

# SAND & GRAVEL (RSG) FACT SHEET

## SAND AND GRAVEL (RSG) STORMWATER MASTER GENERAL PERMIT Permit No. NJ0201189

This permit regulates discharges of stormwater to ground water and certain process wastewaters to ground water from sand and gravel operations.

### BACKGROUND

Under the Federal Water Pollution Control Act (1972), as amended by the Clean Water Act of 1977, and the Water Quality Act of 1987, a facility with a stormwater discharge associated with industrial activity must obtain a National Pollutant Discharge Elimination System (NPDES) Permit. On November 16, 1990 EPA promulgated the regulatory definition of “storm water discharge associated with industrial activity”. The EPA identifies eleven different major categories of facilities of which category (iii) includes SIC codes 14 including active or inactive sand and gravel operations and facilities that excavate fill dirt and topsoil.

The New Jersey Department of Environmental Protection (Department) is the issuing authority for NPDES permits in State of New Jersey under the New Jersey Pollutant Discharge Elimination System (NJPDES). N.J.A.C. 7:14A *et seq.*, for discharges of stormwater associated with industrial activities from point or nonpoint sources. The Department also issues NJPDES rules that regulate stormwater discharges to surface water and ground water (N.J.A.C. 7:14A-1 *et seq.*). Stormwater discharges from industrial activities to ground water are also regulated pursuant to New Jersey’s Clean Water Act (N.J.S.A. 58:10A-1 *et seq.*, the NJPDES rules 7:14A-7, 8., and the Ground Water Quality Standards (GWQS) N.J.A.C. 7:9-6.

The Department proposes to issue New Jersey Pollutant Discharge Elimination System (NJPDES) General Permit Number NJ0201189, for those facilities engaged in sand and gravel operations. The permit regulates stormwater, and ***certain process wastewater discharges*** associated with sand and gravel industrial activities to the ground waters of the State. This includes facilities that have active mining at the site, facilities that may only be involved in the processing and or storage of aggregate materials, or inactive mines and quarries that have not been closed in accordance with Part II.C. of this permit. Facilities that have discharges to surface water are not authorized under this permit.

Once the RSG becomes finalized (becomes effective), eligible facilities with existing general permits authorizations and existing facilities that have individual discharge to ground water and/or stormwater permits have the option to apply for authorization under the RSG.

All facilities presently operating with any of the above permits or operating without a permit shall submit a completed request for authorization (RFA). If the facility is currently operating with an

individual NJPDES permit, the Department will contact the facility to evaluate the facility's applicability under this general permit.

**Permit Number NJ0201189:** This general permit has established certain criteria for all facilities that engage in sand and gravel operations as well as the requirement for the facilities to implement a Stormwater Pollution Prevention Plan (SPPP), to eliminate or minimize the discharge of pollutants to the environment. This permit requires the facilities to eliminate or minimize the exposure of industrial activities and source materials to stormwater. A facility will also have to establish **drainage control** for their facility. Drainage control is one of the essential components of pollution prevention. Any uncontrolled discharge of stormwater that has come in contact with source materials or the industrial activity area can lead to the introduction of pollutants into the environment. For this reason, it is required that all facilities prevent stormwater from leaving their site. Best Management Practices (BMPs) are another major component of this permit. BMPs are methods established by the permittee to prevent or reduce pollutants from non-point sources. An example of a BMP is when a facility landscapes around their aggregate stockpiles to have all the stormwater percolate into the ground.

Removal of the material to be mined in a borrow pit that has intercepted the ground water table can involve excavating machines and/or dredges. A floating dredge is used if the material to be mined is below the water level of the pit. The mined material can then be set on the ground to dewater or brought to a process area via a slurry. The aggregate material is then sorted through a series of screens. The excess water is discharged from the process area, where the discharge water flows back into the borrow pit.

Some facilities excavate materials from a borrow pit that has not intercepted the ground water table. Their operations involve removing material with an excavator and storing and shipping the material off site. Usually these facilities that are processing top soil or clean fill depending on the grade of soil being excavated.

### **Authorization Under the RSG**

Those facilities currently authorized under the R-13 Mining and Quarrying Stormwater general permit who wish to be authorized under the RSG and are eligible for the RSG are required to submit an RFA Supplemental Form, a Certification verifying that their SPPP is up-to-date. For existing facilities who have a current permit to discharge under another NJDPES permit and are eligible for the RSG must submit the a completed RFA, a completed supplemental form, a valid Mining Certificate issued by the Office of Public Safety under the New Jersey Department of Labor, and a verification of an approved Soil Erosion and Sediment Control Plan (251 Plan). These facilities have six (6) months from Effective Date of Permit Authorization (EDPA) to submit the Certification form verifying that they have developed and are implementing their Stormwater Pollution Prevention Plan (SPPP).

### **Active Sand and Gravel Operations**

All active sand and gravel operations have to have a valid NJPDES permit. Facilities are considered active if they do not have a closed status. Conditions required to consider a facility closed, for the purposes of this permit, are outlined in Part II.C. of this permit.

## **Dust Control**

The dust created by the vehicle traffic on the access roads may be controlled by using waters from their borrow pits for dust control. BMPs for dust control range from paving the roads (where practical) to use of dust suppressants such as water taken from the borrow pit or non-process stormwater. Water used as a dust suppressant must remain on-site and must never cause a discharge to surface water. All BMPs chosen for dust control must be included in the facility's SPPP.

## **Storage of Other Materials**

The RSG permit allows for storage of tree trunks limbs and other tree debris along with wood chips and de-icing materials. Part IV Section C. 1 covers the storage of these materials. Other material storage not associated with the facility's industrial activity and not covered under the above mentioned allowable materials is not allowed under this permit. Examples of these materials not allowed on-site are composting (regulated or not regulated by Division of Solid waste), Class B, recycling operations, asphalt and concrete batch plants, to name a few.

## **Process Wastewater**

Process wastewater is water that comes in contact with industrial activities and source materials. For sand and gravel operations this may also include but are not limited to non-contact cooling water, contact cooling water, compressor condensate and boiler blowdown. Stormwater that comes in contact with the facilities aggregate stockpiles (stockpiles of materials used on-site for the daily operations) is not considered process wastewater, unless that stormwater is commingled with any other process wastewater. Any ground water/stormwater that is commingled with process wastewater is considered to be process wastewater. Many facilities use process wastewater (which may or may not be commingled with ground water/stormwater), for dust control. Ground water and/or stormwater, which is not associated with the process area that is conveyed from one location to another within the facility for keeping the stormwater on-site is not considered a process wastewater. However, the RSG only authorizes certain process wastewater discharges to groundwater. Process wastewater discharges that are authorized by the RSG are covered in Part II.C.2 (a) of the permit.

## **Stormwater Drainage Control**

Stormwater Drainage Control is the diversion of stormwater, generated by the facility, such that stormwater from the areas of industrial activity does not leave the site. All sand and gravel operations must have drainage control of their facility when obtain the RSG. Diversions would include structures such as ditches, swales, and pipes. The permittee will be required to design a Drainage Control Plan that incorporates all the requirements outlined in part IV of this permit.

## **Pinelands Requirements**

Facilities that fall within the jurisdiction of the Pinelands Commission shall adhere to all regulations set forth in the Pinelands Comprehensive Management Plan.

## **Borrow Pits**

Borrow Pit is the general term used to describe any excavation pit that may or may not intercept the groundwater table. The common feature of these basins is that they are topographic depressions that are used to extract materials for the facility's operations and **are not** designed to hold, retain, or treat and/or transmit stormwater and/or wastewater.

#### **Non-Stormwater Discharges Allowed by this Permit.**

Certain non-stormwater discharges are allowed by this permit. Rinsing of vehicles/equipment is allowed under certain circumstances using water only, with no detergents. The restrictions are listed in Part IV section E. of the permit. Allowable discharges to the borrow pit (that has intersected the water table) is return water from the process area and incidental stormwater from around the borrow pit.

## **BASIS FOR THE DRAFT PERMIT CONDITIONS**

In the Sand and Gravel Stormwater General Permit BMPs required as part of the SPPP are authorized by the Federal Water Pollution Act ( 33 U.S.-1251 *et seq.*) and the Water Pollution Control Act N.J.S.A. 58:10A-1 *et seq.* These statutes are implemented by the National Pollutant Discharge Elimination System (NPDES, 40 CFR Part 122) and the New Jersey Pollutant Discharge Elimination System (NJPDDES, N.J.A.C. 7:14A) permit programs.

The SPPP is created by the permittee. The SPPP includes the BMPs that the permittee has chosen to implement that reduce or eliminate stormwater contamination. The implementation of the BMPs will eliminate (if possible) or reduce the exposure of the aggregate source materials, machinery, and the associated stockpiles to stormwater that is discharged to ground waters of the State.

BMPs are an essential part of this permit and when correctly implemented eliminate or reduce significantly the introduction of pollutants into the environment. BMPs are integral to a permittee complying with the conditions of this permit and are to be included in all aspects of the facility and its operations. This includes, but is not limited to, storage of fuels, operating procedures and prevention of soil erosion. RFAs for existing facilities shall follow a schedule determined by the Department.

## CONTENTS OF THE ADMINISTRATIVE RECORD

The following items were used to establish the basis for this Draft Renewal Permit:

1. Development Document of USEPA's Multi-Sector General Permit. \*NPI
2. 52440 Federal Register / Vol. 63, No. 189 / Wednesday, September 30, 1998 / Notices. \*NPI
3. Appendix A – Summary of Responses to Public Comments on the November 19, 1993 Draft Multi Sector General Permit. \*NPI 33 U.S.C. 1251 et seq., Federal Water Pollution Control Act. \*NPI
4. N.J.S.A. 58:10A-1 et seq., New Jersey Water Pollution Control Act. \*NPI
5. 40 CFR Part 122, National Pollutant Discharge Elimination System. \*NPI
6. N.J.A.C. 7:14A-1 et seq., New Jersey Pollutant Discharge Elimination System Regulations. \*NPI
7. N.J.A.C. 7:9B-1 et seq., New Jersey Surface Water Quality Standards. \*NPI
8. 40 CFR Part 131, Federal Water Quality Standards. \*NPI
9. "Field Sampling Procedures Manual", published by the NJDEP. \*NPI
10. "Discharge Monitoring Report (DMR) Instructional Manual", published by the NJDEP. \*NPI
11. Delaware River Basin Commission Water Quality Regulations. \*NPI
12. Nationwide Urban Runoff Program, USEPA and consultants, 1983. \*NPI
13. 40 CFR Subchapter N – Effluent Guidelines and Standards.
14. EPA 310R95-011 September 1995 Profile of the non-fuel, non-metal mining industry. \*NPI
15. Hot Mix Asphalt Producers General Permit No. NJ0132721.
16. Concrete Products Manufacturing General Permit No. NJ0108456.
17. *Habitat Suitability Index Models: Brook Trout* published by US Department of the Interior (1992).
18. Draft *Cold Waterfisheries Management Plan* available through NJDEP-Division of Fish and Wildlife.

\*NPI: Denotes officially part of the Administrative Record, but not necessarily a physical part thereof