

Sand Mining Rulemaking Petitions Stakeholder Meeting

Rule Project Number 2020-048-311-OW

November 10, 2020

Texas Commission on Environmental Quality Water Quality Division

Welcome and Introductions



Welcome

- General announcements and ground rules
- TCEQ offices are closed to the public
- Virtual Meeting Reminders:
 - This meeting is being audio recorded
 - Share airtime allow everyone an opportunity to speak
 - Options available to provide input during the meeting
 - "Raise your hand" when you would like to speak a moderator will unmute your microphone
 - If you joined via the conference phone line, please say you would like to speak - a moderator will unmute the phone line
 - Or type questions and comments in the chat box
 - If you called in, please mute your phone line to minimize background noise



Introductions

- Speakers/Presenters
 - David Galindo Deputy Director, Water Quality Division
 - Rebecca L. Villalba, Team Leader, Stormwater Team
 - Macayla Coleman, Permit Writer, Stormwater Team
- Petitioners
 - Josh Leftwich, Texas Aggregates and Concrete Association
 - Bill McCabe, Lake Houston Area Grassroots Flood Prevention Initiative
 - David Feille, Lake Houston Area Grassroots Flood Prevention Initiative
- Panelists
 - Michael Parr, Attorney, Environmental Law Division
 - Peter Schaefer, Team Leader, Standards Implementation Team
 - Dan Siebeneicher, Permit Writer, Stormwater Team



Goals and Objectives





Petitioner Statement

- Lake Houston Area Grassroots Flood Prevention Initiative
 - Known as FPI
 - Citizen committee created after Hurricane Harvey
 - Bill McCabe and David Feille, Initiative Leaders



Petitioner Statement

Texas Aggregates and Concrete Association

- Known as TACA
- Statewide trade organization whose members supply aggregates, concrete, and other materials to commercial property developers
- Josh Leftwich, President and CEO



Today's Agenda

Welcome and Introductions	David Galindo (TCEQ)	
Meeting Overview:		
Goals and Objectives	David Galindo (TCEQ) Bill McCabe (Lake Houston Area Grassroots Flood Prevention Initiative) Josh Leftwich (Texas Aggregates and	
Overview of Rulemaking Timeline	Concrete Association) Rebecca L. Villalba (TCEQ)	
Summary of Rulemaking Petitions	Rebecca L. Villalba (TCEQ)	
Watershed Maps	Macayla Coleman (TCEQ)	
Draft Rule Language	Rebecca L. Villalba (TCEQ)	
Stakeholder Discussion:		

Stakeholder's input on proposed rulemaking

Break for lunch - 1 hour



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Today's Agenda

Meeting Overview:		
Best Management Practices and Stormwater	Rebecca L. Villalba (TCEQ)	
Overview of Proposed Best Management Practices	David Galindo (TCEQ)	
Stakeholder Discussion:		
Stakeholder's input on the proposed best management practices documents		
Summary and Adjournment:	David Galindo (TCEQ)	



Meeting Outline: Morning

Overview of Rulemaking Timeline

Summary of Rulemaking Petitions

Watershed Maps

Draft Rule Language

Stakeholder Discussion and Input



Overview of Rulemaking Timeline



Petitions - Background

- Two similar petitions submitted to TCEQ
 - TACA filed on June 15, 2020
 - FPI filed on June 23, 2020
- Commissioners' Agenda
 - August 12, 2020
 - Docket No. 2020-0821-PET
- Proceed with rulemaking and stakeholder process
- Rulemaking website: <u>https://www.tceq.texas.gov/permitting/stormwater/sand-mining-</u> <u>rulemaking</u>





Rulemaking Timeline

STAKEHOLDER

CURRENT PHASE

- Stakeholder
 Meeting and Input
 - Draft Rule
 - Watershed Area
 - BMPs

Stakeholder Comments Due Dec. 10, 2020

 TCEQ Reviews Comments

PROPOSAL

NEXT PHASE

- TCEQ Finalizes Draft Rule
- Commission Approval to Publish
- TCEQ Publishes Proposed Rule in *Texas Register*
- 30-day Formal Public Comment Period
- Public Hearing

ADOPTION

FINAL PHASE

- TCEQ Responds to Public Comments and Finalizes Rule
- Commission Adopts Rule
- Adopted Rule Published in *Texas Register*

Rulemaking Timeline



Meeting Goals: Morning

Overview of Rulemaking Timeline

Summary of Rulemaking Petitions

Watershed Maps

Draft Rule Language

Stakeholder Discussion and Input



Summary of Rulemaking Petitions



Petitions - Submission Contents

- Original Petitions for Rulemaking
 - Propose TCEQ adopt a new rule to establish BMPs for APOs in a select area in the San Jacinto River Basin
- Petitioners submissions
 - Cover Letter
 - Original Petition for Rulemaking with Draft Rule Language
 - Draft Best Management Practices
 Document



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Original Petitions for Rulemaking

- Proposed new Subchapter in 30 TAC Chapter 311
- Existing Watershed Protection Rules
 - Texas Administrative Code (TAC)
 - Title 30, Environmental Quality
 - Chapter 311, Watershed Protections
 - Subchapters A-I
 - Provide restrictions on specified activities in water quality areas





Original Petitions for Rulemaking

- Proposed new Subchapter in 30 TAC Chapter 311
 - Subchapter J: Best Management Practices for Aggregate
 Production Operations within the San Jacinto River Basin
- Proposed rule only applicable to:
 - Aggregate Production Operations (APOs)
 - "A site that is subject to the requirements under Chapter 342 of this title..." (Petition Page 3, Section 311.101. Definitions)
 - Defined areas within the San Jacinto River Basin
 - "...intent that these proposed rules would have limited applicability and would not apply across the entire San Jacinto River Watershed." (Petition Page 2, Section II)



Original Petitions for Rulemaking

- Proposed new Subchapter in 30 TAC Chapter 311
 - Subchapter J: Best Management Practices for Aggregate
 Production Operations within the San Jacinto River Basin
- Proposed rule would:
 - Establish BMPs for certain APO operations
 - Require TCEQ to develop and maintain a BMPs document



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Watershed Maps



San Jacinto River Watershed Maps

- San Jacinto River Basin is located in Montgomery, Harris, Walker, San Jacinto, Grimes, Waller, and Liberty Counties
- Proposed watershed areas differ between petitions
 - TACA includes a more narrowly-defined area
 - FPI includes a broader area



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Watershed Maps: Definition Comparison



TACA

FPI

Only the watersheds of the following and its tributaries:

- The East Fork of the San Jacinto River in Montgomery County, Harris County and Liberty County
- Peach Creek in Montgomery County
- Caney Creek in Montgomery and Harris County
- The West Fork of the San Jacinto River, to encompass tributaries that feed in below Lake Conroe Dam in Montgomery County and Harris County (to include Lake Creek, Spring Creek and Cypress Creek) terminating at the Lake Houston Dam



Watershed Maps: Map Comparison

TACA



FPI



Map created 11/6/2020. For more information concerning this map, contact the Water Quality Division at 512-239-3925. This map was generated by the Texas Commission on Environmental Quality, Water Quality Division. This product is for information purposes and may not have been prepared for or be suitable for legal, engineering, or survey purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries.



Watershed Maps TACA Proposed Watershed





Watershed Maps FPI Proposed Watershed



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Watershed Maps: Map Overlay



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Input on Watershed Area Definition

- New rule must define the watershed area where the rule will apply
- Need input from stakeholders to determine the final definition
 - Use one of the proposed definitions?
 - Use a combination of the proposed definitions?





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Draft Rule Language



Draft Sand Mining BMPs Rule Language

Chapter 311 Watershed Protection, Title 30 Texas Administrative Code

 SUBCHAPTER J: BEST MANAGEMENT PRACTICES FOR AGGREGATE PRODUCTION OPERATIONS WITHIN THE SAN JACINTO RIVER BASIN



Draft Rule Language §311.101. Definitions

The following words and terms, when used in this subchapter, have the following meanings.

(1) Aggregate Production Operations (APOs) – A site as defined and that is subject to the requirements under Chapter 342 of this title (relating to Regulation of Certain Aggregate Production Operations).

(2) Best management practices (BMPs) – Schedules of activities, prohibitions of practices, maintenance procedures, and other techniques to control, prevent or reduce the discharge of pollutants into surface water of the state.
BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spills or leaks, sludge or waste disposal, or drainage from raw material storage areas.



Draft Rule Language §311.101. Definitions Continued

(3) **Infeasible** - Not technologically possible or not economically practicable and achievable in light of best industry practices.

(4) **Minimize** - To reduce or eliminate to the extent achievable using control measures that are technologically available and economically practicable and achievable in light of best industry practices.

(5) **Regulated activity** – Sand mining and quarrying operations conducted at APO sites.

(6) **San Jacinto River Watershed** – For the purposes of this subchapter the San Jacinto River Watershed is defined only as the... *to be determined with stakeholder involvement*



Draft Rule Language §311.102. Scope and Applicability

The purpose of this chapter is to regulate, through BMPs, APOs which perform certain regulated activities that have the potential to negatively impact water quality within the San Jacinto River Watershed as defined in this subchapter.

1) The Executive Director shall develop and maintain a guidance document of BMPs to minimize water pollution from APOs within the San Jacinto River Watershed as defined in this subchapter. The BMPs shall be based on technically supported information that is generally relied upon by professionals within the appropriate environmental area or discipline. The BMPs guidance document shall be updated regularly on an interval determined by the Executive Director to allow for technological advancements and improved practices.



Draft Rule Language

§311.102. Scope and Applicability Continued

2) Any APO currently operating or seeking to operate in the portion of the San Jacinto Watershed as defined herein and all that are required to obtain a permit subject to the requirements of Chapters 205 and 305 of this title (*relating to General Permits for Waste Discharges and Consolidated Permits*) within the San Jacinto River Watershed shall identify, develop, and implement BMPs to minimize, to the extent practicable, water pollution from APO operations; and to include as many BMPs as feasible but at least a minimum of **##** BMPs identified in the guidance document of BMPs developed by the Executive Director as required by this chapter.


Draft Rule Language §311.102. Scope and Applicability Continued

3) These rules specifically apply to the San Jacinto River Watershed as defined in this subchapter and are not intended to be applied to any other basins or watersheds in the state of Texas.

4) Control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections by the permittee or the executive director determine that such measures have been used inappropriately, or incorrectly, or are not adequate, the permittee must replace or modify the controls in a timely manner.



Input on Draft Rule Language

- Need input from stakeholders on draft sand mining BMPs rule language
 - Watershed area definition
 - Number of BMPs required from BMPs document to be implemented by APOs
 - Implementation and enforcement



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Meeting Goals: Morning

Overview of Rulemaking Timeline

Summary of Rulemaking Petitions

Watershed Maps

Draft Rule Language

Stakeholder Discussion and Input



Stakeholder Discussion and Input



Stakeholder Discussion Items

- Need input from stakeholders on draft rule language
 - Watershed area definition
 - Use one of the definitions proposed by petitioners?
 - Use a combination of the definitions proposed by petitioners?
 - Number of BMPs required to be implemented from the BMPs document
 - Implementation and enforcement ____





Break for Lunch - 1 hour

Meeting will resume at 1:00 PM



Meeting Outline: Afternoon

Best Management Practices and Stormwater

Overview of Proposed Best Management Practices

Stakeholder Discussion and Input



Best Management Practices and Stormwater



Petitions - Submission Contents

- Original Petitions for Rulemaking
 - Proposes TCEQ develop new rule for APOs in select area in the San Jacinto River Basin
- Petitioners submissions
 - Cover Letter
 - Original Petition for Rulemaking with Draft Rule Language
 - Draft Best Management Practices
 Document





What is Stormwater?

- **Stormwater and Stormwater Runoff:** Rainfall runoff, snowmelt runoff, and surface runoff and drainage.
- Stormwater discharges associated with industrial activities, such as sand mining, must be covered by a Texas Pollutant Discharge Elimination System (TPDES) individual or general permit.
- Stormwater permits emphasize pollution prevention and minimizing exposure of pollutants through the implementation of BMPs.



"Schedules of activities, prohibitions of practices, maintenance procedures, and other techniques to control, prevent or reduce the discharge of pollutants. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spills or leaks, sludge or waste disposal, or drainage from raw material storage areas."

Definition from TPDES Multi-Sector General Permit (MSGP) TXR050000



What is a Best Management Practice?

- Procedures, methods, or structures used to address pollution sources and concerns
- Goal to maintain and protect surface water through discharge of clean stormwater
- In support of, or in place of, numeric limits on pollutants
 - Example of numeric limit: Lead cannot exceed 1.5 mg/L in stormwater discharge
 - Example BMP to support numeric limits: Intermediate product X, that contains lead, is kept under cover and is not exposed to stormwater



What is a Best Management Practice?

- Structural or non-structural control
 - Structural example: Silt fence
 - Non-structural example: Regular inspections of silt fence
- Must be maintained and used correctly
- May be site-specific
- Must be evaluated and revised or replaced as needed



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Stormwater Pollution Prevention Plan

- Stormwater permits, like the MSGP, require permittees to develop and implement a Stormwater Pollution Prevention Plan (SWP3)
- The SWP3 must:
 - Identify actual and potential sources of pollution at the site
 - establish *practices and any necessary control measures* that will prevent or reduce pollution in stormwater
 discharges from the site
 - Describe how the practices and controls are appropriate for the site



Stormwater Pollution Prevention Plan

- Stormwater discharges from sand mining facilities permitted under the MSGP must include the following control measures and BMPs in their SWP3
 - Good housekeeping measures
 - Erosion and sediment control
 - Structural controls
 - Employee training
 - Spill prevention and response plan
 - Maintenance program
- Before terminating permit coverage, a sand mining facility must:
 - Achieve final stabilization of the site, or
 - Return the land to an alternative post mining land use

Meeting Goals: Afternoon

Best Management Practices and Stormwater

> Overview of Proposed Best Management Practices

> > Stakeholder Discussion and Input



Overview of Proposed Best Management Practices



Overview of Proposed Best Management Practices

- BMP documents proposed by both petitioners are similar
- BMPs Document Sections
 - BMP Definition
 - Non-point Sources
 - Pre-mining Phase
 - Mining Phase
 - Post-mining Phase





Overview of Proposed Best Management Practices *Non-point Sources* – Vegetative Controls

TACA and FPI Similar BMPs

- Vegetative buffer zones
- Tillage with lime and fertilizer
- Permanent seeding
- Mulching
- Erosion and sediment control blankets
- Surface roughening



Overview of Proposed Best Management Practices *Non-point Sources* – Structural Controls

TACA and FPI Similar BMPs

- Temporary and permanent structures for stormwater control
- Diversion ridges, berms or channels of stabilized soil
- Straw bale barriers
- Sediment basins
- Riprap outlet protection
- Check dams

- Aggregate stabilized construction entrances and exits
- Housekeeping practices
- Post-construction/Stormwater management measures
- Retention ponds
- Grass-lined vegetated swales and natural depressions



Overview of Proposed Best Management Practices *Non-point Sources*

TACA and FPI Different BMPs

- Sod Stabilization
- Silt Fences
- Rock Berms



Overview of Proposed Best Management Practices *Non-point Sources* – Sod Stabilization



"...Protection of trees involves preserving and protecting selected trees that exist on the site prior to development..."

FPI

"...Protection of trees involves preserving and protecting selected trees that exist on the site prior to development...If trees die or no longer viable for soil stabilization for any reason, then they must be replaced within 30 days with an equivalent or better soil stabilizing tree by the operating APO."



Overview of Proposed Best Management Practices *Non-point Sources* – Silt Fence





Overview of Proposed Best Management Practices *Non-point Sources* – Rock Berms

TACA

"Rock Berms serve as a check dam in areas of concentrated flow, to intercept sediment-laden runoff, detail the sediment and release the water in sheet flow. The rock berm should be used when the contributing drainage area is less than 5 acres. Rock berms are used in areas where the volume of runoff is too great for a silt fence to contain. They are less effective for sediment removal than silt fences, particularly for fine particles, but are able to withstand higher flows than a silt fence..."

FPI

No equivalent rock berm option.



Overview of Proposed Best Management Practices *Pre-mining Phase*

TACA and FPI Similar BMPs

- Measures to protect groundwater
- Crowning of roads
- Graveling and compacting of roads
- Design and use of ditches and culverts
- Stripping activities



Overview of Proposed Best Management Practices *Pre-mining Phase*

TACA and FPI Different BMPs

- Pre-mining phase
- Site evaluation
- Surface water flow
- Construction and access haul roads
- Land clearing and grubbing



Overview of Proposed Best Management Practices *Pre-mining Phase*





Overview of Proposed Best Management Practices *Pre-mining Phase* – Site Evaluation

TACA

"Property to be mined should be evaluated in terms of how the overall mining process will take place..."

FPI

"Property to be mined should be evaluated in terms of how the overall mining process will take place...**They also** need to do a Threatened and Endangered Species assessment. Operators need to be aware of local floodplain and drainage regulations and meet any local regulations including obtain any appropriate community floodplain development permits. Note: some communities are regulating to the 0.2% risk area (aka the 500 year floodplain) and/or have requirements for any landscape changes in the low risk flood zone area (unshaded X zone.). You are encouraged to check with the local community before performing any work. In addition be mindful if your property extends across multiple jurisdictions as they may have different regulations."

Overview of Proposed Best Management Practices *Pre-mining Phase* – Surface Water Flow

TACA

"...using the appropriate United States Geological Survey (USGS) Topographic Quadrangle map(s) for the area in question...for sites with little elevation variation, these maps may not be useful because the contours lines are typically spaced at ten-foot or twenty-foot intervals. Upto-date topographic data should be obtained onsite to assist in accurately determining drainage patterns. Inspection of the property during or after rainfall event can also provide a substantial amount of information regarding how surface water flows across the subject site."

FPI

"...using the appropriate United States Geological Survey (USGS) Topographic Quadrangle map(s) for the area in question..."



Overview of Proposed Best Management Practices Pre-mining Phase – Construction of Access and Haul Roads

TACA

"...The fencing must be installed and secured beneath the ground surface to prevent undermining or underwashing from occurring. It should be regularly monitored to ensure that it is effective."

FPI

"...The fencing must be installed and secured beneath the ground surface to prevent undermining or underwashing from occurring. The silt fence must be inspected routinely and after each [rain] event to ensure it is not damaged and will function as designed."



Overview of Proposed Best Management Practices *Pre-mining Phase* – Land Clearing & Grubbing

TACA

"...Certain limited regulated activities will be allowed within this buffer zone and include: access roads provided they are stabilized to mitigate ordinary erosion, placement of utilities and infrastructure, placement of water pumps, placement of outfall structures, and allow for the movement of heavy equipment required to operate sand traps within the stream or river. In all cases disturbed areas shall be stabilized within (ENTER A TIME FRAME) of the uses excluded above. REGULATORY REFERENCE FROM TEXAS RAILROAD COMMISSION STATUTE:"

FPI

"...Certain limited regulated activities will be allowed within this buffer zone. In all cases disturbed areas shall be stabilized within **30 days** of the uses excluded above."



Overview of Proposed Best Management Practices *Mining Phase*

TACA and FPI Similar BMPs

- Dredging activities
- Aggregate wash plan area (wet and processing)
- Petroleum product storage and handling BMPs
- Oil discharge response and cleanup



Overview of Proposed Best Management Practices *Mining Phase*

TACA and FPI Different BMPs

- Effective use of dikes
- Maintenance area



Overview of Proposed Best Management Practices *Mining Phase* – Effective use of Dikes

TACA

"...Angled surfaces deflect and diffuse incoming energy. Wider dikes, if vegetated, can slow currents entering/leaving mines and trap sand....

FPI

"...Properly sloped dikes will deflect and diffuse incoming energy. Wider dikes, if vegetated, can slow currents entering/leaving mines and trap sand. And finally, wider dikes give the river room to expand during floods. Sloping dikes more gradually strengthens their resistance to floods, but by itself will not prevent erosion, especially on cutbanks. Planting them with grass and/or native trees and other vegetation can bind the soil, slow water down, reduce erosion and help retain sand within the mine boundaries."



Overview of Proposed Best Management Practices *Mining Phase* – Maintenance Area

TACA

"A Spill Prevention Control & Countermeasures (SPCC) Plan must be in place to implement spill prevention and response..."

FPI

"A Spill Prevention Control & Countermeasures (SPCC) Plan must be in place to implement spill prevention and response... Each facility that is located in the floodplain is also encouraged to have an Emergency Flood Operations plan. If equipment can be removed prior to the flood event that is highly recommended but trigger criteria and how the equipment can be removed must be identified before the event occurs. Also who is responsible to make the decision to remove equipment must be identified."



Overview of Proposed Best Management Practices *Post-mining Phase*

TACA and FPI Similar BMPs

- Site stabilization
- Debris and waste removal
- Property grading


Overview of Proposed Best Management Practices *Post-mining Phase*

TACA and FPI Different BMPs

Performance bonds



Overview of Proposed Best Management Practices *Post-mining Phase* – Performance Bonds

TACA FPI "Establish performance bonds to guarantee remediation of breaches and/or repurposing of mined areas once mining is complete. Reclamation or remediation of sand mines, and repair of No equivalent breaches should be covered by performance bonds. performance Obtaining a permit requires a mine to file a bond remediation plan, but it does not force mines to requirement. remediate. Operators can simply walk away from pits, creating safety hazards, eyesores, and economic development headaches for

communities."



Overview of Proposed Best Management Practices Summary





Meeting Goals: Afternoon

Best Management Practices and Stormwater

Overview of Proposed Best Management Practices

Stakeholder Discussion and Input



Stakeholder Discussion and Input



Stakeholder Discussion Items

- Petitioners agree on several BMPs for sand mining activities
- Need input from stakeholders on the BMPs petitioners disagree about
 - Rock berms
 - Silt fences
 - Site evaluation
 - Etc.



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Summary and Adjournment



Summary of Today's Meeting

- Reviewed rulemaking timeline
- Summarized content of petitions
- Compared maps of proposed areas of regulation within San Jacinto River Basin
- Reviewed draft rule language
- Compared Best Management Practices





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Stakeholder Comments Due Tuesday December 10, 2020

 Send comments via email to: <u>Macayla.Coleman@tceq.texas.gov</u>

Include e-mail subject "Sand Mining Rule Petitions"





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Updates Available Online

 For updates on this rulemaking project and access to the summary, agenda, and handouts from this meeting, visit the following webpage:

https://www.tceq.texas.gov/permitting/stormwater/sand-mining-rulemaking

 An audio recording of this meeting will be available after the meeting at the following link: <u>https://www.youtube.com/user/TCEQNews</u>



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



Thank you!