4)
pH	6.0 – 9.0 Standard Units	1/quarter (*2) (*3)	Grab (*4)
Total Iron(*1)	1.3 mg/L	1/quarter (*2) (*3)	Grab (*4)

(*1) All analytical results for these parameters must be obtained from a laboratory that is accredited based on rules located in 30 TAC §25.4 (a) or through the National Environmental Laboratory Accreditation Program (NELAP). Analysis must be performed using sufficiently sensitive methods for analysis that comply with the rules located in 40 CFR §136.1(c) and 40 CFR §122.44(i)(1)(iv).

(*2) When discharge occurs. Sampling is required within the first 30 minutes of discharge. If it is not practicable to take the sample, or to complete the sampling, within the first 30 minutes, sampling must be completed within the first hour of discharge. If sampling is not completed within the first 30 minutes of discharge, the reason must be documented and attached to all required reports and records of the sampling activity.

(*3) Sampling must be conducted at least once during each of the following periods. The first sample must be collected during the first full quarter that a stormwater discharge occurs from a concrete batch plant authorized under this general permit.

January through March
April through June
July through September
October through December

For projects lasting less than one full quarter, a minimum of one sample shall be collected, provided that a stormwater discharge occurred at least once following submission of the NOI or following the date that automatic authorization was obtained under Section II.E.2, and prior to terminating coverage.

(*4) A grab sample shall be collected from the stormwater discharge resulting from a storm event that is at least 0.1 inches of measured precipitation that occurs at least 72 hours from the previously measurable storm event. The sample shall be collected downstream of the concrete batch plant, and where the discharge exits any BMPs utilized to handle the runoff from the batch plant, prior to commingling with any other water authorized under this general permit.

2. The permittee must compare the results of sample analyses to the benchmark values above, and must include this comparison in the overall assessment of the SWP3's effectiveness. Analytical results that exceed a benchmark value are not a violation of this permit, as these values are not numeric effluent limitations. Results of analyses are indicators that modifications of the SWP3 should be assessed and may be necessary to protect water quality. The operator must investigate the cause for each exceedance and must document the results of this investigation in the SWP3 by the end of the quarter following the sampling event.

   The operator's investigation must identify the following:

   (a) any additional potential sources of pollution, such as spills that might have occurred;

   (b) necessary revisions to good housekeeping measures that are part of the SWP3;

   (c) additional BMPs, including a schedule to install or implement the BMPs; and

   (d) other parts of the SWP3 that may require revisions in order to meet the goal of the benchmark values.

   Background concentrations of specific pollutants may also be considered during the investigation. If the operator is able to relate the cause of the exceedance to background concentrations, then subsequent exceedances of benchmark values for that pollutant may be resolved by referencing earlier findings in the SWP3. Background concentrations may be identified by laboratory analyses of samples of stormwater run-on to the permitted facility, by laboratory analyses of samples of stormwater run-off from adjacent non-industrial areas, or by identifying the pollutant is a naturally occurring material in soils at the site.

Section B. Best Management Practices (BMPs) and SWP3 Requirements

Minimum SWP3 Requirements – The following are required in addition to other SWP3 requirements listed in this general permit, which include, but are not limited to the applicable requirements located in Part III.F.7 of this general permit, as follows:

1. Description of Potential Pollutant Sources - The SWP3 must provide a description of potential sources (activities and materials) that can cause, have a reasonable potential to cause or contribute to a violation of water quality standards or have been found to cause, or contribute to, the loss of a designated use of surface water in the state in stormwater discharges associated with concrete batch plants authorized under this permit. The SWP3 must describe the implementation of practices that will be used to minimize to the extent practicable the discharge of pollutants in stormwater discharges associated with industrial activity and non-stormwater discharges (described in Part II.A.3 of this general permit), in compliance with the terms and conditions of this general permit, including the protection of water quality, and must ensure the implementation of these practices.

   The following must be developed, at a minimum, in support of developing this description:

   (a) Drainage – The site map must include the following information:

      i. the location of all outfalls for stormwater discharges associated with concrete batch plants that are authorized under this permit;

ii. a depiction of the drainage area and the direction of flow to the outfall(s);

iii. structural controls used within the drainage area(s);

iv. the locations of the following areas associated with concrete batch plants that are exposed to precipitation: vehicle and equipment maintenance activities (including fueling, repair, and storage areas for vehicles and equipment scheduled for maintenance); areas used for the treatment, storage, or disposal of wastes; liquid storage tanks; material processing and storage areas; and loading and unloading areas; and

v. the locations of the following: any bag house or other dust control device(s); recycle/sedimentation pond, clarifier or other device used for the treatment of facility wastewater (including the areas that drain to the treatment device); areas with significant materials; and areas where major spills or leaks have occurred.

(b) Inventory of Exposed Materials – A list of materials handled at the concrete batch plant that may be exposed to stormwater and that have a potential to affect the quality of stormwater discharges associated with concrete batch plants that are authorized under this general permit.

(c) Spills and Leaks - A list of significant spills and leaks of toxic or hazardous pollutants that occurred in areas exposed to stormwater and that drain to stormwater outfalls associated with concrete batch plants authorized under this general permit must be developed, maintained, and updated as needed.

(d) Sampling Data - A summary of existing stormwater discharge sampling data must be maintained, if available.

2. Measures and Controls - The SWP3 must include a description of management controls to regulate pollutants identified in the SWP3's "Description of Potential Pollutant Sources" from Part IV.B.1 of this permit, and a schedule for implementation of the measures and controls. This must include, at a minimum:

(a) Good Housekeeping - Good housekeeping measures must be developed and implemented in the area(s) associated with concrete batch plants.

i. Operators must prevent or minimize the discharge of spilled cement, aggregate (including sand or gravel), settled dust, or other significant materials from paved portions of the site that are exposed to stormwater. Measures used to minimize the presence of these materials may include regular sweeping or other equivalent practices. These practices must be conducted at a frequency that is determined based on consideration of the amount of industrial activity occurring in the area and frequency of precipitation, and shall occur at least once per week when cement or aggregate is being handled or otherwise processed in the area.

ii. Operators must prevent the exposure of fine granular solids, such as cement, to stormwater. Where practicable, these materials must be stored in enclosed silos, hoppers or buildings, in covered areas, or under covering.

(b) Spill Prevention and Response Procedures - Areas where potential spills that can contribute pollutants to stormwater runoff, and the drainage areas from these locations, must be identified in the SWP3. Where appropriate, the SWP3 must specify material handling procedures, storage requirements, and use of equipment. Procedures for cleaning up spills must be identified in the SWP3 and made available to the appropriate personnel.

(c) Inspections - Qualified facility personnel (i.e., a person or persons with knowledge of this general permit, the concrete batch plant, and the SWP3 related to the concrete batch plant(s) for the site) must be identified to inspect

designated equipment and areas of the facility specified in the SWP3. Personnel conducting these inspections are not required to have signatory authority for inspection reports under 30 TAC §305.128. Inspections of facilities in operation must be performed once every seven days. Inspections of facilities that are not in operation must be performed at a minimum of once per month. The current inspection frequency being implemented at the facility must be recorded in the SWP3. The inspection must take place while the facility is in operation and must, at a minimum, include all areas that are exposed to stormwater at the site, including material handling areas, above ground storage tanks, hoppers or silos, dust collection/containment systems, truck wash down and equipment cleaning areas. Follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections must be maintained and be made readily available for inspection upon request.

(d) Employee Training - An employee training program must be developed to educate personnel responsible for implementing any component of the SWP3, or personnel otherwise responsible for stormwater pollution prevention, with the provisions of the SWP3. The frequency of training must be documented in the SWP3, and at a minimum, must consist of one training prior to the initiation of operation of the concrete batch plant.

(e) Record Keeping and Internal Reporting Procedures - A description of spills and similar incidents, plus additional information that is obtained regarding the quality and quantity of stormwater discharges, must be included in the SWP3. Inspection and maintenance activities must be documented and records of those inspection and maintenance activities must be incorporated in the SWP3.

(f) Management of Runoff - The SWP3 shall contain a narrative consideration for reducing the volume of runoff from concrete batch plants by diverting runoff or otherwise managing runoff, including use of infiltration, detention ponds, retention ponds, or reusing of runoff.

3. Comprehensive Compliance Evaluation – At least once per year, one or more qualified personnel (i.e., a person or persons with knowledge of this general permit, the concrete batch plant, and the SWP3 related to the concrete batch plant(s) for the site) shall conduct a compliance evaluation of the plant. The evaluation must include the following.

   (a) Visual examination of all areas draining stormwater associated with regulated concrete batch plants for evidence of, or the potential for, pollutants entering the drainage system. These include, but are not limited to: cleaning areas, material handling areas, above ground storage tanks, hoppers or silos, dust collection/containment systems, and truck wash down and equipment cleaning areas. Measures implemented to reduce pollutants in runoff (including structural controls and implementation of management practices) must be evaluated to determine if they are effective and if they are implemented in accordance with the terms of this permit and with the permittee's SWP3. The operator shall conduct a visual inspection of equipment needed to implement the SWP3, such as spill response equipment.

   (b) Based on the results of the evaluation, the following must be revised as appropriate within two weeks of the evaluation: the description of potential pollutant sources identified in the SWP3 (as required in Part IV.B.1, "Description of Potential Pollutant Sources"); and pollution prevention measures and controls identified in the SWP3 (as required in Part IV.B.2, "Measures and Controls"). The revisions may include a schedule for implementing the necessary changes.

(c) The permittee shall prepare and include in the SWP3 a report summarizing the scope of the evaluation, the personnel making the evaluation, the date(s) of the evaluation, major observations relating to the implementation of the SWP3, and actions taken in response to the findings of the evaluation. The report must identify any incidents of noncompliance. Where the report does not identify incidences of noncompliance, the report must contain a statement that the evaluation did not identify any incidence(s), and the report must be signed according to 30 TAC §305.128, relating to Signatories to Reports.

(d) The Comprehensive Compliance Evaluation may substitute for one of the required inspections delineated in Part IV.B.2.(c) of this general permit.

Section C. Prohibition of Wastewater Discharges

Wastewater discharges associated with concrete production including wastewater disposal by land application are not authorized under this general permit. These wastewater discharges must be authorized under an alternative TCEQ water quality permit or otherwise disposed of in an authorized manner. Discharges of concrete truck wash out at construction sites may be authorized if conducted in accordance with the requirements of Part V of this general permit.

Part V. Concrete Truck Wash Out Requirements

This general permit authorizes the land disposal of wash out from concrete trucks at construction sites regulated under this general permit, provided the following requirements are met. Any discharge of concrete production waste water to surface water in the state must be authorized under a separate TCEQ general permit or individual permit.

A. Discharge of concrete truck wash out water to surface water in the state, including discharge to storm sewers, is prohibited by this general permit.

B. Concrete truck wash out water shall be disposed in areas at the construction site where structural controls have been established to prevent discharge to surface water in the state, or to areas that have a minimal slope that allow infiltration and filtering of wash out water to prevent discharge to surface water in the state. Structural controls may consist of temporary berms, temporary shallow pits, temporary storage tanks with slow rate release, or other reasonable measures to prevent runoff from the construction site.

C. Wash out of concrete trucks during rainfall events shall be minimized. The discharge of concrete truck wash out water is prohibited at all times, and the operator shall insure that its BMPs are sufficient to prevent the discharge of concrete truck wash out as the result of rainfall or stormwater runoff.

D. The disposal of wash out water from concrete trucks, made under authorization of this general permit must not cause or contribute to groundwater contamination.

E. If a SWP3 is required to be implemented, the SWP3 shall include concrete wash out areas on the associated site map.

Part VI. Retention of Records

The permittee must retain the following records for a minimum period of three (3) years from the date that a NOT is submitted as required in Part II.F.1 and 2 of this permit. For activities in which an NOT is not required, records shall be retained for a minimum period of three (3) years from the date that the operator terminates coverage under Section II.F.3 of this permit. Records include:

A. A copy of the SWP3;

B. All reports and actions required by this permit, including a copy of the construction site notice;

C. All data used to complete the NOI, if an NOI is required for coverage under this general permit; and

D. All records of submittal of forms submitted to the operator of any MS4 receiving the discharge and to the secondary operator of a large construction site, if applicable.

Part VII. Standard Permit Conditions

A. The permittee has a duty to comply with all permit conditions. Failure to comply with any permit condition is a violation of the permit and statutes under which it was issued (CWA and TWC), and is grounds for enforcement action, for terminating, revoking and reissuance, or modification, or denying coverage under this general permit, or for requiring a discharger to apply for and obtain an individual TPDES permit, based on rules located in TWC §23.086, 30 TAC §305.66 and 40 CFR §122.41 (a).

B. Authorization under this general permit may be modified, suspended, revoked and reissued, terminated or otherwise suspended for cause, based on rules located in TWC §23.086, 30 TAC §305.66 and 40 CFR §122.41(f). Filing a notice of planned changes or anticipated non-compliance by the permittee does not stay any permit condition. The permittee must furnish to the executive director, upon request and within a reasonable time, any information necessary for the executive director to determine whether cause exists for modifying, revoking and reissuing, terminating or, otherwise suspending authorization under this permit, based on rules located in TWC §23.086, 30 TAC §305.66 and 40 CFR §122.41 (h). Additionally, the permittee must provide to the executive director, upon request, copies of all records that the permittee is required to maintain as a condition of this general permit.

C. It is not a defense for a discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the permit conditions.

D. Inspection and entry shall be allowed under TWC Chapters 26-28, Texas Health and Safety Code §§361.032-361.033 and 361.037, and 40 CFR §122.41(i). The statement in TWC §26.014 that commission entry of a facility shall occur according to an establishment's rules and regulations concerning safety, internal security, and fire protection is not grounds for denial or restriction of entry to any part of the facility or site, but merely describes the commission's duty to observe appropriate rules and regulations during an inspection.

E. The discharger is subject to administrative, civil, and criminal penalties, as applicable, under TWC Chapter 7 for violations including but not limited to the following:

1. negligently or knowingly violating the federal CWA §§301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a permit issued under CWA §402, or any requirement imposed in a pretreatment program approved under CWA §§402(a)(3) or 402(b)(8);

2. knowingly making any false statement, representation, or certification in any record or other document submitted or required to be maintained under a permit, including monitoring reports or reports of compliance or noncompliance; and

3. knowingly violating CWA §303 and placing another person in imminent danger of death or serious bodily injury.

F. All reports and other information requested by the executive director must be signed by the person and in the manner required by 30 TAC §305.128 (relating to Signatories to Reports).

G. Authorization under this general permit does not convey property or water rights of any sort and does not grant any exclusive privilege.

H. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

I. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

J. The permittee shall comply with the monitoring and reporting requirements in 40 CFR §122.41(j) and (l), as applicable.

K. Analysis must be performed using sufficiently sensitive methods for analysis that comply with the rules located in 40 CFR §136.1(c) and 40 CFR §122.44(i)(1)(iv).

Part VIII. Fees

A. A fee of must be submitted along with the NOI:

1. $325 if submitting a paper NOI, or
2. $225 if submitting an NOI electronically.

B. Fees are due upon submission of the NOI. An NOI will not be declared administratively complete unless the associated fee has been paid in full.

C. No separate annual fees will be assessed for this general permit. The Water Quality Annual Fee has been incorporated into the NOI fees as described above.

D. Effective September 1, 2018, applicants seeking coverage under an NOI or LREW must submit their application using the online e-Permits system available through the TCEQ website, or request and obtain a waiver from electronic reporting from the TCEQ. Waivers from electronic reporting are not transferrable and expire on the same date as the authorization to discharge.

Appendix A: Automatic Authorization
Periods of Low Erosion Potential by County – Eligible Date Ranges

Andrews: Nov. 15 - Apr. 30

Archer: Dec. 15 - Feb. 14

Armstrong: Nov. 15 - Apr. 30

Bailey: Nov. 1 - Apr. 30, or Nov. 15 - May 14

Baylor: Dec. 15 - Feb. 14

Borden: Nov. 15 - Apr. 30

Brewster: Nov. 15 - Apr. 30

Briscoe: Nov. 15 - Apr. 30

Brown: Dec. 15 - Feb. 14

Callahan: Dec. 15 - Feb. 14

Carson: Nov. 15 - Apr. 30

Castro: Nov. 15 - Apr. 30

Childress: Dec. 15 - Feb. 14

Cochran: Nov. 1 - Apr. 30, or Nov. 15 - May 14

Coke: Dec. 15 - Feb. 14

Coleman: Dec. 15 - Feb. 14

Collingsworth: Jan. 1 - Mar. 30, or Dec. 1 - Feb. 28

Concho: Dec. 15 - Feb. 14

Cottle: Dec. 15 - Feb. 14

Crane: Nov. 15 - Apr. 30

Crockett: Nov. 15 - Jan. 14, or Feb. 1 - Mar. 30

Crosby: Nov. 15 - Apr. 30

Culberson: Nov. 1 - May 14

Dallam: Nov. 1 - Apr. 14, or Nov. 15 - Apr. 30

Dawson: Nov. 15 - Apr. 30

Deaf Smith: Nov. 15 - Apr. 30

Dickens: Nov. 15 - Jan. 14, or Feb. 1 - Mar. 30

Dimmit: Dec. 15 - Feb. 14

Donley: Jan. 1 - Mar. 30, or Dec. 1 - Feb. 28

Eastland: Dec. 15 - Feb. 14

Ector: Nov. 15 - Apr. 30

Edwards: Dec. 15 - Feb. 14

El Paso: Jan. 1 - Jul. 14, or May 15 - Jul. 31, or Jun. 1 - Aug. 14, or Jun. 15 - Sept. 14, or Jul. 1 - Oct. 14, or Jul. 15 - Oct. 31, or Aug. 1 - Apr. 30, or Aug. 15 - May 14, or Sept. 1 - May 30, or Oct. 1 - Jun. 14, or Nov. 1 - Jun. 30, or Nov. 15 - Jul. 14

Fisher: Dec. 15 - Feb. 14

Floyd: Nov. 15 - Apr. 30

Foard: Dec. 15 - Feb. 14

Gaines: Nov. 15 - Apr. 30

Garza: Nov. 15 - Apr. 30

Glasscock: Nov. 15 - Apr. 30

Hale: Nov. 15 - Apr. 30

Hall: Feb. 1 - Mar. 30

Hansford: Nov. 15 - Apr. 30

Hardeman: Dec. 15 - Feb. 14

Hartley: Nov. 15 - Apr. 30

Haskell: Dec. 15 - Feb. 14

Hockley: Nov. 1 - Apr. 14, or Nov. 15 - Apr. 30

Howard: Nov. 15 - Apr. 30

Hudspeth: Nov. 1 - May 14

Hutchinson: Nov. 15 - Apr. 30

Irion: Dec. 15 - Feb. 14

Jeff Davis: Nov. 1 - Apr. 30 or Nov. 15 - May 14

Jones: Dec. 15 - Feb. 14

Kent: Nov. 15 - Jan. 14 or Feb. 1 - Mar. 30

Kerr: Dec. 15 - Feb. 14

Kimble: Dec. 15 - Feb. 14

King: Dec. 15 - Feb. 14

Kinney: Dec. 15 - Feb. 14

Knox: Dec. 15 - Feb. 14

Lamb: Nov. 1 - Apr. 14, or Nov. 15 - Apr. 30

Loving: Nov. 1 - Apr. 30, or Nov. 15 - May 14

Lubbock: Nov. 15 - Apr. 30

Lynn: Nov. 15 - Apr. 30

Martin: Nov. 15 - Apr. 30

Mason: Dec. 15 - Feb. 14

Maverick: Dec. 15 - Feb. 14

McCulloch: Dec. 15 - Feb. 14

Menard: Dec. 15 - Feb. 14

Midland: Nov. 15 - Apr. 30

Mitchell: Nov. 15 - Apr. 30

Moore: Nov. 15 - Apr. 30

Motley: Nov. 15 - Jan. 14, or Feb. 1 - Mar. 30

Nolan: Dec. 15 - Feb. 14

Oldham: Nov. 15 - Apr. 30

Parmer: Nov. 1 - Apr. 14, or Nov. 15 - Apr. 30

Pecos: Nov. 15 - Apr. 30

Potter: Nov. 15 - Apr. 30

Presidio: Nov. 1 - Apr. 30, or Nov. 15 - May 14

Randall: Nov. 15 - Apr. 30

Reagan: Nov. 15 - Apr. 30

Real: Dec. 15 - Feb. 14

Reeves: Nov. 1 - Apr. 30, or Nov. 15 - May 14

Runnels: Dec. 15 - Feb. 14

Schleicher: Dec. 15 - Feb. 14

Scurry: Nov. 15 - Apr. 30

Shackelford: Dec. 15 - Feb. 14

Sherman: Nov. 15 - Apr. 30

Stephens: Dec. 15 - Feb. 14

Sterling: Nov. 15 - Apr. 30

Stonewall: Dec. 15 - Feb. 14

Sutton: Dec. 15 - Feb. 14

Swisher: Nov. 15 - Apr. 30

Taylor: Dec. 15 - Feb. 14

Terrell: Nov. 15 - Apr. 30

Terry: Nov. 15 - Apr. 30

Throckmorton: Dec. 15 - Feb. 14

Tom Green: Dec. 15 - Feb. 14

Upton: Nov. 15 - Apr. 30

Uvalde: Dec. 15 - Feb. 14

Val Verde: Nov. 15 - Jan. 14, or Feb. 1 - Mar. 30

Ward: Nov. 1 - Apr. 14, or Nov. 15 - Apr. 30

Wichita: Dec. 15 - Feb. 14

Wilbarger: Dec. 15 - Feb. 14

Winkler: Nov. 1 - Apr. 30, or Nov. 15 - May 14

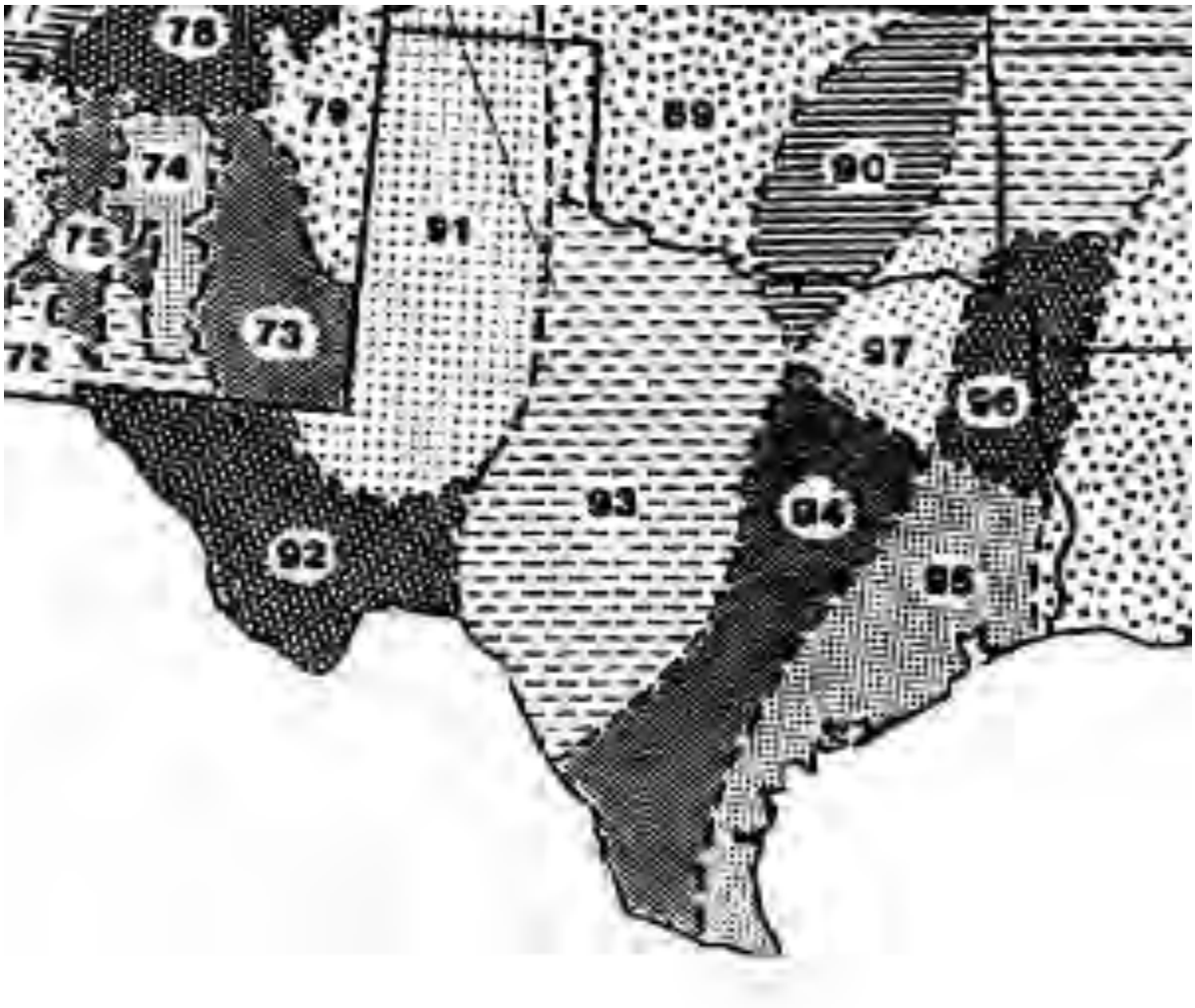
Yoakum: Nov. 1 - Apr. 30, or Nov. 15 - May 14

Young: Dec. 15 - Feb. 14

Wheeler: Jan. 1 - Mar. 30, or Dec. 1 - Feb. 28

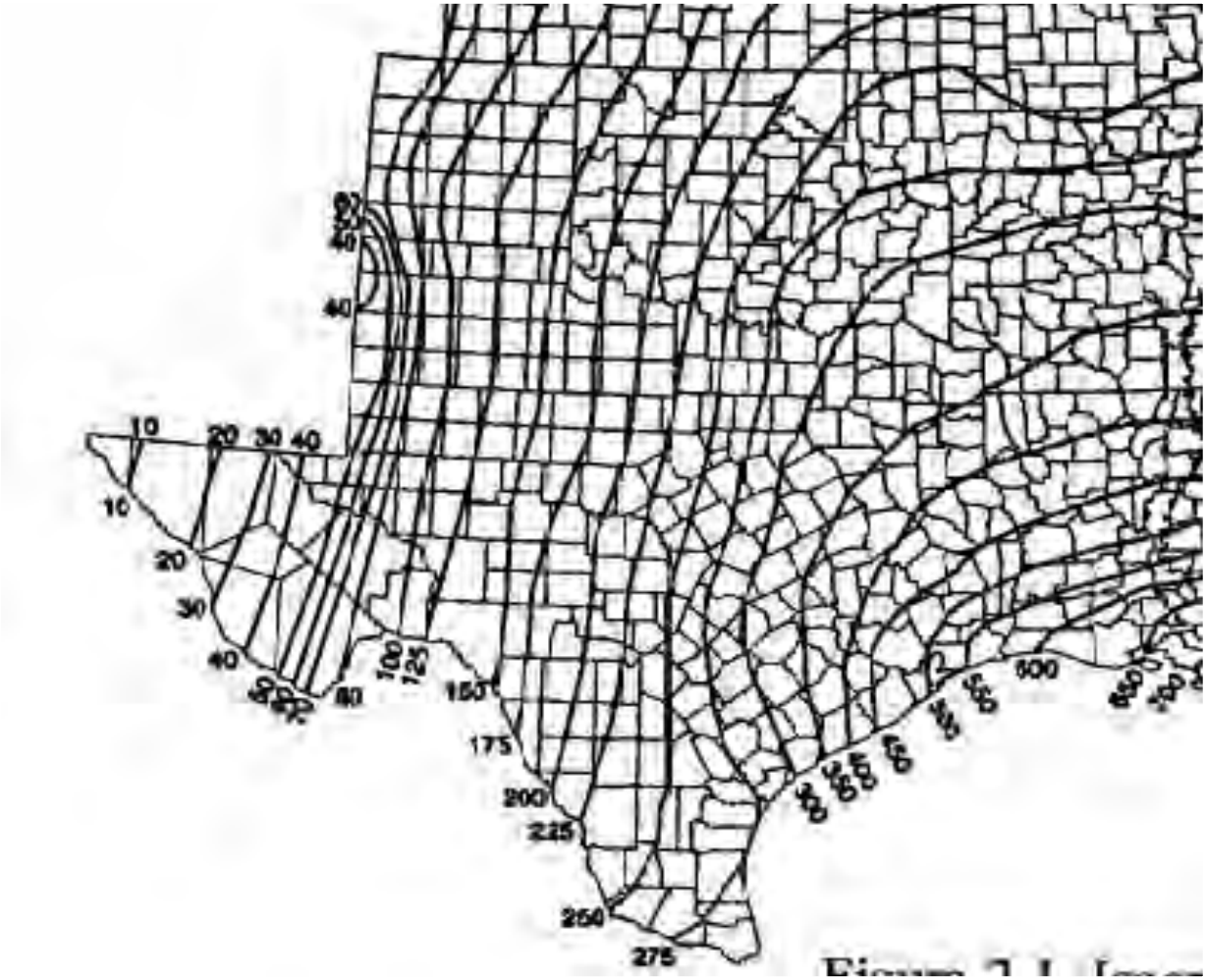
Zavala: Dec. 15 - Feb. 14

Appendix B: Erosivity Index (EI) Zones in Texas



Adapted from Chapter 2 of USDA Agriculture Handbook 703: "Predicting Soil Erosion by Water: A Guide to Conservation Planning With the Revised Universal Soil Loss Equation (RUSLE)," U.S. Department of Agriculture, Agricultural Research Service

Appendix C: Isoerodent Map



Adapted from Chapter 2 of USDA Agriculture Handbook 703: "Predicting Soil Erosion by Water: A Guide to Conservation Planning With the Revised Universal Soil Loss Equation (RUSLE)," U.S. Department of Agriculture, Agricultural Research Service

Appendix D: Erosivity Indices for EI Zones in Texas

Periods:

EI #	1/1	1/16	1/31	2/15	3/1	3/16	3/31	4/15	4/30	5/15	5/30	6/14	6/29	7/14	7/29	8/13	8/28	9/12	9/27	10/12	10/27	11/11	11/26	12/11	12/31
89	0	1	1	2	3	4	7	2	8	27	38	48	55	62	69	76	83	90	94	97	98	99	100	100	100
90	0	1	2	3	4	6	8	13	21	29	37	46	54	60	65	69	74	81	87	92	95	97	98	99	100
91	0	0	0	0	1	1	1	2	6	16	29	39	46	53	60	67	74	81	88	95	99	99	100	100	100
92	0	0	0	0	1	1	1	2	6	16	29	39	46	53	60	67	74	81	88	95	99	99	100	100	100
93	0	1	1	2	3	4	6	8	13	25	40	49	56	62	67	72	76	80	85	91	97	98	99	99	100
94	0	1	2	4	6	8	10	15	21	29	38	47	53	57	61	65	70	76	83	88	91	94	96	98	100
95	0	1	3	5	7	9	11	14	18	27	35	41	46	51	57	62	68	73	79	84	89	93	96	98	100
96	0	2	4	6	9	12	17	23	30	37	43	49	54	58	62	66	70	74	78	82	86	90	94	97	100
97	0	1	3	5	7	10	14	20	28	37	48	56	61	64	68	72	77	81	86	89	92	95	98	99	100
106	0	3	6	9	13	17	21	27	33	38	44	49	55	61	67	71	75	78	81	84	86	90	94	97	100

* Each period begins on the date listed in the table above and lasts until the day before the following period. The final period begins on December 11 and ends on December 31.

Table adapted from Chapter 2 of USDA Agriculture Handbook 703: "Predicting Soil Erosion by Water: A Guide to Conservation Planning With the Revised Universal Soil Loss Equation (RUSLE)," U.S. Department of Agriculture, Agricultural Research Service

Appendix B

SWPPP Certification

Signature Requirements in 30 TAC §305.44

The purpose of this document is to clarify the signature requirements for water quality permit applications subject to 30 Texas Administrative Code (TAC) section (§)305.44. This includes most applications relating to authorizations issued under 30 TAC Chapter 305 (relating to Consolidated Permits), Chapter 205 (relating to General Permits for Waste Discharges), 30 TAC Chapter 312 (relating to Sludge Use, Disposal and Transportation), and 30 TAC Chapter 321 (relating to Control of Certain Activities By Rule).

TCEQ is currently updating the signatory instructions in its application forms. You may have recently received a notice of deficiency (NOD) letter indicating failure to meet the signatory requirements. Please review the information provided below concerning signatory requirements and have a person authorized to sign under §305.44 and submit the enclosed certification. The certification must clearly indicate the applicant and the original application form subject to the NOD. Upon satisfactory review of your signed certification, your submission will no longer be deficient for failing to meet the signatory requirements.

You are encouraged to use the attached certification page for water quality permit and registration applications, and other authorization forms subject to §305.44, until the forms have been updated.

IF YOU ARE A CORPORATION:

The regulation governing who may sign an application form is 30 TAC §305.44(a)(1) (see attached). According to this provision, any corporate representative may sign an application form so long as the authority to sign such a document has been delegated to that person in accordance with corporate procedures. By signing the application form, you are certifying that such authority has been delegated to you. The TCEQ may request documentation evidencing such authority.

IF YOU ARE A MUNICIPALITY OR OTHER GOVERNMENT ENTITY:

The regulation governing who may sign an application form is 30 Texas Administrative Code §305.44(a)(3) (see attached). According to this provision, only a ranking elected official or principal executive officer may sign an application form. Persons such as the City Mayor or County Commissioner are ranking elected officials. The principal executive officer may be identified in your city charter, county or city ordinances, or the Texas statute(s) under which your governmental entity was formed. An application form that is signed by a governmental official who is not a ranking elected official or principal executive officer does not conform to §305.44(a)(3). The signatory requirement may not be delegated to a government representative other than those identified in the regulation. By signing the application , you are certifying that you are either a ranking elected official or principal executive officer. Documentation demonstrating your position as a ranking elected official or principal executive officer may be requested by the TCEQ.

If you have questions or need additional information concerning the signatory requirements discussed above, please contact either Matt Beeter at (512) 239-1406 or Carol Lear at (512) 239-1025, of the Texas Commission on Environmental Quality's Environmental Law Division.

30 Texas Administrative Code
§305.44. Signatories to Applications.

(a) All applications shall be signed as follows.

(1) For a corporation, the application shall be signed by a responsible corporate officer. For purposes of this paragraph, a responsible corporate officer means a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. Corporate procedures governing authority to sign permit or post-closure order applications may provide for assignment or delegation to applicable corporate positions rather than to specific individuals.

(2) For a partnership or sole proprietorship, the application shall be signed by a general partner or the proprietor, respectively.

(3) For a municipality, state, federal, or other public agency, the application shall be signed by either a principal executive officer or a ranking elected official. For purposes of this paragraph, a principal executive officer of a federal agency includes the chief executive officer of the agency, or a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., regional administrator of the EPA).

CERTIFICATION

Permit/Registration No._____

Applicant:_____

I, _____ _____
Typed or printed name *Title*

certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I further certify that I am authorized under 30 Texas Administrative Code §305.44 to sign this document and can provide documentation in proof of such authorization upon request.

Signature:_____ Date:_____

Appendix C

Large Construction Site Notice – Primary and Secondary Operators

LARGE CONSTRUCTION SITE NOTICE

FOR THE
Texas Commission on Environmental Quality (TCEQ)
Stormwater Program

TPDES GENERAL PERMIT TXR150000

"PRIMARY OPERATOR" NOTICE

This notice applies to construction sites operating under Part II.E.3. of the TPDES General Permit Number TXR150000 for discharges of stormwater runoff from construction sites equal to or greater than five acres, including the larger common plan of development. The information on this notice is required in Part III.D.2. of the general permit. Additional information regarding the TCEQ stormwater permit program may be found on the internet at:

https://www.tceq.texas.gov/permitting/stormwater/construction

Site-Specific TPDES Authorization Number:	
Operator Name:	GHD Services, Inc.
Contact Name and Phone Number:	Jason Davis, 432-413-5156
Project Description: *Physical address or description of the site's location, and estimated start date and projected end date, or date that disturbed soils will be stabilized.*	18003 Market Street, Channelview, Texas Estimated Start date: 11/14/2022 Estimated End Date: 5/9/2024
Location of Stormwater Pollution Prevention Plan:	On-site storage

LARGE CONSTRUCTION SITE NOTICE

FOR THE
Texas Commission on Environmental Quality (TCEQ)
Storm Water Program

TPDES GENERAL PERMIT TXR150000

"SECONDARY OPERATOR" NOTICE

This notice applies to secondary operators of construction sites operating under Part II.E.3. of the TPDES General Permit Number TXR150000 for discharges of storm water runoff from construction sites equal to or greater than five acres, including the larger common plan of development. The information on this notice is required in Part III.D.2. of the general permit. Additional information regarding the TCEQ storm water permit program may be found on the internet at:

http://www.tceq.state.tx.us/nav/permits/sw_permits.html

Site-Specific TPDES Authorization Number:	TXR150000
Operator Name:	GHD Services, Inc.
Contact Name and Phone Number:	Jason Davis, 432-413-5156
Project Description: *Physical address or description of the site's location, and estimated start date and projected end date, or date that disturbed soils will be stabilized.*	
Location of Storm Water Pollution Prevention Plan (SWP3):	

For Large Construction Activities Authorized Under Part II.E.3. (Obtaining Authorization to Discharge) the following certification must be completed:

I _____ (Typed or Printed Name Person Completing This Certification) certify under penalty of law that I have read and understand the eligibility requirements for claiming an authorization under Part II.E.3. of TPDES General Permit TXR150000 and agree to comply with the terms of this permit. A storm water pollution prevention plan has been developed and will be implemented prior to construction, according to permit requirements. A copy of this signed notice is supplied to the operator of the MS4 if discharges enter an MS4. I am aware there are significant penalties for providing false information or for conducting unauthorized discharges, including the possibility of fine and imprisonment for knowing violations.

Signature and Title_____ Date _____

_____*Date Notice Removed*
____*MS4 operator notified per Part II.F.3.*

Appendix D

Site Stabilization Tracking Form

Site Stabilization Tracking Form
San Jacinto Waste Pits Superfund Site - Southern impoundment
Channelview, Texas

The following records shall be maintained:

– Dates when major grading activities occur
– Dates when construction activities temporarily or permanently cease on a portion of the Site
– Dates when stabilization measures are initiated

Date	Temporary or Final	Activity

Appendix E

Soil Data

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Harris County, Texas

October 11, 2022

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:4,720 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 200 400 800 1200

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Harris County, Texas
Survey Area Data: Version 24, Aug 24, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 20, 2022—Mar 25, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
HarA	Harris clay, 0 to 1 percent slopes, frequently flooded, tidal	1.6	4.4%
IjmB	Ijam clay, 0 to 2 percent slopes, frequently flooded, tidal	24.7	66.6%
W	Water	10.8	29.0%
Totals for Area of Interest		**37.2**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or

landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Harris County, Texas

HarA—Harris clay, 0 to 1 percent slopes, frequently flooded, tidal

Map Unit Setting

National map unit symbol: 2syc5
Elevation: 0 to 50 feet
Mean annual precipitation: 28 to 60 inches
Mean annual air temperature: 69 to 72 degrees F
Frost-free period: 300 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Harris and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Harris

Setting

Landform: Marshes
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Holocene age clayey alluvium derived from igneous, metamorphic and sedimentary rock

Typical profile

Ag - 0 to 12 inches: clay
Bssg1 - 12 to 44 inches: clay
Bssg2 - 44 to 80 inches: silty clay

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 0 to 30 inches
Frequency of flooding: NoneFrequent
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Slightly saline to moderately saline (4.0 to 12.0 mmhos/cm)
Sodium adsorption ratio, maximum: 30.0
Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): 7w
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: D
Ecological site: R151XY673TX - INTERMEDIATE Firm MARSH
Hydric soil rating: Yes

Minor Components

Follet

Percent of map unit: 3 percent
Landform: Marshes
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R150BY552TX - Tidal Flat
Hydric soil rating: Yes

Narta

Percent of map unit: 2 percent
Landform: Flats
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R150BY551TX - Salty Prairie
Hydric soil rating: Yes

Franeau

Percent of map unit: 2 percent
Landform: Flats
Landform position (three-dimensional): Dip
Microfeatures of landform position: Gilgai
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R151XY006LA - Clayey Chenier Brackish Marsh 55-64 PZ
Hydric soil rating: Yes

Creole

Percent of map unit: 1 percent
Landform: Marshes
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R151XY005LA - Brackish Firm Mineral Marsh 55-64 PZ
Hydric soil rating: Yes

Veston

Percent of map unit: 1 percent
Landform: Barrier flats
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R150BY550TX - Northern Salt Marsh
Hydric soil rating: Yes

Barnett

Percent of map unit: 1 percent
Landform: Marshes
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R151XY005LA - Brackish Firm Mineral Marsh 55-64 PZ
Hydric soil rating: Yes

ljmB—ljam clay, 0 to 2 percent slopes, frequently flooded, tidal

Map Unit Setting

National map unit symbol: 2thnj
Elevation: 0 to 10 feet
Mean annual precipitation: 50 to 62 inches
Mean annual air temperature: 68 to 72 degrees F
Frost-free period: 270 to 300 days
Farmland classification: Not prime farmland

Map Unit Composition

ljam and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of ljam

Setting

Landform: Flats
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey dredge spoils derived from igneous, metamorphic and sedimentary rock

Typical profile

A - 0 to 6 inches: clay
Cg1 - 6 to 23 inches: clay
Cg2 - 23 to 65 inches: clay
Cg3 - 65 to 80 inches: clay

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: FrequentNone
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Slightly saline to strongly saline (4.0 to 16.0 mmhos/cm)
Sodium adsorption ratio, maximum: 30.0
Available water supply, 0 to 60 inches: Moderate (about 6.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: D
Ecological site: R151XY673TX - INTERMEDIATE Firm MARSH

Hydric soil rating: Yes

W—Water

Map Unit Composition

Water: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Water

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D
Hydric soil rating: No

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Appendix F

Construction Site Inspection Checklist

Inspection Checklist
San Jacinto Waste Pits Superfund Site - Southern Impoundment
Channelview, Texas

Inspections must be conducted once every 7 days OR every 14 days and within 24 hours of a 0.5 inches or greater rainfall. This report must be completed within 24 hours following the inspection.

GENERAL INSPECTION INFORMATION

Construction Site Inspection Date: _____ Inspector Name: _____

Inspector Title: _____ Qualifications: _____

Storm Events of the Last 7 Days

Storm Event Date	Storm Event Time	Storm Event Duration	Total Rainfall Amount	Discharge Occur? (Y/N)

Weather Information at the Time of Inspection

Temperature: _____ Climate (Sunny, Cloudy, Rain)? _____

Is Stormwater Being Discharged? _____ If yes, describe: _____

Sketch or Small Site Map

Along with a narrative inspection log, use a sketch or a reduced photocopy of the site plan showing the location of stormwater outfalls and storm drain inlets as well as the location and types of control measures. Problems observed at these locations, or at other locations on the construction site, should be highlighted and any corrective measures undertaken should be drawn in and noted in detail on the front side of the sketch. This method will also be helpful as the permittee is required to update the SWPPP to reflect current site conditions.

Inspection Checklist
San Jacinto Waste Pits Superfund Site - Southern Impoundment
Channelview, Texas

CONSTRUCTION ENTRANCES/EXITS

Construction Site Notices

	Yes	No	N/A
1. Is a complete Construction Site Notice posted in a publicly visible location?	☐	☐	☐

Stone Construction Entrances

	Yes	No	N/A
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐	☐
2. Is the stone greater than 2-inch diameter?	☐	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 30 feet and a length of at least 50 feet?	☐	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Inspection Checklist
San Jacinto Waste Pits Superfund Site - Southern Impoundment
Channelview, Texas

SEDIMENT CONTROLS

Silt Fence

		Yes	No	N/A
1.	Is the fence at least 4" to 6" into the ground?	☐	☐	☐
2.	Is the trench backfilled to prevent runoff from cutting underneath the fence?	☐	☐	☐
3.	Is the fence pulled tight so it won't sag when water builds up behind it?	☐	☐	☐
4.	Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	☐	☐	☐
5.	Is the fence placed on a level contour? If not, the fence will only act as a diversion.	☐	☐	☐
6.	Have any gaps and tears in the fence been eliminated.	☐	☐	☐
7.	Is the fence controlling an appropriate drainage area?	☐	☐	☐
8.	Has sediment buildup been removed before it reaches half the height of the fence?	☐	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

_____

_____

_____

_____

Filter Tubes

		Yes	No	N/A
1.	Is the tube staked or otherwise secured to the ground?	☐	☐	☐
2.	Are the ends of tubes overlapped to prevent breakthrough?	☐	☐	☐
3.	Is the fence pulled tight so it won't sag when water builds up behind it?	☐	☐	☐
4.	Are the ends turned upslope to prevent runoff from going around the ends?	☐	☐	☐
5.	Is the tube placed on a level contour? If not, the tube will only act as a diversion.	☐	☐	☐
6.	Have any gaps and tears in the tube been eliminated.	☐	☐	☐
7.	Is the tube controlling an appropriate drainage area?	☐	☐	☐
8.	Has sediment buildup been removed before it reaches half the height of the tube?	☐	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

_____

_____

_____

_____

TEMPORARY STABILIZATION

		Yes	No	N/A
1.	Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐	☐
2.	Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐	☐
3.	Have disturbed areas outside the perimeter controls been seeded or mulched?	☐	☐	☐
4.	Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐	☐
5.	Has seed and mulch been applied at the proper rate?	☐	☐	☐
6.	Has seed or mulch blown away? If so, repair.	☐	☐	☐

Note areas where repairs or maintenance are needed or where this practice needs to be applied:

PERMANENT STABILIZATION

		Yes	No	N/A
1.	Are any areas at final grade?	☐	☐	☐
2.	Has the soil been properly prepared to accept permanent seeding?	☐	☐	☐
3.	Has seed and mulch been applied at the appropriate rate?	☐	☐	☐
4.	If rainfall has been inadequate, are seeded areas being watered?	☐	☐	☐
5.	For drainage ditches with high velocity flow, have additional stabilization practices been implemented?	☐	☐	☐
6.	Has rock riprap or equivalent been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	☐	☐	☐
7.	For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	☐	☐	☐

Note areas where repairs or maintenance are needed or where this practice needs to be applied:

Inspection Checklist
San Jacinto Waste Pits Superfund Site - Southern Impoundment
Channelview, Texas

NON-SEDIMENT POLLUTION CONTROL

		Yes	No	N/A
1.	Has an area been designated for washing out concrete trucks? Washings must be contained on site within a lined, bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.	☐	☐	☐
2.	Is waste and packaging disposed of in a dumpster? Do not burn them on site.	☐	☐	☐
3.	Are fuel tanks and drums of toxic and hazardous materials stored within a protected area or trailer and away from any watercourse, ditch or storm drain?	☐	☐	☐
4.	Are fuel tanks and drums of toxic and hazardous materials stored within adequate secondary containment?	☐	☐	☐
5.	Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.	☐	☐	☐
6.	Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?	☐	☐	☐
7.	If an area of the site is being dewatered, is it being pumped using a dewatering bag or other adequate BMP?	☐	☐	☐

Note areas where repairs or maintenance are needed or where this practice needs to be applied:

_____

_____

_____

_____

ADDITIONAL NOTES

_____

_____

_____

_____

_____

_____

_____

_____

_____

Inspection Checklist
San Jacinto Waste Pits Superfund Site - Southern Impoundment
Channelview, Texas

SWPPP Action Items

Items previously identified for action:	Target Date	Completed		Comments
		Yes	No	
		☐	☐	
		☐	☐	
		☐	☐	
		☐	☐	
		☐	☐	
		☐	☐	
		☐	☐	
		☐	☐	
		☐	☐	
		☐	☐	

Items Identified in this inspection for action:	Target Date

SWPPP Modification

The SWPPP must be modified based on the results of inspections, as necessary, to better control pollutants in runoff within seven calendar days. Results that require a modification in the SWPPP may include instances of non-conformance, BMPs which have failed to operate as designed or proved inadequate, and locations where additional BMPs are needed.

NO INCIDENTS OF NON-COMPLIANCE

Where an inspection report does not identify any incidents of non-compliance, it shall be certified that the facility is in compliance TPDES Construction General Permit TXR150000. The report shall be signed in accordance with Part III.F.7.(f)(ii) of the permit.

I certify that the Enterprise - Colorado River Project LLC site is in compliance with the TPDES Construction General Permit TXR150000.

Signatory or Authorized Delegate

Date

Appendix G

Tracking Form for SWPPP Amendments

Tracking Form For SWPPP Amendments
San Jacinto Waste Pits Superfund Site - Southern Impoundment
Channelview, Texas

The SWPPP must be updated whenever: (1) there is a change in design, construction, operations, or maintenance that has a significant effect on the discharge of pollutants to waters of the United States or State and which has not otherwise been addressed in the SWPPP; (2) inspections or investigations indicate that the SWPPP is not effective in eliminating or significantly minimizing stormwater runoff from construction activities; or (3) there are changing site conditions based on updated plans, new operators, new areas of responsibility and changes in BMPs.

Revisions to the SWPPP are noted below:

Date	Section No.	Revision	Revisions Made By:	
			Name	Signature

Tracking Form For SWPPP Amendments
San Jacinto Waste Pits Superfund Site - Southern Impoundment
Channelview, Texas

The SWPPP must be updated whenever: (1) there is a change in design, construction, operations, or maintenance that has a significant effect on the discharge of pollutants to waters of the United States or State and which has not otherwise been addressed in the SWPPP; (2) inspections or investigations indicate that the SWPPP is not effective in eliminating or significantly minimizing stormwater runoff from construction activities; or (3) there are changing site conditions based on updated plans, new operators, new areas of responsibility and changes in BMPs.

Revisions to the SWPPP are noted below:

Date	Section No.	Revision	Revisions Made By:	
			Name	Signature

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			Name	Signature

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Revisions to the SWPPP are noted below:

Date	Section No.	Revision	Revisions Made By:	
			Name	Signature

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Channelview, Texas

The SWPPP must be updated whenever: (1) there is a change in design, construction, operations, or maintenance that has a significant effect on the discharge of pollutants to waters of the United States or State and which has not otherwise been addressed in the SWPPP; (2) inspections or investigations indicate that the SWPPP is not effective in eliminating or significantly minimizing stormwater runoff from construction activities; or (3) there are changing site conditions based on updated plans, new operators, new areas of responsibility and changes in BMPs.

Revisions to the SWPPP are noted below:

Date	Section No.	Revision	Revisions Made By:	
			Name	Signature

Appendix H

Erosion and Sedimentation Control Plan and Details

LEGEND

- PROPERTY BOUNDARY
- PROPERTY EASEMENT
- EXISTING CONTOUR INTERVAL
- FENCELINE
- SHORELINE
- TOP OF BANK
- TOE OF SLOPE
- OVERHEAD ELECTRICAL
- GUARDRAIL
- UNDERGROUND CCTV LINE
- UNDERGROUND AT&T LINE
- SJSB002 PDI/RI BORING LOCATION
- MW MONITORING WELL
- P.P. POWER POLE
- L.P. LIGHT POLE
- WELL WELL
- AREA OF IMPACT
- ASPHALT
- CONCRETE
- GRAVEL
- SILT FENCE
- TURBIDITY CURTAIN

SOURCE:

TOPOGRAPHIC, HYDROGRAPHIC, & MAGNETOMETER SURVEY OF SAN JACINTO RIVER WASTE PITS, HARRIS COUNTY, TEXAS, MORRISON SURVEYING INC., 190608, JULY 8, 2019 TO AUGUST 2, 2019

PARCELS 1, 2 & 3 & PRIVATE ROAD SURVEYED FOR GHD SITUATED IN THE J. T. HARRELL SURVEY, A-330 HARRIS COUNTY, TEXAS HUTCHISON & ASSOCIATES - 20-6417 - 6417.bdry - 07-24-2020

NOTES:

1. FOR THE AREAS REQUIRING SOIL REMOVAL NEAR MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY, THE LATERAL LIMITS OF THE EXCAVATION WILL EXTEND IMMEDIATELY UP TO MARKET STREET AND THE GLENDALE BOAT WORKS, INC. PROPERTY LIMITS; HOWEVER, THE EXCAVATION WILL NOT EXTEND INTO EITHER THE STREET OR ONTO THE GLENDALE BOAT WORKS, INC. PROPERTY.
2. FOR THE AREAS REQUIRING SOIL REMOVAL ON THE SOUTHWEST PORTION OF THE SOUTHERN IMPOUNDMENT, A BULKHEAD WILL BE INSTALLED ADJACENT TO THE SAN JACINTO RIVER. THE EXCAVATION WILL BE COMPLETED UP TO THE LATERAL LIMIT OF THIS BULKHEAD.

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF EPA REVIEW UNDER THE AUTHORITY OF WILLIAM ALLEN BEAL, P.E. 137828 ON 06/02/2022. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING, RECORDATION, CONVEYANCE OR SALES PURPOSES.

GHD SERVICES INC.
JOB NO. 11215131 FILE NO. 02
GHD TEXAS FIRM REGISTRATION NO. 276

100% REMEDIAL DESIGN ADDENDUM

GHD
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Baton Rouge Louisiana USA
T 225 292 9007 **F** 225 952 2978 **W** www.ghd.com

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Client
SAN JACINTO RIVER WASTE PITS

Project
REMEDIAL DESIGN SOUTHERN IMPOUNDMENT HARRIS COUNTY, TEXAS

No.	Issue	Drawn	Approved	Date
9	100% RD ADDENDUM	MW	RH	06/02/2022
8	FOR CLIENT REVIEW	MW	RH	05/06/2022
7	100% EPA RE-SUBMITTAL	MW	RH	04/19/2021
6	100% EPA SUBMITTAL	MW	RH	12/18/2020

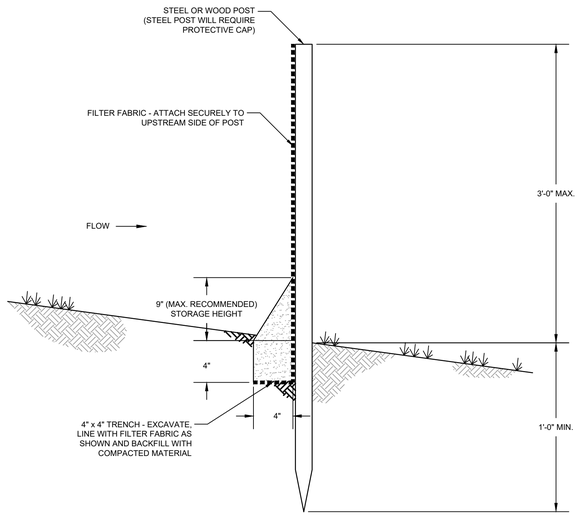
Drawn **MW** — Designer **RH**
Drafting Check **BP** — Design Check **LL**
Project Coordinator **CM** — Date **May 27, 2022**
This document shall not be used for construction unless signed and sealed for construction. — Scale **1" = 100'**
Original Size **Arch D** — Bar is one inch on original size drawing 0 1"

Project No. **11215131**

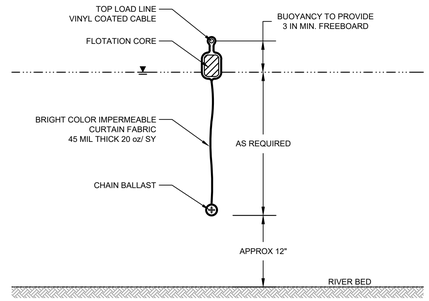
Title
SOIL EROSION AND SEDIMENT CONTROL PLAN

Sheet No.
C-04

Sheet 7 of 46



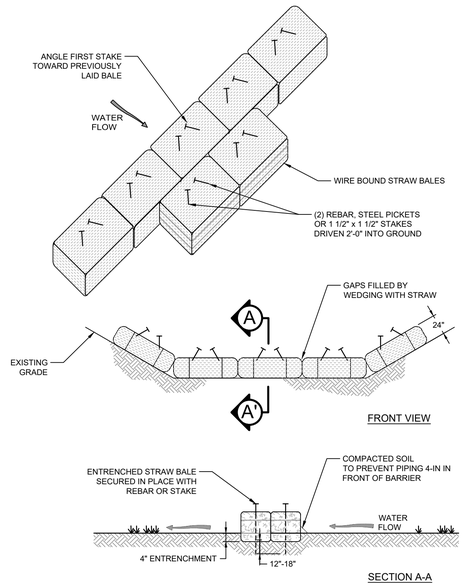
DETAIL 1 TEMPORARY SILT FENCE
N.T.S. C-04



NOTES

1. TURBIDITY CURTAIN SHALL BE TYPE II ACCORDING TO DEPARTMENT OF THE ARMY, US ARMY CORPS OF ENGINEERS WASHINGTON, DC, ENGINEERING AND DESIGN "HANDBOOK FOR THE PREPARATION OF STORM WATER POLLUTION PREVENTION PLANS FOR CONSTRUCTION ACTIVITIES", APPENDIX 'C' BMP 27 TURBIDITY CURTAIN, DOCUMENT EP1110-1-16, 1997.
2. CURTAIN SYSTEM SHALL BE EQUIPPED WITH LOAD TRANSFER TYPE PANEL CONNECTORS, HEAT SEALED FABRIC SEAMS AND TIGHT SKIRT JOINTS.
3. INCLUDE MOORING SYSTEM IF REQUIRED.

DETAIL 2 TURBIDITY CURTAIN
N.T.S. C-04



NOTE:

INSTALL SECOND ROW OF STRAW BALES IN BOTTOM OF SWALE ONLY.

DETAIL 3 STRAW BALE BARRIER
N.T.S. C-04

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Project
REMEDIAL DESIGN SOUTHERN IMPOUNDMENT HARRIS COUNTY, TEXAS

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Drafting Check	BP	Design Check	LL
Project Coordinator	CM	Date	May 27, 2022
This document shall not be used for construction unless signed and sealed for construction.		Scale	N.T.S.
Original Size	Arch D	Bar is one inch on original size drawing	0 1"

Project No. 11215131

Title
SOIL EROSION AND SEDIMENT CONTROL DETAILS

Sheet No.
C-05

Sheet 8 of 46

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The Power of Commitment