# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

# INFORMATION SHEET ON RESCISSION OF ORDER NO. 88-55 OGLEBAY NORTON INDUSTRIAL SANDS, INC. MISSION VIEJO SAND PLANT

## I. Background

Order No. 88-55 (Regional Board, 1988), as amended, prescribes Waste Discharge Requirements to Oglebay Norton Industrial Sands, Inc. (Discharger) for the discharge of recirculated sand wash water at its Mission Viejo Sand Plant (Facility) in Orange County. The manufacturing process includes mining and washing high quality silica sand to be used mainly in the manufacture of glass. Wash water generated from the processing plant is cycled through a sedimentation/thickener basin to remove a portion of the sediment load. From this lined basin, thickened wash water is pumped behind the dam for further settling of sediment in the reservoir. Clarified water is then pumped to a final holding pond and ultimately recycled to the process plant. Sediment is allowed to accumulate in the reservoir.

When Order No. 88-55 was adopted, the Facility manufacturing processes included the use of sulfuric acid and caustic soda. Since adoption of Order No. 88-55, the facility changed its operation to a closed-loop process system with no chemical usage, enrolled under the Industrial Storm Water General Permit in 1992 (NPDES No. CAS000001), and continued to monitor potential impacts from its operation on groundwater quality.

The Discharger submitted a Report of Waste Discharge (RoWD; Shaw Environmental, 2009) dated January 2009 to support its request for rescission of Order No. 88-55. The information contained in the RoWD documents that water quality is adequately protected at the Facility with just the requirements prescribed by the Storm Water General Permit and supports a conclusion that the discharges of waste regulated under Order No. 88-55 pose an insignificant threat to groundwater quality. The following presents a summary of the information in the RoWD.

#### II. Surface Water

The 1,200-acre site contains four drainage basins, identified as Trampas Canyon Dam, Thickener, northwest desilting basin, and northeast desilting basin. The runoff generated from the first two areas is self-contained. Holding ponds were constructed to collect storm water runoff from the northwest and northeast desiltation basins. The capacity of the holding ponds is evaluated annually and has consistently been found to be more than adequate. (Shaw Environmental, 2009, p. 2-1)

Order No. 88-55 requires monitoring of storm water runoff from the holding ponds and contains prohibitions relating to the discharge of waste to surface waters including:

Prohibition A.7 - Discharge of wastewater or other waste to Trampas Creek is prohibited.

Prohibition A.8 - Discharge of grease, oil, or other chemicals which would not occur naturally in the runoff or washwater are prohibited.

Prohibition A.9 - Land grading and similar operations causing soil disturbance which do not include provisions to minimize soil erosion and limit suspended matter in the runoff are prohibited. (Regional Board, p. 8)

In March 1992, the Facility was enrolled under the Industrial Storm Water General Permit Order No. 97-03-DWQ (General Permit). The General Permit prohibits discharges of material other than storm water (non-storm water discharges) that are not authorized by the General Permit and discharges containing hazardous substances in storm water in excess of reportable quantities. (State Water Board, 1997, p. VIII) In addition, the General Permit (State Water Board, 1997, p. X) requires development and implementation of a monitoring program in order to "(1) demonstrate compliance with the General Permit, (2) aid in the implementation of the SWPPP, and (3) measure the effectiveness of the BMPs in reducing or preventing pollutants in storm water discharges and authorized non-storm water discharges."

Pursuant to the requirements of the General Permit, the Discharger developed a storm water pollution prevention plan (SWPP). The SWPP includes best management practices for the industrial processes related to mining, material handling and storage, and vehicle parking and maintenance. (Shaw Environmental, 2009, p.5-1)

## III. Groundwater

Groundwater data from wells located onsite have been collected since 1986. Additional groundwater data from the nearby Prima Deshecha Landfill was utilized in the RoWD. Concentrations of total dissolved solids and sulfate in groundwater over time show variability but do not demonstrate a continuous upward trend which would indicate an impact to groundwater due to the discharge of waste from the Facility. (Shaw Environmental, 2009, p. 4-5)

#### IV. Conclusion

The prohibitions contained in Order No. 88-55 are duplicative of the requirements of the General Permit which are as protective of surface water. In addition, groundwater data has indicated that the Facility does not pose a significant threat to groundwater quality. Based on the above information, Waste Discharge Requirements are not necessary for protection of ground and surface waters and therefore rescission of Order No. 88-55 is appropriate.

# References:

- 1. Regional Board. 1998. Order No. 88-55, Waste Discharge Requirements for Oglebay Norton Industrial Sands, Inc., Mission Viejo Sand Plant.
- 2. Shaw Environmental, Inc. 2009. Report of Waste Discharge, Oglebay Norton Industrial Sands, Inc. dba Carmeuse Industrial Sands, Inc., 31302 Ortega Highway, San Juan Capistrano, California.
- 3. State Water Board. 1997. Fact Sheet for State Water Resources Control Board (State Water Board) Water Quality Order No. 97-03-DWQ, National Pollutant Discharge Elimination System, General Permit No. CAS000001, Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities.