

[WQCD Construction Stormwater Inspection Report] for COG501574, Prowers Aggregate Operators LLC – West Farm Pit

1 message

Joseph Campbell - CDPHE <joseph.campbell@state.co.us> To: karl@cacompanies.com, ron@rocktran.com Thu, Jul 26, 2018 at 10:37 AM

Cc: Amy Eschberger - DNR <amy.eschberger@state.co.us>, Jim Ramsay - DNR <jim.ramsay@state.co.us>

Please find attached the final inspection report for the sand and gravel mining inspection conducted on 06/15/2018 at West Farm Pit (COG501574). A response to this inspection report is required and is due no later than 08/10/2018. Additionally, a hard copy has been mailed to the permittee.

Please let me know if you have any questions.

Joe Campbell Environmental Protection Specialist Clean Water Compliance Unit Water Quality Control Division



COLORADO Department of Public Health & Environment

P 303.692.2356 4300 Cherry Creek Drive South, Denver, CO 80246-1530 joseph.campbell@state.co.us | www.coloradowaterpermits.com

COG501574 \$ Inspection Report \$ 07-27-2018 \$ A.pdf 9288K





Dedicated to protecting and improving the health and environment of the people of Colorado

July 27, 2018

Certified Mail: 7016 1370 0001 2272 0186

Karl Nyquist, Manager Prowers Aggregate Operators, LLC 7991 Shaffer Parkway, Suite 200 Littleton, Colorado 80127 karl@cacompanies.com

RE: Facility Inspection / Compliance Advisory West Farm Pit CDPS Permit Certification - COR501574

Mr. Nyquist:

The Water Quality Control Division (the division) inspected the above referenced facility on June 15, 2018. The inspection procedure consisted of two parts, a review of records and onsite observations of the facility. Findings identified during the inspection are detailed in the enclosed inspection report.

Corrective Action

All discharges authorized by the Colorado Discharge Permit System (CDPS) General Permit for Discharges from Sand and Gravel Mining and Processing (And Other Nonmetallic Minerals Except Fuel) (COG500000) (the permit) must be consistent with all terms and conditions of the permit. Therefore, the division expects Prowers Aggregate Operators, LLC (the permittee) to correct all findings identified in the enclosed inspection report and return the facility to compliance with the permit. A violation of the terms and conditions specified in this permit may be subject to civil and criminal liability pursuant to sections 25-8-601 through 612, C.R.S. Correcting a permit violation does not remove the original violation.

Compliance Advisory

The division evaluated the inspection findings described in the enclosed inspection report against the division's Enforcement Response Guide and determined that the findings meet the criteria for formal enforcement actions.

Requirement to Respond

The division has determined that the permittee must submit a written response to the enclosed inspection report, identifying the corrective action(s) taken to return the facility to compliance with the permit.

Pursuant to the division's authority under 5 CCR 1002-61, §61.8(3)(q) of the <u>CDPS Regulations and Part II.B.2</u> of the permit:

- a) The permittee must submit a response to the division documenting the corrective actions implemented for each finding described in the inspection report.
- b) Please submit the response and additional requested information to the Colorado Department of Public Health and Environment, WQCD-P-B2, 4300 Cherry Creek Drive South, Denver, CO 80246-1530, Attn: Joe Campbell by August 10, 2018. Pursuant to Part I.F.4 of the permit, any



document submitted in response to this Compliance Advisory must include the following certification upon submittal:

"I 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 that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Pursuant to ~25-8-608, C.R.S., any person who violates any provision of the Colorado Water Quality Control Act, or of any permit issued under the act, or any control regulation promulgated pursuant to the act, shall be subject to a civil penalty of up to \$10,000 per violation for each day during which such violation occurs.

This Compliance Advisory is intended to advise Prowers Aggregate Operators, LLC of potential violations of the Colorado Water Quality Control Act, its implementing regulations and permits so that appropriate steps can be taken to avoid or mitigate formal enforcement action or to correct our records (if applicable). This Compliance Advisory does not constitute a Notice of Violation or Cease and Desist Order and is not subject to appeal. The issuance of this Compliance Advisory does not limit or preclude the division from pursuing its enforcement options concerning the potential violation(s). The division will evaluate the facts associated with the potential violation(s) and if a formal enforcement action is deemed necessary, you may be issued a Notice of Violation/Cease and Desist Order that may include the assessment of penalties.

Please contact me with any questions at 303-692-2356 or joseph.campbell@state.co.us.

Regards,

Joe Campbell Environmental Protection Specialist Clean Water Compliance Unit WATER QUALITY CONTROL DIVISION

cc: Permit File Ron Peterson, ron@rocktran.com

SAND AND GRAVEL MINING AND PROCESSING INSPECTION REPORT

West Farm Pit

Permittee: Prowers Aggregate Operators, LLC Legally Responsible Person: Karl Nyquist	Cert#: COR501574 Title: Manager
Facility: West Farm Pit Address: 9485 CR HH 5, Prowers County, Colorado 81052	Inspector: Joe Campbell MS4/County: Prowers County
Receiving Water: Arkansas River	Outfalls: 001-A, 002-A
Inspection Began: 6/15/2018 9:15 AM	Inspection Completed: 6/15/2018 1:40 PM
Persons Present: Ron Peterson (Prowers), Joe Campbell (WQCD), Jim Ramsay (CPW)	

The purpose of division inspections is to evaluate and document compliance with the Colorado Discharge Permit System (CDPS) <u>General Permit for Discharges From Sand and Gravel Mining and Processing (And Other</u> <u>Nonmetallic Minerals Except Fuels</u>) (the permit). This report is the result of a "point in time" inspection and therefore only documents this facility's conditions, as they existed at the time of the inspection. Division inspection oversight does not pre-empt nor supersede the authority of local agencies to prohibit, restrict, or control discharges of sand and gravel mining and processing to municipal storm drain systems or other stormwater conveyances within their jurisdiction.

During the inspection closing conference the division inspector reviewed all alleged inspection findings with the facility representative(s). The inspector communicated the division's expectation that the facility representative initiate corrective actions immediately for all alleged inspection findings, in accordance with the provisions of the CDPS General Permit for Sand and Gravel Mining and Processing (And Other Nonmetallic Minerals Except Fuels).

RECORDS REVIEW

- <u>Note 1</u>: The permit certification effective date was January 1, 2017. The date industrial activities covered under this permit began at the site was April 1, 2014. The permittee is discharging from 3 outfalls as described in Note 7. This information was provided to the inspector by Ron Peterson.
- <u>Note 2</u>: In a communication with the permittee prior to the inspection, the division inspector requested a duplicate copy of the following documents be provided to division personnel during the inspection: monitoring records, visual assessment documentation, inspection reports, corrective action reports, the stormwater management plan, and annual reports. This was provided to the inspector on June 15, 2018.
- <u>Note 3</u>: On May 18, 2018, the division received a notification from Colorado Parks and Wildlife that highly turbid/muddy water being discharged to the Arkansas River from the Prowers Aggregate sand and gravel operation (Photograph 18).
- <u>Note 4</u>: It was observed during the field portion of the inspection that process water from sand and gravel washing and stormwater from haul roads and stockpiles was directed to a roadside ditch that flows to the north and directly to the Arkansas River (at Latitude 38.105872°, Longitude -102.584633°). During the inspection, it was evident that sediment had accumulated along the entirety of the ditch leading to the Arkansas River, further indicating process water from sand and gravel washing has discharged at this unpermitted second outfall location. Ron Peterson with Prowers Aggregate stated that the unauthorized discharge of process water and associated sediment occurred in 2018 and was due to a breach of the

sediment ponds that were utilized to recycle the wash plant water. He stated that the well pump used to augment the use of recycled wash water was left on overnight causing the sediment ponds to become overwhelmed which caused a breach in the side of the pond to the roadside ditch leading to the Arkansas River. He also noted that the settling ponds were full and currently being mucked out, which was evident at the time of the inspection. The division inspector observed that wash water is conveyed in the ditch to the Arkansas River. Additionally, the amount and depth of sediment observed during the division inspection illustrated that this discharge was occurring prior to the time stated by Ron Peterson as sediment piles from cleaning out of the ditch were evident at the end of the ditch near the Arkansas River (Photographs 11 and 12).

- <u>Note 5:</u> According to Part II.A.3 of the permit the permittee was required to submit a noncompliance notification for the unauthorized discharge in Note 4. An oral 24-hour and five-day written report of noncompliance is necessary when the permittee does not or is unable to comply with any discharge limitations or standards specified in the permit. The division did not receive a noncompliance notification for the unauthorized discharge.
- 1. A copy of the discharge monitoring reports (DMRs) for process water discharge effluent limitations were retained on site. The division inspector reviewed the records from 1/1/2017 to 3/31/2018 and found them to be inadequate for the following reasons:

It was noted during the records review portion of the inspection that samples were only being collected once a quarter and reported on the quarterly DMRs. Per the facilities certification, sampling for Manganese, Selenium, Total Recoverable Uranium, pH, TSS, and Oil and Grease (visual) is required twice per month. Additionally, there were exceedances of TSS in the 2nd and 3rd Quarters 2017 and 1st Quarter 2018 at Outfall 001.

a) Sampling and monitoring must be conducted consistent with minimum frequencies and sample types required by Part I.C of the permit and the permit certification.

The division expects the permittee to monitor the effluent for the parameters listed in the permit certification at the frequency and sample types specified in permit certification.

b) The permitted discharge shall not contain effluent parameter concentrations that exceed the limitations specified in the permit certification and Part I.C of the permit.

The division expects the permitted discharge to not contain parameter concentrations that exceed the limitations in the permit and the permit certification.

c) The Discharge Monitoring Report forms shall be filled out accurately and completely in accordance with requirements of this permit and the instructions on the forms.

The division expects the permittee fill out the Discharge Monitoring Report forms accurately and completely, and to modify inaccurate or incomplete forms.

- 2. Stormwater discharge visual monitoring has not been conducted. According to Ron Peterson, with Prowers Aggregate Operators, no stormwater discharges have occurred at the designated stormwater outfall since the renewed permit became effective on 1/1/2017.
- **3**. A copy of the discharge monitoring reports for stormwater water quality standards monitoring were retained on site. The division inspector reviewed the records from 1/1/2017 and 3/31/2018 and found

them to be adequate. According to Ron Peterson, stormwater discharge water quality standards monitoring has not been conducted, as no stormwater discharges have occurred at the designated stormwater outfalls since the renewed permit became effective on 1/1/2017.

4. The division inspector reviewed the sampling methods used on site and found them to be inadequate for the following reasons:

Analysis for pH has been performed at the lab, and the time between sampling and analysis has been greater than 15 minutes, as confirmed by Ron Peterson. The specified methods of 40 C.F.R Part 136 requires pH to be analyzed within 15 minutes for the maximum hold time.

Sampling shall be performed by the permittee according to specified methods in 40 C.F.R. Part 136; methods approved by EPA pursuant to 40 C.F.R. Part 136; or methods approved by the division in the absence of a method specified in or approved pursuant to 40 C.F.R. Part 136.

The division expects the permittee to perform sampling in accordance with the approved methods.

5. A copy of the inspection reports were retained on site. The division inspector reviewed a subset of inspection records between January 15, 2018 and June 1, 2018. The inspection records were found to be inadequate for the following reasons:

The inspection records did not include the inspection time, weather information, or a statement of whether or not the site is incompliance. Additionally, the inspection form only had specific control measures, some of which were not present at the site, of what was inspected. It did not include locations of all control measures or all locations inspected at the facility. The records also indicated that no maintenance was needed during any of the inspections conducted, with the exception of the inspection conducted on March 15, 2018. However, it was noted during the inspection that large amounts of sediment were in the drainage swale on the eastern portion of the facility and was in need of maintenance and additional control measures (see field finding #3).

a. Inspections must be performed and/or documented as required by Part I.J.2 and I.J.3 of the permit.

Each inspection report shall include:

- The inspection date and time;
- Locations inspected;
- Weather information and a description of any discharges occurring at the time of the inspection;
- A statement that, in the judgment of 1) the person conducting the site inspection, and 2) the person described in Part I.F.4 (Reporting and Recordkeeping), the site is either in compliance or out of compliance with the terms and conditions of this permit, with respect to Part I.J.2 (Inspection Scope);
- A summary report and a schedule of implementation of the corrective actions that the permittee has taken or plans to take if the site inspection indicates that the site is out of compliance;

The division expects the permittee to conduct and document inspections as required by the permit.

6. A copy of the corrective action reports were not retained on site. However, it was noted during the inspection that large amounts of sediment were in the drainage swale on the eastern portion of the

facility and was in need of maintenance and additional control measures (see field finding #3). Due to this, site condition corrective actions and reports should have been completed as identified below:

a. Corrective actions associated with maintaining control measures must be conducted with due diligence, as soon as possible after the need is discovered, to achieve the effluent limits required by this permit.

In accordance with Part I.G.2, the permittee must maintain all control measures (structural and non-structural) used to achieve the effluent limits required by this permit in effective operating condition. For this permit, maintenance includes preventative and routine maintenance, modification, repair, replacement, or installation of new control measures.

The division expects the permittee to maintain control measures in effective operating condition, within the prescribed timeframe, as required by the permit.

b. The permittee shall document corrective actions associated with maintaining control measures, and shall revise the facility stormwater management plan to reflect replacement or installation of new control measures.

Within five days of discovery of any condition that must be eliminated or that requires review and modification per Parts I.K.1 and I.K.2, the permittee must document the following information:

- Identification of the condition triggering the need for corrective action review;
- Description of the problem identified;
- Date the problem was identified;
- Summary of corrective action taken or to be taken (or, for triggering events identified in Part I.K.2 where the permittee determines that corrective action is not necessary, the basis for this determination);
- Notice of whether SWMP modifications are required as a result of this discovery or corrective action;
- Date corrective action initiated; and
- Date corrective action completed or expected to be completed.

The division expects the permittee to document corrective actions as required by the permit.

- 7. A copy of the stormwater management plan was retained on site. The division inspector reviewed the plan and found it to be inadequate for the following reasons:
 - a) The facility description section did not adequately describe the components listed below as required by Part I.M.2 of the permit.
 - The general layout of the facility including mining areas, revegetated areas, buildings, raw material storage areas, and the flow of goods and materials through the facility.

The division expects the permittee to update the site description section of the stormwater management plan to include all items required by the permit.

- b) The facility map(s) associated with the stormwater management plan did not identify items described below as required by Part I.M.3 of the permit.
 - The locations of all facility stormwater conveyances including ditches, pipes, and swales.
 - The locations of stormwater inlets and outfalls, with a unique identification code for each outfall (e.g., Outfall No. 001, No.002, etc.), and indicating whether one or more outfalls

are "substantially identical" under Part I.H (General Monitoring Requirements); and an approximate outline of the areas draining to each outfall.

- The directions of stormwater flow indicated by arrows;
- The areas where mining and processing activities are currently or have previously been conducted, where such activities are exposed to precipitation. This includes all areas of soil disturbance and reclamation/revegetation.
- The locations of all actual or potential pollutant sources (including sediment) associated with mining and processing activities, including but not limited to those identified in the Facility Inventory and Assessment of Pollutant Sources (below) and the following:
 - Vehicle fueling areas;
 - Fertilizer or chemical storage areas;
 - o Areas used for storage or disposal of overburden, materials, soils or wastes;
 - o Areas used for mineral milling and processing;
 - o All access and haul roads; and
 - All asphalt or concrete batch plants, or areas used for recycling of asphalt or concrete.
- The location of all structural and applicable non-structural control measures used to meet the effluent limits required by this permit.
- The locations where significant spills or leaks identified under Part I.L.4.b have occurred.
- The locations of all stormwater monitoring points applicable to the facility (visual monitoring; benchmark monitoring, water quality-based monitoring).
- The date that the facility site map was prepared and/or amended.

The division expects the permittee to update the site map(s) to include all items required by the permit.

c) The facility inventory and assessment of pollutant sources associated with the stormwater management plan did not identify items described below as required by Part I.M.4 of the permit.

The stormwater management plan must include an inventory and assessment of all pollutant sources and an inventory of all materials that contribute or have the potential to contribute pollutants to stormwater. The stormwater management plan narrative had a general description of activities and potential pollutant sources but no short narrative or tabulation describing the potential of a pollutant to be present in stormwater discharge for each facility activity, equipment and material identified at the site.

The facility inventory and assessment shall include the following:

- The inventory of facility activities and equipment shall identify all areas (except interior areas that are not exposed to precipitation) associated with industrial activities that have been, or may potentially be, sources of pollutants, that contribute, or have the potential to contribute, any pollutants to stormwater, including but not limited to the following:
 - Loading and unloading of materials, including solids and liquids.
 - o Outdoor storage of materials or products, including solids and liquids.
 - Outdoor manufacturing and processing.
 - On-site dust or particulate generating processes, including dust collection devices and vents.
 - On-site waste treatment, storage, or disposal, including waste ponds and solid waste management units.

- Vehicle and equipment fueling, maintenance, and/or cleaning (includes washing).
- Immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility.
- Roofs or other surfaces exposed to air emissions from a manufacturing building or a process area.
- Roofs and associated surfaces composed of galvanized materials that may be mobilized by stormwater (e.g., roofs, ducts, heating/air conditioning equipment, gutters and downspouts).
- The inventory of materials shall list materials that contribute, or have the potential to contribute, pollutants to stormwater, including but not limited to the following:
 - The types of materials handled at the facility that may be exposed to precipitation or runoff and could result in stormwater pollution.
 - The types of materials handled at the facility that may leak or spill, and be exposed to precipitation or runoff and result in stormwater pollution.
 - A narrative description of any potential sources of pollutants from past activities, materials and spills that could contribute pollutants to stormwater discharges, and the corresponding outfall(s) that would be affected by such spills and leaks. The description shall include the method and location of any on-site storage or disposal; and documentation of all significant spills and leaks of oil or toxic or hazardous pollutants that occurred at exposed areas, or that drained to a stormwater conveyance, in the 3 years prior to the SWMP preparation date.
- The assessment of potential pollutant sources shall provide a short narrative or tabulation describing the potential of a pollutant to be present in stormwater discharges for each facility activity, equipment and material identified above, including but not limited to the following:
 - Loading and unloading operations;
 - o Outdoor storage of chemicals or equipment;
 - o Crushing facilities or significant dust and particulate generating activities;
 - o On site waste disposal practices;
 - Stockpiles of overburden, raw material, intermediate products, byproducts, finished products or waste products;
 - o Asphalt or concrete batch plants or areas used for recycling of asphalt or concrete;
 - Routine maintenance activities involving fertilizers, pesticides, detergents, fuels, solvents, oils, etc.;
 - o Haul roads; and
 - o Disturbed and revegetated areas.

The division expects the permittee to update the facility inventory and assessment of pollutant sources to include all items required by the permit.

d) The stormwater management plan did not include the location, installation date, and type of each nonstructural and structural control measure implemented at the facility to achieve meet the effluent limitations, as required by Part I.M.5 of the permit.

The stormwater management plan only discussed the use of structural control measures at the facility to be sediment basins and sediment control logs. However, the sediment basins were not utilized for stormwater at the facility they were utilized for process water relating to the wash plant and sediment control logs were not implemented on site during the inspection. It was noted during

the inspection that earthen dikes and swales and temporary stream crossings were utilized at the facility however these were not included in the narrative of the stormwater management plan.

The division expects the permittee to update the description of control measures to include all items required by the permit.

e) The stormwater management plan did not include the installation and implementation specifications for each control measure used by the permittee to meet the effluent limitations contained in this permit, as required by Part I.M.6 of the permit.

The stormwater management plan did not include installation and implementation specifications for the earthen dikes and swales and temporary stream crossings implemented at the facility.

The division expects the permittee to update the control measures specifications to include all items required by the permit.

- f) The stormwater management plan did not include the following schedules, procedures, and evaluation results, as required by Part I.M.6 of the permit.
 - To document maintenance, the stormwater management plan shall contain preventative maintenance schedules for industrial equipment and systems; control measures; and any back-up practices in place should a runoff event occur while a control measure is off-line, in accordance with Part I.C.2.a.iii of the permit.
 - To document spill prevention and response procedures, the stormwater management plan shall contain procedures for preventing, responding to, and reporting spills and leaks in accordance with Part I.C.2.a.iv of the permit.
 - To document employee training, the stormwater management plan shall contain a schedule for all types of training required by this permit, content of the training, and log of the dates on which specific employees received training, in accordance with Part I.C.2.a.viii of the permit.
 - To document non stormwater discharges, the stormwater management plan shall contain documentation of the stormwater conveyance system evaluation for the presence of non-stormwater discharges not authorized in Part.I.A.1.c, and the elimination of all unauthorized discharges, including the following information:
 - o The date of any evaluation;
 - A description of the evaluation criteria used;
 - A list of the outfalls or onsite drainage points that were directly observed during the evaluation;
 - The different types of non-stormwater discharge(s) and source locations; and
 - The action(s) taken, such as a list of control measures used to eliminate unauthorized discharge(s), if any were identified.

The division expects the permittee to update the stormwater management plan to include all additional control measure documentation required by the permit.

- g) The stormwater management plan did not include the following requirements for procedures for performing any applicable types of monitoring, as required by Part I.M.8 of the permit.
 - Locations where samples are collected, and outfall identification by its unique identifying number;
 - Staff responsible for conducting stormwater sampling;
 - Procedures for sample collection and handling, including any deviations from sampling within the first 30 minutes of a measurable storm event;

- For any parameters requiring analysis, the name of the parameter, the holding times and preservatives, the analytical methods used, and the laboratory quantitation levels;
- Procedures for sending samples to a laboratory, as applicable;
- Monitoring schedules, including any deviations from the monitoring schedule for alternate monitoring periods for climates with irregular stormwater runoff (see Part I.H.5);
- The numeric control values (benchmarks, TMDL-related requirements, or other requirements) applicable to discharges from each outfall.
- Permittees that invoke the Monitoring Exceptions for Inactive and Unstaffed Sites and for Completed and Finally Stabilized Areas, must include in the SWMP the signed and certified documentation to support this claim.
- Permittees that use the substantially identical outfall monitoring exception (Part I.H.1) must document the following:
 - o Location of each of the substantially identical outfalls, and the outfall sampled;
 - Description of the general industrial activities conducted in the drainage area of each outfall;
 - Description of the control measures implemented in the drainage area of each outfall;
 - Description of the exposed materials located in the drainage area of each outfall that are likely to be significant contributors of pollutants to stormwater discharges;
 - Impervious surfaces in the drainage area that could affect the percolation of stormwater runoff into the ground (e.g., asphalt, crushed rock, grass, etc.);
 - Why the permittee expects the outfalls to discharge substantially identical effluents.

The division expects the permittee to update the inspection procedures portion of the stormwater management plan to include all items required by the permit.

8. The inspector reviewed a subset of annual reports between 2016 and 2017. The annual reports were found to be inadequate for the following reasons:

The 2017 annual report, due February 28, 2018, was received by the division 61 days late on April 30, 2018. Additionally, the 2017 annual report stated that the facility does not have water quality standards monitoring for stormwater. However, the certification requires water quality standards monitoring for stormwater. Also, a summary of the visual monitoring was not attached.

a) Annual reports must be completed for the reporting period from January 1 to December 31 and submitted by the permittee to the division no later than February 28 of the following reporting period.

The division expects the permittee to submit annual reports to the division no later than February 28 following the monitoring period.

- b) The annual reports did not include the following requirements, as required by Part I.N.2 of the permit.
 - Summary of visual monitoring

The division expects the permittee to update the annual reports to include all items required by the permit.

SITE INSPECTION

<u>Note 6</u>: As required by Part I.C.2 of the permit, the permittee must adhere to all practice based effluent limitations included in the permit.

As required by Part I.G of the permit, all control measures used by the permittee to meet the effluent limitations contained in this permit must be:

- Selected, designed, installed, implemented, and maintained in accordance with good engineering, hydrologic and pollution control practices.
- Consistent with the installation and implementation specifications identified in the stormwater management plan.
- <u>Note 7</u>: The findings identified below provide specific observations of field deficiencies. It remains the permittee's responsibility to ensure that all permit requirements, terms, and conditions are met for the entire construction site.
- <u>Note 8</u>: Process water discharge drainage path and outfall: Process water from the main pit at the facility is discharge to an irrigation ditch on the northeast corner of the facility that flows to the Arkansas River (Outfall 001)

Stormwater discharge drainage path and outfall: Stormwater at the facility flows from haul roads to an irrigation ditch in the center of the facility that flows to the Arkansas River (Outfall 002)

Unauthorized Process Water and Stormwater path and outfall: Both process water from the facility wash plant and stormwater from haul roads and stockpiles flows to an unprotected drainage swale on the western portion of the facility. The drainage swale flows north to the Arkansas River.

- 1. The temporary stream crossings utilized across the irrigation ditch consisted of uncompact soil without riprap armoring (refer to photographs 1 2).
 - <u>Finding</u>: Control measures used by the permittee to meet the effluent limitations were not installed in accordance with good engineering hydrologic and pollution control practices and/or the manufacturer's specifications (refer to Part I.G of the permit).
 - In accordance with industry standards and good engineering, hydrologic, and pollution control practices, the installation and implementation specifications for temporary stream crossings developed by Urban Drainage and Flood Control District directs that D50-12" type riprap be utilized on the banks of culvert type stream crossings.
 - Location: Irrigation ditch in center of facility
 - <u>Pollutant Source</u>: Sediment from disturbed areas
 - <u>Down Gradient Control Measures</u>: Additional control measures were not implemented down gradient of this location.
 - <u>Result</u>: There was a potential discharge of pollutants to a water of the state as identified in Note 5, stormwater drainage path and outfall (Outfall 002-A).

- 2. Control measures were not implemented along the roadside ditch (refer to photographs 3 8).
 - <u>Finding</u>: The permittee did not stabilize exposed areas and manage runoff using structural and/or non-structural control measures to minimize onsite erosion and sedimentation, and the resulting discharge of pollutants (refer to Part I.C.2.a of the permit).
 - o The permittee must stabilize exposed areas and manage runoff using structural and/or nonstructural control measures to minimize onsite erosion and sedimentation, and the resulting discharge of pollutants. Among other actions taken to meet this effluent limit, flow velocity dissipation devices must be placed at discharge locations and within outfall channels where necessary to minimize erosion and/or settle out pollutants.
 - Location: Eastern roadside ditch near the wash plant
 - <u>Pollutant Source</u>: Sediment from disturbed areas
 - <u>Down Gradient Control Measures</u>: Additional control measures were not implemented down gradient of this location.
 - <u>Result</u>: There was an actual discharge of pollutants to a water of the state as identified in Note 5, unauthorized stormwater drainage path and outfall.
- 3. Wash water and sediment breached the sediment ponds and sediment was evident in the roadside ditch that extended to the Arkansas River (refer to photographs 3 13).
 - <u>Finding</u>: The permittee did not eliminate non-stormwater discharges not authorized by this or any other CDPS permit, or conducted in accordance with a Division Low Risk Guidance document (refer to Part I.C.2.a of the permit).
 - Location: Western roadside ditch near wash plant
 - Pollutant Source: Wash plant water and sediment
 - <u>Down Gradient Control Measures</u>: Additional control measures were not implemented down gradient of this location.
 - <u>Result</u>: There was an actual discharge of pollutants to a water of the state as identified in Note 5, unauthorized process water drainage path and outfall.
- 4. Three sediment ponds utilized to settle out sediment from the wash plant process were completely full of sediment and not maintained causing the ponds to overflow and discharge to the a roadside ditch leading to the Arkansas River (refer to photographs 14 17).
 - <u>Finding</u>: The permittee did not properly operate and maintain all facilities and systems of treatment and control which were installed or used by the permittee as necessary to achieve compliance with the conditions of this permit (refer to Part I.B.1 of the permit).
 - Location: Wash plant
 - Pollutant Source: Wash plant water and sediment
 - <u>Down Gradient Control Measures</u>: Additional control measures were not implemented down gradient of this location.
 - <u>Result</u>: There was an actual discharge of pollutants to a water of the state as identified in Note 5, unauthorized process water drainage path and outfall.

CONCLUSION

The division expects the permittee to design and implement control measures as required by the permit and make the following corrections:

- o The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control which are installed or used by the permittee as necessary to achieve compliance with the conditions of the permit.
- o The permitted discharge shall not contain effluent parameter concentrations that exceed the effluent limitations identified in the permit or specified in the certification.
- o The permittee shall monitor the effluent consistent with the requirements specified in the permit and in the certification, as applicable to the permitted feature.
- o The permittee must minimize the exposure of pollutant sources associated with manufacturing, processing, and material storage areas to rain, snow, snowmelt, and runoff.
- o The permittee must minimize the potential for leaks, spills and other releases that may be exposed to stormwater and develop plans for effective response to such potential spills.
- o The permittee must eliminate non-stormwater discharges not authorized by this or any other CDPS permit, or conducted in accordance with a Division Low Risk Guidance document.
- All control measures used by the permittee to meet the effluent limitations contained in this permit must be selected, designed, installed, implemented, and maintained in accordance with good engineering, hydrologic and pollution control practices.
- Once each quarter for the entire permit term, the permittee must collect a stormwater sample from each outfall as applicable and conduct a visual assessment of each of these samples.
- o The permittee must develop, implement, and maintain a stormwater management plan for each facility authorized by the permit.





Photograph 4: Control measures not implemented along roadside ditch. Unauthorized process water and stormwater discharge location with a discharge of sediment to the Arkansas River.



Photograph 6: Control measures not implemented along roadside ditch. Unauthorized process water and stormwater discharge location with a discharge of sediment to the Arkansas River.



Photograph 8: Control measures not implemented along roadside ditch. Unauthorized process water and stormwater discharge location with a discharge of sediment to the Arkansas River.



Photograph 10: Unauthorized process water and stormwater discharge location with a discharge of sediment to the Arkansas River.



Photograph 12: Unauthorized process water and stormwater discharge location with a discharge of sediment to the Arkansas River.



Photograph 14: Process water sediment ponds full of sediment and not maintained



Photograph 16: Process water sediment ponds full of sediment and not maintained



Photograph 18: CPW photograph of the turbid water in the Arkansas River below Prowers aggregate, May 2018