

REPORT OF COMPLIANCE EVALUATION INSPECTION
(INDUSTRIAL STORMWATER)

Linwood Mining and Minerals Corporation

401 E. Front Street
Davenport, Iowa 52804

NPDES General Permit No. 3: **IA0617-0435**

NPDES General Permit No. 5: **IA0140186**

BY

U.S. ENVIRONMENTAL PROTECTION AGENCY

REGION 7

ENFORCEMENT AND COMPLIANCE ASSURANCE DIVISION (ECAD)
WATER BRANCH/DRINKING WATER & INSPECTIONS SECTION (WB/DWIS)

ON

OCTOBER 26 and 27, 2023

Introduction

At the request of the Water Branch (WB), Enforcement and Compliance Assurance Division (ECAD), a Compliance Evaluation Inspection (Industrial Stormwater) was conducted on October 26 and 27, 2023, at the Linwood Mining and Minerals Corporation site located in Davenport, Iowa. The inspection was conducted under the authority of Section 308 of the Clean Water Act, as amended. It was conducted in accordance with the U.S. Environmental Protection Agency (EPA) Region 7 Standard Operating Procedures for Compliance Inspections (ENST SOP No. 2332). This narrative report presents the findings of the inspection for the Iowa National Pollutant Discharge Elimination System (NPDES) General Permit No. 3: IA0617-0435, and General Permit No. 5: IAG140186.

Participants

Linwood Mining and Minerals Corporation

- Darin Osland, Environmental Manager

U.S. Environmental Protection Agency (EPA), Region 7

- Naji J. Ahmad, Environmental Engineer, ECAD/WB/DWIS
- Carson Colletier, Environmental Scientist, ECAD/WB/DWIS

Procedures

Mr. Carson Colletier and I arrived at the facility on October 26, 2023, at 9:30AM. We met with Mr. Darin Osland. We introduced ourselves and presented our credentials. I explained the purpose and procedures of the industrial stormwater compliance evaluation inspection. These included completing the Region 7 Industrial Stormwater Worksheet and the U.S. EPA Confidentiality Notice, evaluating self-monitoring and stormwater management practices, and conducting a facility walk-through with photographs (Attachment 8).

I provided Mr. Osland with the U.S. EPA Small Business Resources Information Sheet and the U.S. EPA Confidentiality Notice. The facility chose not to claim any confidential business information.

After a brief description of the site operations, Mr. Osland provided us with the Stormwater Pollution Prevention Plan (SWPPP) binder that included the SWPPP (Attachment 2) document and site inspection reports. Mr. Osland also provided us with the Spill Prevention Control and Countermeasure (SPCC) plan required by 40 CFR Part 112, §112.3.

Soon after, Mr. Osland escorted Mr. Colletier and I on a visual inspection of the facility. We started our visual inspection of the site at the lime plant located on the south side of East Front Street (Iowa Highway 22) where we observed the lime processing plant, settling ponds, storage piles, outfalls GP3-06 and GP3-07, and above ground fuel storage tanks. At the time of our inspection GP3-07 was discharging.

Next, we inspected the quarry plant located north of East Front Street. We observed outfalls GP3-01, GP3-02, GP3-03, GP3-04, and GP3-05. We inspected Donaldson Creek. We also observed a significant amount of sediment discharge from an unidentified point between outfalls GP3-02 and GP3-03 causing the flow in Donaldson Creek to be murky.

We also visually inspected the outfalls GP5-01 and GP5-03 associated with quarry and mine dewatering.

After the facility walkthrough we discussed our preliminary observations of the site and informed Mr. Osland that we would return the next day to hold the formal exit meeting and issue a Notice of Preliminary Findings (NOPF).

On October 27, 2023, we returned to the site. I issued an NOPF with two observations (Attachment 7). On November 8, 2023, I received an email from Mr. Osland that included the 2023 employee training records and a photo of corrective action in response to the NOPF (Attachment 10).

Facility Description

Linwood Mining and Minerals Corporation (Facility) operates a limestone mining processing operation on an approximately 1600-acre property since 1944. The Facility produces calcium carbonate, calcium oxide (lime), and construction materials. Limestone is mined from the quarry north of East Front Street (Iowa Highway 22). It is crushed and screened to produce uniform rock size.

The Facility operates a lime plant, located on the south side of East Front Street along the bank of the Mississippi River, to produce lime for chemical purposes. The crushed limestone is calcined, sent through a post calcination product cooler, and stored. The Standard Industrial Classification Codes for the Facility are 1422 (cut stone and limestone products) and 3274 (quick lime).

Storm water discharge from the lime plant and quarry is subject to the Iowa National Pollutant Discharge Elimination System (NPDES) General Permit No. 3 (GP3): IA0617-0435, Stormwater discharge associated with rock crushing plants, and construction sand and gravel facilities. The

Quarry and Mine dewatering is permitted under General Permit No. 5 (GP5): IAG140186, Stormwater discharge from mining and processing facilities. Both permits are due to expire on June 30, 2028. The facility has been authorized to discharge stormwater since October 1, 1992.

In general, GP3 requires the Facility to develop and implement a stormwater pollution prevention plan (SWPPP) and annually monitor for Total Suspended Solids (TSS) discharges at outfalls. GP5 requires monitoring for TSS and pH each month that dewatering is occurring. There are a total of seven outfalls associated with GP3 and two associated with GP5.

Outfall GP3-02 discharge is collected and monitored annually during a rain event as required since it is the representative discharge of all outfalls (GP3-01, GP3-02, GP3-03, GP3-04 and GP3-05) at the Quarry Plant. GP3-06 and GP3-07 are also monitored outfalls at the Lime Plant.

GP5-01 and GP5-03 are monitored at the Quarry Plant when the mine and/or the quarry are dewatered.

Stormwater and Drainage Pattern (Attachment 3)

The topography of the site is frequently changing due to the nature of the operation. However, the general topography of the land is sloped to drain south into the Mississippi River through streams and creeks.

- Stormwater surface runoff at the Lime Plant flows to the south and is collected in a series of settling ponds that discharge into the Mississippi River through outfalls GP3-06 and GP3-07.
- According to the SWPPP, discharge from the settling pond associated with GP3-07 is restricted due to culvert height on the south side of the property, which is above the historical flood height, allowing residence time during storm water collection for TSS settling in the settling pond.
- The two eastern settling ponds are associated with GP3-06 and have very high sides with discharge via lift pump from the second pond. Both ponds are connected via a pipe allowing residence time for TSS to settle.
- Stormwater surface water at the Quarry plant is mainly directed to surface flow toward the five GP3 outfalls. All outfalls end up flowing into Donaldson Creek. The creek flows south from GP3-05 for approximately 3,000 feet of stream distance to GP3-02. As mentioned above, GP3-02 is the monitored outfall located just beneath the East Front Street bridge. The creek continues to flow south approximately 600 feet into the Mississippi River.
- Mine dewatering occurs at GP5-03 in the north part of the quarry via a pump station into Moore Creek. The creek flows south approximately 1.5 stream miles into the Mississippi River.
- Quarry dewatering would be pumped into Donaldson Creek via outfall GP5-01. The creek flows south approximately 1,700 feet into the Mississippi River.

Finding and Observations

1. At the time of the inspection, it was raining, and the ground was wet. Outfall GP3-07 was discharging clear water as shown in photo 3, Attachment 8 to this report.
2. NOPF #1 was issued because contaminated surface runoff was leaving the site from an

unidentified point between Outfalls GP3-02 and GP3-03 into Donaldson Creek, causing water in the creek to be significantly murky as shown in photos 14 and 10 below. Contaminated water was flowing through the inadequate structural control best management practices (BMPs). I pointed out to Mr. Osland that this location should be identified as an outfall, should be added to the map, and the SWPPP should be updated as well. Additional structural and administrative BMP controls would also be needed at the newly identified outfall.

Photo 14, Sediment flowing down into Donaldson Creek



Photo 10, Donaldson Creek at the time of the inspection



3. The SWPPP was developed in 2004 to cover both GP3 and GP5. The SWPPP was revised several times over the years. The last and current revision dated October 28, 2019, was signed by Mr. Jonathan W. Wilmshurst, President of the Facility (Attachment 2). Overall, the SWPPP appeared adequate and conformed to current site activities. However, The Facility should update the SWPPP to include the discharge point mentioned above in item 2, as a GP3 outfall.
4. Records indicate that site personnel conducted annual site inspections in 2020, 2021, and 2022 as required by the GP3. The last annual inspection was conducted in December 2022.
5. Records indicate that site personnel conducted annual sampling of GP3-02, GP3-06, and GP3-07 for TSS as required by the GP3 (Attachment 4).
6. Records indicate that site personnel conducted monthly sampling of GP5-01 and GP5-03 for TSS and pH as required by the GP5 (Attachment 5).
7. Records indicate that site personnel performed the annual Non-Stormwater Discharge Assessment and Certification (Attachment 6).
8. NOPF#2 was issued because the Facility failed to conduct annual employee training as required by NPDES GP3 Part III.C.4.b.(8) Employee Training in 2020, 2021, and 2022. Records indicate that the last training was conducted in October 2019 (Attachment 7).
9. The Facility has aboveground storage capacity over 1,320 U.S. gallons of petroleum products (diesel, hydraulic fluids, oil, and used oil) stored onsite in tanks, totes, and 55-gallon containers. The Facility prepared and is currently implementing a Spill Prevention Control and Countermeasure (SPCC) Plan in accordance with [§112.7](#) and any other applicable sections of this Part. The plan was prepared in October 2003 and was updated in 2015.
10. On November 8, 2023, Mr. Osland sent a Facility response to the NOPF via email. In his response he indicated the following (Attachment 10):
 - a. Employee training record from the quarry and mining plant was completed on November 2, 2023, and they are scheduled to complete annual training for the lime plant employees on the week of November 13th.
 - b. He also attached a photo of the silt removed and area flattened out from the location where sediment was leaving the site from an unidentified point between Outfalls GP3-02 and GP3-03 into Donaldson Creek at the time of the inspection. He added “*we are tooling up to regrade (excavator) the area that crossed the creek so that water be forced to head south to our quarrying plant. I will monitor this area during the next storms to make sure that storm water is not entering the creek at this site. If we are successful in getting the grade proper, then I will add this spot to our plant and designate an outfall number*”.

Conclusion

1. Overall structural and nonstructural BMPs appeared adequate and good housekeeping practices appeared adequate as well with the exception of the failed BMPs mention above.

2. In order to ensure that BMPs are adequate, facility personnel should conduct thorough inspections of all stormwater controls.
3. The point of discharge where sediment was leaving the site from an unidentified point should be considered as an outfall and should be included on the site map, and the SWPPP should be updated to reflect this location as a GP3 outfall.

**NAJI
AHMAD**

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Naji J. Ahmad
Environmental Engineer, WB/DWIS

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Jodi Bruno
Manager, ECAD/WB

Attachments

1. ISW Checklist
2. SWPPP
3. Site Maps
4. GP3 Annual TSS Monitoring
5. GP5 quarterly TSS and pH monitoring
6. Non-SW Discharge Cert.
7. 2019 Employee training log
8. Photo Log
9. NOPF
10. Response to NOPF