

**STW CGP_TXR1504ER_CP_20210616_Investigation
Texas Commission on Environmental Quality
Investigation Report**

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**Customer: Primoris Renewable Energy, Inc.
Customer Number: CN605622794**

Regulated Entity Name: BIG STAR SOLAR PROJECT

Regulated Entity Number: RN111207767

Investigation # 1746082

Incident Numbers

359702

Investigator: MINDY MCDONOUGH

Site Classification CONSTRUCTION GENERAL
PERMIT FOR STORMWATER

Conducted: 06/16/2021 -- 06/16/2021

SIC Code: 1629

Program(s): STORMWATER

Investigation Type: Compliance Investigation

Location:

Additional ID(s): TXR1504ER

Address: 183 CISTERN RD,
ROSANKY, TX, 78953

Local Unit: REGION 11 - AUSTIN

Activity Type(s): SWCCICGP - SW CCI Construction
General Permit
SWCMPL - SW Complaint

Principal(s):

Role

Name

RESPONDENT

PRIMORIS RENEWABLE ENERGY INC

Contact(s):

Role

Title

Name

Phone

REGULATED
ENTITY
CONTACT

SITE MANAGER

Trevor Williams

Cell (720) 390-8412

Other Staff Member(s):

Role

Name

QA Reviewer
Supervisor

BOYD GUTHRIE
SHAWN STEWART

Associated Check List

Checklist Name

STORMWATER CGP CCI

WQ COMPLAINT INVESTIGATION

Unit Name

Solar Farm

Solar Farm

Investigation Comments:

INTRODUCTION

On June 16, 2021, a stormwater (STW) complaint investigation of Big Star Solar Project located at 183 Cistern Road, Rosanky (Bastrop County), Texas was conducted by Texas Commission on Environmental Quality (TCEQ) Investigator Mindy McDonough. Additionally, a Texas Pollutant Discharge Elimination System (TPDES) TXR150000 Construction General Permit (CGP) comprehensive compliance investigation was conducted.

Complaint incident # 359702 was received by the TCEQ Austin Region office on June 1, 2021. The complainant alleged a large amount of sediment discharged from a construction site due to heavy rainfall events and inadequate or poorly maintained stormwater controls that failed causing an estimated 1.5 to 2.0 feet of off-site silt accumulation. The discharged silt crossed Jeddo Road and into an unnamed wet weather creek.

On June 21, 2021, an Exit Interview Form (EIF) was sent to Trevor Williams, Site Manager, with the general contractor Primoris Renewable Energy, Inc. ('Primoris'). The EIF noted six alleged violations of the CGP (Attachment No. 1-EIF).

A Notice of Violation (NOV) letter dated August 18, 2021 was sent to Mr. Williams with Primoris. A final letter dated August 18, 2021 including investigation findings was sent to the complainant.

GENERAL FACILITY AND PROCESS INFORMATION

Primoris Renewable Energy, Inc. is the primary operator in charge of constructing a solar farm including the development and implementation of stormwater pollution prevention plan (SWP3). Per the SWP3, the total project site is 1,712 acres and approximately 1,390 acres of land is to be disturbed. There are multiple waterbodies that receive stormwater runoff from the construction site. Receiving waterbodies include Bartons Creek (segment 1434 of the Colorado River Basin), Hickory Creek (segment 1434 of the Colorado River Basin), Rocky Creek (segment 1803 of the Guadalupe River Basin), and Piney Creek (segment 1803 of the Guadalupe River Basin). There are additional unnamed tributaries.

CGP authorization TXR1504ER was obtained on March 1, 2021.

BACKGROUND

Investigation 1747102 was conducted on March 26, 2021 and May 27, 2021 in response to a nuisance dust complaint allegation. Nuisance dust conditions were not confirmed, and no violations resulted from the investigation.

ADDITIONAL INFORMATION

Preceding the complaint received date of June 1, 2021, Austin-Bergstrom International Airport (ABIA) weather station recorded 6.61 inches of rainfall between May 29-31, 2021. Localized amounts vary.

On June 16, 2021, Ms. McDonough arrived at Koch Pipeline located at 197 Jeddo Road at approximately 1030 where she observed off-site sedimentation as a result of a sediment discharge generated from the Big Star Solar Project (Attachment No. 2 – Site Photos). Ms. McDonough also noted a vacuum hose in the same location (Photos 1-4). A drainage culvert that runs under Jeddo Road was impacted by the sediment discharge. The culvert is approximately 125 feet south of Koch Pipeline's southern property line. Sediment entrained discolored water and sedimentation were noted in an unnamed wet weather creek on the downstream side of the culvert.

At 1100 hours, Ms. McDonough arrived at Big Star Solar Project via a construction entrance on Jeddo Road. Upon entry, she met Mr. Williams and explained she was there to conduct a stormwater complaint investigation. Mr. Williams escorted Ms. McDonough to the job site trailer where she reviewed the SWP3 including site inspection reports. The SWP3 contained information required by the CGP (Attachment No. 3 – SWP3 Records). However, the following SWP3 deficiencies were noted:

1 - Site inspection reports noted stormwater control failures but didn't note actions taken to correct the failures. Qualifications for one inspector, Steven Pearson, were maintained with the SWP3; however, site inspection reports indicated other inspectors, but their qualifications were not noted in the SWP3. Dates of SWP3 modifications were not maintained.

2- Dates when major grading activities occur; dates when construction activities temporarily or permanently cease on a portion of the site; and dates when stabilization measures are initiated were not maintained.

3 – The SWP3 didn't contain a copy of the CGP; however, the CGP is accessible via the internet. A copy of the NOI was not located in the SWP3.

Site inspection reports indicated multiple days of rainfall contributing to saturated soils. The May 27, 2021 site inspection report indicated 3 inches of rain occurred on May 16, 2021. The June 2, 2021 report indicated 3.7 inches of rain occurred between May 28-29, 2021. A June 4, 2021 site inspection report indicated 0.7 inches of

rain on June 3, 2021. A June 7, 2021 site inspection report indicated 1.1 inches of rain on June 5, 2021.

After reviewing SWP3 records, Ms. McDonough was escorted by Mr. Williams an on-site evaluation of the project area with emphasis on lower elevations where stormwater runoff has the greater potential to discharge (Attachment No. 2 – Site Photos). The first area evaluated was near solar block 7 (Photos 5-7). Mr. Williams explained this area contributed to the sediment discharge near Jeddo Road. The sediment discharge path was observed. Mr. Williams explained proposed steps to be taken to minimize future sediment discharges including the construction of a sedimentation basin and the installation of a rock berm. Ms. McDonough noted a rock berm was in place and the area where a sediment basin is to be constructed was cleared of vegetation.

A second sedimentation basin was observed near solar block 1 (Photo 8). Construction of this second basin was near completion. New silt fence had been installed in the downslope vicinity of the basin; however, there was sediment accumulation more than 50% of the silt fence capacity (Photos 9-10). Ms. McDonough advised Mr. Williams to perform silt fence maintenance to mitigate a control failure.

Mr. Williams stated exposed soils are being roughened to reduce runoff velocity (Photo 11). In general, roughening a bare soil surface is a technique to reduce runoff velocity, increase infiltration, and/or reduce erosion and provide sediment trapping. Roughening can be done by creating horizontal grooves across a slope, stair stepping, or tracking with construction equipment. Mr. Williams also pointed out constructed earthen water breaks to minimize velocity of stormwater runoff (Photo 11).

Another low area of the site near solar blocks 15, 17, and 18 was observed. Ms. McDonough noted stormwater controls were blown out and sediment bypassed controls. Sediment toppled over silt fence that was pushed down from the weight of accumulated sediment. Tree logs used to slow velocity were pushed askew and non-functional. Rock berms were overwhelmed and clogged by sediment.

The construction entrance on Jeddo Road was not stabilized and in need of maintenance (Photo 13). A construction site notice was not posted (Photo 14). There was minor sediment tracking onto Jeddo Road from the site entrance noted (Photo 15).

Ms. McDonough departed the site at 1330 hours.

On June 21, 2021, an EIF was sent to Mr. Williams. Mr. Williams acknowledge receipt of the EIF via email on June 23, 2021 (Attachment No. 4 – EIF Acknowledgment). Mr. Williams stated Primoris would be drafting a written remediation plan per violation, including any documentation required by no later than July 16th.

He further stated that cleanup will commence immediately, including corrective measures, and all physical remediation activities would be completed by August 6th.

On June 29, 2021, the complainant contacted Ms. McDonough to report another incident of sediment discharge resulting from a rainfall event on or about June 28, 2021. The complainant submitted photos in which one of the photos showed sediment runoff at the entrance. Other photos appeared to show the sedimentation that resulted from late May/early June rainfall events had not been removed or cleaned-up and/or possibly more sediment discharged offsite.

On June 30, 2021, Ms. McDonough emailed Mr. Williams about the latest report of a sediment discharge and asked for an update on actions being taken by Primoris. Mr. Williams responded via email on July 2, 2021 (Attachment No. 5 – Email Communication). Mr. Williams explained the site received a total of four inches of rain in two hours on June 28th. He stated the construction entrance was addressed with the extension of a track out on July 1st and they are looking into a track out pad. Mr. Williams stated that he personally swept the entrance with their sweeper around 1730 hours. He explained that a rock check dam that was installed had been breached over the top. A hydrovac team was scheduled to be onsite July 7th for additional clean-up.

On July 17, 2021, Primoris provided a written response to the EIF dated June 21, 2021 Refer to Attachment No. 6 for a detailed response the EIF.

On July 20, 2021, Ms. McDonough requested from Mr. Williams a detailed update on the Jeddo Road sediment discharge clean-up efforts. She stressed that the complainant contacted the TCEQ with another report of discharged sediment and that the issue needs to be addressed as quickly as feasible due to the continued rainfall

events. Mr. Williams provided a response on July 21, 2021 (Attachment No. 7 – Jeddo Road Clean-up Response). Primoris provided a response timeline including rainfall setbacks, photos, foreman timesheets, and a plan to construct a rock check dam and to seed the ground.

Conclusions and Recommendations

The complaint was substantiated. A sediment discharge occurred due to poorly designed, installed, and maintained erosion and sediment controls. Additional non-compliance issues were noted.

Primoris has been responsive in correcting stormwater control deficiencies and making improvements by adding additional controls each time the complainant reported a sediment discharge. A NOV letter was sent to Mr. Williams noting and resolving five of six violations detailed in the EIF.

A final letter of findings was sent to the complainant.

NOV Date 08/18/2021 **Method** WRITTEN

**OUTSTANDING ALLEGED VIOLATION(S)
ASSOCIATED TO A NOTICE OF VIOLATION**

Track Number: 786780

Compliance Due Date: 09/18/2021

Violation Start Date: Unknown

30 TAC Chapter 281.25(a)(4)**PERMIT TXR1504ER, TXR150000, Part III Section F7(f)**

An inspection report must include date(s) of the inspection and major observations such as where erosion and discharges of sediment from the site, locations of controls that need maintenance, locations of failed controls, and locations of where additional controls are needed. Actions taken as a result of inspections must be described. Names and qualifications of personnel making the inspections must be documented (can be once in the SWP3 rather than being included in each report).

Alleged Violation:

Investigation: 1746082

Comment Date: 08/16/2021

Failure to document in the site inspection reports actions taken as a result of inspections; names and qualifications of personnel making the inspections for the permittee; and dates of Stormwater Pollution Prevention Plan modifications.

During the investigation, the site inspection reports noted stormwater control failures, but failed to note actions taken to correct the failures. Qualifications for one inspector, Steven Pearson, were maintained with the Stormwater Pollution Prevention Plan; however, site inspection reports indicated other inspectors, but their qualifications were not noted in the Stormwater Pollution Prevention Plan. Dates of Stormwater Pollution Prevention Plan modifications were not maintained.

Recommended Corrective Action: On July 17, 2021, Primoris provided a statement that site inspector qualifications have been updated in the latest draft of the site's Stormwater Pollution Prevention Plan.

Primoris still needs to provide documentation that demonstrates site inspection reports include "actions taken as a result of inspections". Dates of corrections should be included to demonstrate non-compliance issues are corrected and are not on-going deficiencies.

**ALLEGED VIOLATION(S) NOTED AND RESOLVED
ASSOCIATED TO A NOTICE OF VIOLATION**

Track Number: 786766

Resolution Status Date: 8/17/2021

Violation Start Date: Unknown

Violation End Date: 7/17/2021

30 TAC Chapter 281.25(a)(4)

PERMIT TXR1504ER, TXR150000 Part III Section D2

The construction site notice shall be posted in a location that is safe and readily available for viewing by the public, local, state, and federal authorities.

Alleged Violation:

Investigation: 1746082

Comment Date: 08/17/2021

Failure to post the Construction Site Notice.

Recommended Corrective Action: Provide photographic documentation that the Construction Site Notice has been posted.

Resolution: A photograph of the posted Construction Site Notice was provided on July 17, 2021.

Track Number: 786771

Resolution Status Date: 8/17/2021

Violation Start Date: Unknown

Violation End Date: 7/17/2021

30 TAC Chapter 281.25(a)(4)

PERMIT TXR1504ER, TXR150000 Part III Section F4(a)

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

Alleged Violation:

Investigation: 1746082

Comment Date: 08/16/2021

Failure to maintain a stabilized construction entrance that minimizes offsite vehicle tracking of sediment and the generation of dust.

Recommended Corrective Action: Submit compliance documentation that demonstrates the construction site entrance has been stabilized.

Resolution: A photograph was provided on July 17, 2021. Primoris stated base was scraped off and additional 3x5 rock was added for track-out control.

Track Number: 786773

Resolution Status Date: 8/17/2021

Violation Start Date: Unknown

Violation End Date: 7/21/2021

30 TAC Chapter 281.25(a)(4)

PERMIT TXR1504ER, TXR150000, Part III Section G1

At a minimum, controls must be designed, installed, and maintained to: control stormwater volume and velocity; minimize channel and streambank erosion and scour in the immediate vicinity of discharge point(s); minimize the amount of soil exposed; minimize the disturbance of steep slopes; etc.

Alleged Violation:

Investigation: 1746082

Comment Date: 08/16/2021

Failure to design, install, and maintain effective erosion controls and sediment controls to minimize the

discharge of pollutants.

The investigator observed ineffective stormwater controls on June 16, 2021. The stormwater controls were not designed to minimize sediment discharges. They were rendered ineffective because they could not adequately minimize erosion and control sediment. Controls were damaged or altogether removed due to stormwater flows from significant rain events around Memorial Day weekend. Sedimentation was observed outside the limits of construction in several areas of the project site mostly along natural drainage paths or areas of lower elevation. Sedimentation was observed outside the property line in one area of the site adjacent to Jeddo Road.

Recommended Corrective Action: Modify stormwater controls to better minimize soil erosion and control sediment discharges from the site. Provide documentation that describes modifications and/or enhancements made to stormwater controls at the site including location of controls and type of controls. This documentation should include updates to the Stormwater Pollution Prevention Plan including the detailed site map.

Resolution: On July 17, 2021, compliance documentation was provided that detailed actions taken to add additional stormwater controls such as silt fence and straw wattles across graded areas as they are completed. Additional check dams have been installed in areas where there is heavy water flow. A subcontractor beginning July 19, 2021 is to drill seed disturbed areas with a temporary and permanent seed blend as approved by the engineer.

An updated erosion control plan map was provided.

Lastly, on July 21, 2021, Primoris provided documentation that details their response in cleaning up discharged sediment near Jeddo Road.

Track Number: 786787

Resolution Status Date: 8/17/2021

Violation Start Date: Unknown

Violation End Date: 7/17/2021

30 TAC Chapter 281.25(a)(4)

PERMIT TXR1504ER, TXR150000 Part III Section F2(b)(ii)

Alleged Violation:

Investigation: 1746082

Comment Date: 08/16/2021

Failure to document the dates when major grading activities occur; dates when construction activities temporarily or permanently cease on a portion of the site; and dates when stabilization measures are initiated (as needed as construction progresses).

Recommended Corrective Action: Submit an updated form that includes dates of major activities that have occurred to date.

Resolution: On July 17, 2021, Primoris provided a record of major site disturbance activities.

Track Number: 786793

Resolution Status Date: 8/17/2021

Violation Start Date: Unknown

Violation End Date: 7/17/2021

30 TAC Chapter 281.25(a)(4)

PERMIT TXR1504ER, TXR150000 Part III Section F2(c)(A)

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.

Alleged Violation:

Investigation: 1746082

Comment Date: 08/17/2021

Failure to construct a sedimentation basin for a common drainage location that serves an area with ten (10) or more acres disturbed at one time.

During the investigation, one sedimentation basin under construction was nearly completed. Another planned basin had yet to be constructed. These basins were not part of the initial design and there was no documentation in the Stormwater Pollution Prevention Plan explaining a reason for why a sedimentation basin was not feasible.

Recommended Corrective Action: Submit compliance documentation that shows sedimentation basin(s) have been constructed for a common drainage location that serves an area with ten (10) or more acres disturbed at one time. Include location of the sedimentation basin(s) and designs that show there is sufficient storage to contain a calculated volume of runoff from a 2-year, 24-hour storm from each disturbed acre drained. If not feasible, then the permittee shall provide equivalent control measures and explain why.

Resolution: On July 17, 2021, Primoris stated two sedimentation basins had been designed and added to the Stormwater Pollution Prevention Plan. Photographs and an updated Erosion Control Plan map were provided.

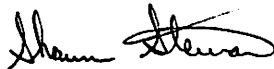
Signed



Environmental Investigator

Date 08/17/2021

Signed



Supervisor

Date 8/19/2021

Attachments: (in order of final report submittal)

☐ Enforcement Action Request (EAR)
☒ Letter to Facility (specify type) : NOV
 Investigation Report
☐ Sample Analysis Results
☐ Manifests
☐ Notice of Registration

☐ Maps, Plans, Sketches
☐ Photographs
☐ Correspondence from the facility
☐ Other (specify) :

List of Attached files

Attachment No. 1 - EIF.pdf
 Attachment No. 2 - Site Photos.pdf
 Attachment No. 3 - SWP3 Records.pdf
 Attachment No. 4 - EIF Acknowledgment.pdf
 Attachment No. 5 - Email Communication.pdf
 Attachment No. 6 - EIF Response.pdf
 Attachment No. 7 - Jeddo Road Clean-up Response.pdf

1. The first part of the document is a letter from the President of the United States to the Congress, dated January 3, 1862.

2. The second part is a report from the Secretary of the Treasury, dated January 10, 1862.

3. The third part is a report from the Secretary of the Interior, dated January 15, 1862.

4. The fourth part is a report from the Secretary of the Navy, dated January 20, 1862.

5. The fifth part is a report from the Secretary of the War, dated January 25, 1862.

6. The sixth part is a report from the Secretary of the State, dated January 30, 1862.

7. The seventh part is a report from the Secretary of the Army, dated February 5, 1862.

8. The eighth part is a report from the Secretary of the Navy, dated February 10, 1862.

9. The ninth part is a report from the Secretary of the War, dated February 15, 1862.

10. The tenth part is a report from the Secretary of the State, dated February 20, 1862.

11. The eleventh part is a report from the Secretary of the Army, dated February 25, 1862.

12. The twelfth part is a report from the Secretary of the Navy, dated March 1, 1862.