

JANET T. MILLS
GOVERNORMELANIE LOYZIM
COMMISSIONER

MEMORANDUM

TO: Susan Lessard, Board Chair of the Board of Environmental Protection
Scott Boak, Assistant Attorney General

FROM: Brian Kavanah, Director, Bureau of Water Quality
Pamela Parker, Division of Water Quality, Central Maine Region

SUBJECT: ADMINISTRATIVE CONSENT AGREEMENT, ND OTM LLC

DATE: August 17, 2023

Statute and Rule Reference: By discharging approximately 30,720 gallons of 50% sodium hydroxide to the ground, groundwater, and the Penobscot River, ND OTM violated: 38 M.R.S. §§ 413(1), 414(5), 420, 451, 464, and 465; Special Condition E and Standard Condition B of the permit.

- 38 M.R.S. § 413(1) prohibits the discharge of pollutants to the waters of the state without a permit.
- 38 M.R.S. § 414 (5) prohibits the violation of the terms or conditions of a license.
- 38 M.R.S. § 420 prohibits the discharge of toxic or hazardous substances to the waters of the state or to areas where it may run into waters of the state.
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- 38 M.R.S. § 451 prohibits the discharge of pollutants in a manner that will lower the water quality of the water body below its classification.
- 38 M.R.S. § 464 describes the general provisions of water quality classification and prohibits pollutants that result in the pH of the fresh waterbodies being outside of the 6-8.5 standard unit range.
- 38 M.R.S. § 465 contains the classification standards for fresh waters, including Class B waters.
- Special Condition E states that the facility can only discharge in accordance with its permit.

- Standard Condition B requires that permitted facilities properly operate at maximum efficiency and maintain their pollution control equipment in good working order.

By failing to monitor the effluent discharged from Outfall #002 and failing to submit Discharge Monitoring Reports (DMRs) from Outfall #002 between December 2019 and June 2020, ND OTM violated: Special Condition A, Special Condition E, Special Condition O, Standard Condition B of the permit; and 38 M.R.S. § 414(5).

- Special Condition A of the permit describes the monitoring requirements for licensed outfalls.
- Special Condition E states that the facility can only discharge in accordance with its permit.
- Special Condition O requires that monitoring and reporting be conducted and submitted on a set schedule.
- Standard Condition B requires that permitted facilities properly operate at maximum efficiency and maintain their pollution control equipment in good working order.
- 38 M.R.S. § 414(5) prohibits the violation of the terms or conditions of a license.

Violator: ND OTM LLC

Location: Old Town, Maine

Description: On October 7, 2020, staff at ND OTM LLC discovered an ongoing discharge of high pH ground water to the Penobscot River through groundwater breakout points along 250' of the riverbank directly east of the recaustification and recovery boiler area of the mill. This area of the river is the former tailrace of the former hydropower dam and is bordered by a riprap bank to the east forming a small embayment off the main stem of the river. The discharge was discovered through pH monitoring at the wastewater treatment section of the mill and traced back to the river water intake. Testing of the river water at the intake and in the facility revealed that the raw water being withdrawn from the river was at a pH of between 12 and 13, similar to the groundwater breakouts along the bank. Staff at ND OTM LLC immediately worked to identify the source of the caustic discharge, concluding quickly that the most likely source was within the recovery and recaustification system.

Subsequent investigations by ND OTM LLC staff revealed that approximately 30,720 gallons (190,873 lbs) of 50% sodium hydroxide was discharged to the floor drain in the Riley Building intermittently between 9/29/20 and 10/7/2020. The discharge was caused by a valve operated during normal distribution of caustic to the mill being left in the open

position, transferring the caustic liquid to the recovery system caustic day tank located in the Riley building rather than its intended locations in other mill systems. Once the day tank was full, excess caustic was discharged through an overflow vent on the tank and through discontinued piping to a floor drain that originally discharged to the sewer collection system. The floor drains were deteriorated and had failed, allowing the caustic to discharge through the floor into the subgrade fill material beneath the Riley building. In addition, the sump pumps serving Riley building had also failed and the sump was found not have a high-level alarm. Finally, piping leading from the Riley building to a manhole outside the building was found to be leaking where it connected to the manhole.

The caustic liquid flowed through the subgrade material to the riverbank where it was discharged to the Penobscot River. Due to drought conditions, the breakout locations on the riverbank were visible to ND OTM LLC staff during the initial investigation which aided in the discharges' discovery and tracing.

On June 29, 2022, ND OTM LLC staff observed an additional spill of 50% sodium hydroxide solution on the floor of the Riley building near the day tank associated with the October 2020 discharge described above due to two leaks from distribution piping leading to the day tank. One of the leaks was near the failed floor drain that had been determined to be one of the root causes of the 2020 discharge. ND OTM LLC estimated that this leak discharged approximately 1076 gallons over a 30-day period and that a portion of that leak discharged to the failed floor drain and subsequently into the ground and groundwater below the Riley Building. The Riley building floor drain system has since been repaired and associated with the shutdown of the mill in the spring of 2023, all caustic material has been removed from the site and the piping flushed.

Environmental Issues: The discharge raised the pH of the water in the embayment of Penobscot River to a toxic and hazardous level causing a violation of water quality standards and a limited fish kill. Although ND OTM LLC worked to find and stop the source of the sodium hydroxide quickly, the river immediately adjacent to the bank discharge area continues to be impacted due to ongoing high pH contaminated groundwater discharges. The river water in the embayment away from the immediate discharge area does not appear to be impacted regularly from the ongoing discharge. A corrective action in the ACA requires that ND OTM LLC investigate the amount of remaining caustic material below the Riley building and report on the methods and feasibility of remediating the area.

Staff Recommendation: The Department recommends acceptance of this Administrative Consent Agreement as proposed stipulating a monetary penalty of one hundred and one thousand four hundred dollars (\$101,400.00) in the form of a supplemental environmental project (SEP) to complete the project entitled "City of Old Town College Avenue Extension Culvert Replacement and Upgrade".

Estimated Presentation Time: 20 Minutes

Is the agreement subject to 30-day public comment pursuant to 38 M.R.S. § 347-A(6)?

Yes

No

POSTED FOR 30-DAY PUBLIC COMMENT:

Enforcement Coordinator: RM Posting Date: 6/28/2023 Expires: 07/28/2023