

MQGP FACT SHEET

MINING AND QUARRYING STORMWATER GENERAL PERMIT

Permit No. NJ0141950

PI ID # 50577

This permit regulates discharges of stormwater, ground water from mine dewatering, and certain process wastewaters at facilities that engage in mining and quarrying, and/or processing of aggregate materials.

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 10 through 14 including active or inactive mining operations.

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 NJ0141950, for those facilities engaged in mining and quarrying operations. The permit regulates stormwater, ground water and certain process wastewater discharges associated with mining and quarrying industrial activities to surface waters and 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.F. of this permit.

Authorization under this general permit, once finalized, shall replace expired permits awaiting renewal and permit authorization under the existing Construction General Permit (5G3) NJ0088323 or the Basic General Permit (5G2) NJ0088315. The Department will begin the process of revoking permits for all mining and quarrying facilities presently operating under an expired individual permit awaiting renewal, the 5G2 or the 5G3 General Permits. Concurrent with this action the Department will also be

modifying the Construction General Permit (5G3) NJ 0088323 to remove authorization eligibility for all mining and quarry operations.

All facilities presently operating with any of the above permits or operating without a permit shall submit a completed RFA_1 Storm and RFA Supplemental form for the Mining and Quarrying General Permit (MQGP) within thirty (30) days of the effective date of permit (EDP). 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 NJ0141950: This general permit has established numeric limitations for all facilities that engage in mining and quarry 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 divert all stormwater to permitted outfalls or basins. BMPs are another major component of this permit. An example of a BMP is when a facility landscapes around their aggregate stockpiles to have a majority of the stormwater percolate into the ground, instead of discharging into the nearby surface water bodies.

The activities that are typically associated with mining and quarrying activities involve the removal of the overburden to expose the material that is to be mined. Removal of the material in hard rock quarries usually involves blasting. Then the material is usually crushed and sorted. The rock may undergo various stages of crushing to obtain the optimum size.

Removal of the material to be mined in a sand and gravel operation 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 can be chemically treated before it is discharged to a settling basin. A basin or a series of basins can be used to aid in the settling process.

Active Mines and Quarries

All active mines and quarries will have to have a valid NJPDES permit. Mines and quarries 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.F. of this permit.

Operation of Hot Mix Asphalt Plants and/or Concrete Products Manufacturing Plants

Many mining and quarrying operations also have hot mix asphalt and/or concrete plants in operation, on-site. If these plants have separate drainage areas, the permittee will be required to request authorization under the applicable general permit or apply for an individual permit. If these plants discharge to the same outfall (s) as the discharge outfall (s) of the mining and quarrying operations., the permittee will operate these plants in accordance with the terms and conditions of this permit.

If these plants are operated by an entity other than the permittee, the permittee will either include the operator of these plants as a co-permittee or the operator will have to obtain a separate NJPDES permit to cover the discharges from the plants.

Dust Control

Dust generated at a mine or quarry may be from direct industrial activities, such as the crushing operations to indirect activities; such as the dust created by the vehicle traffic. Mines and Quarries are allowed to use ground water/stormwater and certain process wastewaters for dust control. BMPs that have been chosen for dust control range from paving the roads (where practical) to use of dust suppressants. All BMPs chosen for dust control must be included in the facility's SPPP.

Mine Dewatering

Mine dewatering involves the removal of ground water/stormwater or process wastewater from the mining area and transporting the water to other basins, for temporary storage, or the direct discharge to a surface water body. Stormwater/ground water and possibly process wastewater that is not discharged and is stored in these basins is commonly used for dust control in crushing operations and on roadways in the mining area itself. Facilities can either mine dewater and meet effluent limitations outlined in Part III of this permit or design, construct and maintain a system to contain or treat the volume of waste water/stormwater which result from a 10-year 24-hour storm event, plus sediment storage, that does not result in a discharge to surface waters.

Process Wastewater

Process wastewater is water that the facility uses in the facility operation in any manner. These may include but are not limited to truck washing, sand washing, 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 process wastewater, such as in a storage basin. 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 the purposes of storage or settling is not considered a process wastewater. However, the MQGP only authorizes certain process wastewater discharges. Process wastewater discharges that are not authorized by the MQGP are covered in Part II.B.2(a) of the permit.

Hydraulic Control

A facility is said to have hydraulic control when it has the ability to contain, hydraulically, a 10-year, 24-hour storm (6" of rain) event and have no discharges to surface water. The term, 10-year 24-hour storm event, is the maximum rain event, that has a probable occurrence once every 10 years. A Hydraulic Control plan must be signed, dated, and certified by a Professional Engineer. The facility must have in their SPPP a contingency plan to handle a 10-year 24-hour storm event (plus sediment storage). The contingency plan may include, for example, construction of additional basins for

diversion of stormwater during the rain event, equalization of existing basins to allow for additional storage of stormwater in emergency conditions, etc. If a facility has hydraulic control and experiences a rain event in excess of the 10-year, 24-hour (6" of rain) storm event, the resultant discharge is considered an "upset". The discharge from this resultant "upset" must be a gravity flow only discharge. This resultant "upset" must be noted in the facility's SPPP plan, with notes of the duration of the storm event and the rainfall amount. When a facility no longer has hydraulic control, the Department must be notified and the facility's SPPP plan must be revised to reflect the change. Facilities that do not have hydraulic control must monitor a mine dewatering discharges under Part III of this 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 facility in an uncontrolled manner. A controlled manner is a deliberate diversion or storage of stormwater to permitted outfalls or to basins. All mines and quarries must have drainage control of their facility whether they apply for and obtain the MQGP or an individual permit. Storage would typically include basins, wet ponds, etc. 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. The plan must be completed within six (6) months of the EDP, and submitted with **Attachment C** to the Department for approval. The drainage control plan must be fully implemented within 24 months of the EDP.

Settling Aids

Settling aids are used by facilities to remove settleable solids in a discharge. Settling aids come in many forms, including, but not limited to flocculants, coagulants, and alums. Usually, a facility will dose the settling aid into the discharge; then direct the discharge to a basin to allow for settling. A facility that chooses to use settling aids in their discharge will have to complete six (6) acute toxicity tests for each permitted outfall where treated water is discharged over the life of the permit.

Temperature Monitoring – Trout Streams

Many mines and quarries have stormwater and water from dewatering of their basins that are discharged directly into trout streams. The discharges of water from the basins have potential to negatively affect temperature and oxygen sensitive trout streams. The basins that are used to store process or non-process wastewater have thermal layers with the heated water (in excess of 80°F) in the upper most layers and the coldest layers at the bottom of the basins. In addition, the lowest portion of the basin may be low in dissolved oxygen (**DO**). When a facility discharges from these basins, careful considerations must be taken to ensure that the temperature of the discharged water does not exceed the interim temperature limit (75°F during the first 27 months of the permit). During this time, the permittee will also develop and implement BMPs to meet a target value of 68°F. In addition, the **DO** depleted water from the lowest portion of the basin should be pumped to a temporary mixing area before being discharged to the surface water body. This mixing area could be another section of the basin or a secondary basin.

Stream Study-Trout Streams

In addition to mine dewatering, another potential source of heated water is the initial flush of stormwater over the exposed rock and aggregate piles that are typical of a quarry. This initial flush of heated water may adversely affect the receiving waters by raising the ambient temperature over what trout can tolerate. The Department will require constant temperature and depth monitoring for all facilities that discharge stormwater to trout production and trout maintenance streams. This stream study will measure the effects of stormwater discharges from facilities discharging to trout maintenance and trout production streams by measuring temperature upstream and downstream of the point(s) of discharge. This study will be done in accordance with Part IV.C of the permit.

Numeric Effluent Limits

The Department has established numeric effluent limitations for discharges of stormwater to surface water in the MQGP for the parameter of **Oil and Grease**, based on N.J.A.C.7:14A-12.8, and for stormwater to ground water based on the Ground Water Quality Standards (GWQS) (N.J.A.C. 7:9-6). Facilities that mine construction sand and gravel, and industrial sand have numeric effluent limitations for the pollutant parameter of **pH** and Total Suspended Solids (**TSS**) when discharging to surface water. Facilities that use settling aids will have to test for the additional parameters of Chemical Oxygen Demand (**COD**) and Toxicity (% Effect Statre 48hr Acute Ceriodaphnia) when they discharge. Existing facilities that discharge to trout production (TP) or trout maintenance (TM) streams will have an additional pollutant parameter of **Temperature** to report on a monthly basis.

Additional numeric effluent limitations were applied for mine dewatering to trout production and trout maintenance streams for DO, TSS, Total Dissolved Solids (TDS), COD.

Pollutants Parameters

The Permit requires facilities that are issued an authorization under the MQGP to sample for the pollutants listed below. The specific pollutants that a facility will have to sample for depends on the actual industrial process(es) involved.

Acute Toxicity Testing (%Effect Statre 48hr Acute Ceriodaphnia): Acute Toxicity testing will be required for quarries using settling aids. The limit for compliance will be No Observed Adverse Effect Concentration (NOAEC) \geq 100% effluent. There are many different settling aids on the market that, when misused, have the potential of being toxic to aquatic life. Settling aids may contain residual monomers such as acrylamide that cannot be detected at the level considered to be toxic. Toxicity testing is a proven method of determining toxicity regardless of the chemical composition and whether or not toxic components can be detected by typical analytical methods.

Benzene: Monitoring for Benzene will be required for quarries with operating hot mix asphalt plants. Most hot mix asphalt plants store “cold patch” asphalt used for asphalt repairs. The storage is seasonal, typically from November to April. Site inspections of the industry revealed that “cold patch” asphalt is stored outdoors and is exposed to stormwater. Review of random Material Safety Data Sheets showed residual concentrations of benzene as part of the composition of “cold patch” asphalt. Monitoring for benzene will be performed in accordance

with this permit to measure the effectiveness of the implemented BMPs. If there is an increasing trend, the permittee must re-evaluate and modify the existing BMPs.

Chemical Oxygen Demand (COD): COD is the quantity of oxygen used in biological and non-biological oxidation of materials in water. Quarries typically use heavy equipment such as specialized dump trucks, front-end loaders, hydraulic drills, dredging equipment and other types of equipment. Routine maintenance such as minor repairs, refueling, refilling liquid levels and other types of routine maintenance are all potential sources for COD and may not be detected while sampling for oil and grease or total petroleum hydrocarbons. Application data submitted to the EPA on form 2F indicated presence of COD. Monitoring for COD will demonstrate the effectiveness of housekeeping and maintenance BMPs.

Dissolved Oxygen (DO): Amount of gaseous oxygen (O₂) actually present in water expressed in terms of either its presence in the volume of water (milligrams of O₂ per liter) or its share in saturated water (percentage). Adequate concentrations of dissolved oxygen are necessary for the life of fish and other aquatic organisms especially in TP and TM streams. Adequate DO is also critical in the prevention of offensive odors.

Foam: In accordance with N.J.A.C. 7:14A-12.6, all DSW dischargers are prohibited from discharging foam or causing foaming of the receiving water that forms objectionable deposits on the receiving water; forms floating masses producing a nuisance; produces objectionable color or odor; or interferes with a designated use of the waterbody. Foaming of the receiving waterbody caused by natural conditions shall not be considered a violation of the standard N.J.A.C. 7:14A-12.6.

Oil and Grease: In sand and gravel operations, the material that is removed may or may not be above the water table. Typically, the process includes the use of a dredge for removal of material below the water table. The use of a dredge can introduce oil and grease to the waters in which the dredge is operating. Certain maintenance operations (i.e. truck washing, vehicle maintenance), if handled poorly, can allow for the introduction of oil and grease based products into the environment.

Metals: Monitoring for metals (chromium, copper, lead, and zinc) will be required for quarries with operating hot mix asphalt plants. Hot mix asphalt plants process construction debris and recycled asphalt product (RAP). The manufacturing activities are outdoors. All of these materials and equipment are exposed to stormwater. Metals in trace quantities are also found in heavier petroleum distillates. Chromium is released during combustion of #4 fuel oil, #6 fuel oil or waste/used oil. Independent testing by NJDEP-Enforcement and Compliance Branch showed numerous incidences of elevated levels of metals. These elevated levels of metals are a concern for NJDEP. The total number of samples collected was too small to evaluate the impact of metals. There is little industry characterization data available to reasonably evaluate the impact of metals or to develop any correlation that metals concentrations are proportional to the concentration of TSS. Metals monitoring will be used to collect industry characterization data. There will be no numeric effluent limitation for metals. In lieu of numeric effluent limitations the facility will be required to implement specific BMPs in accordance with the requirements in this permit. Monitoring for metals (chromium, copper,

lead, and zinc) will be performed in accordance with this permit to measure the effectiveness of the implemented BMPs. If there is an increasing trend, the permittee must re-evaluate and modify the existing BMPs.

Methylene Blue Active Substances (MBAS): Monitoring for MBAS will be required for quarries with operating hot mix asphalt plants. Hot mix asphalt plants use an asphalt release agent to reduce the surface tension and prevent asphalt from adhering to smooth metal vehicle beds. The Material Safety Data Sheet reveals that this product is detergent based and contains proprietary surfactants. Surface water containing high foaming can cause destruction of useful bacteria in the environment. Since the asphalt release agent is exposed to stormwater there is reason to believe increased concentrations of surfactants are entering the waters of the State. There will be no numeric effluent limitation for MBAS. In lieu of numeric effluent limitations the facility will be required to implement specific BMPs in accordance with the requirements in this permit. Monitoring for MBAS will be performed in accordance with this permit to measure the effectiveness of the implemented BMPs. If there is an increasing trend, the permittee must re-evaluate and modify the existing BMPs. The Department will substitute an alternative monitoring parameter for MBAS if the facility has stated to the Department in writing that the release agent used does not contain anionic surfactants.

pH: Materials, based on their chemical composition, may have the ability to alter the pH of the water, whether it is in a basin or a surface water body. Altering the pH can adversely affect the environment of a natural water body. Part III of this permit requires all facilities that have the MQGP to test for the parameter of pH. The normal effluent limits for pH is between six (6) and nine (9) standard units. However, the pH limits for areas under the jurisdiction of the Pinelands Commission is anti-degradation of the background pH, which may be as low as 4 (in standard units).

Temperature (°F): All surface water bodies are sensitive to temperature changes, whether they are sudden or gradual changes. No stormwater, process and/or mine dewatering discharges shall degrade the surface water bodies by altering the ambient temperature of the receiving waters. Certain streams, such as TP or TM streams are especially sensitive to temperature change. The temperature selected for these streams was based on a document titled *Habitat Suitability Index Models: Brook Trout* published by US Department of the Interior (1992). There will be an interim temperature limit of 75°F for discharges to TP and TM waters during the first 27 months of the permit. During this time, the permittee will also develop and implement BMPs to meet a target value of 68°F for all mine dewatering and direct process water discharges to surface waters that discharge through existing outfalls. Temperature limits for other streams as noted in Permit Summary Tables of the Fact Sheet are based on existing New Jersey water quality standards and are consistent with other permits issued by the Department.

Permittees will collect 6 samples for temperature monitoring during the first 27 months after the EDP. In addition, all permittees that discharge to TP or TM waters will report the temperature of the discharge in accordance with Part III of this permit and submit an annual report postmarked by February 1 of each calendar year (Summary Report – Temperature Monitoring Attachment I) beginning in 2006. The report will summarize DMR temperature

results, continuous monitoring data for mine dewatering, effectiveness of selected BMPs and additional BMPs implemented to meet the temperature limit of 75°F and the target value of 68°F. A final report will be submitted to the Department postmarked by December 1, 2007.

Total Dissolved Solids (TDS): TDS is another pollutant associated with the mining industry. Some of the material, as a result of crushing or mining operations, becomes dissolved when it comes in contact with stormwater, or ground water. These dissolved particles have the ability to alter the chemistry of the associated water body.

Total Suspended Solids (TSS): Suspended particles are created when stormwater washes over disturbed areas which are typically devoid of soil retaining vegetative cover. Directing stormwater to a basin or a series of basins is the most common way to decrease the amount of TSS before it is discharged to a permitted outfall. Basins allow for suspended material to settle out. A single basin or a series of basins may be employed for the settling process. Another way to decrease the amount of TSS is to apply chemicals to aid in the settling process. The chemical settling aid is applied to the discharge and then that discharge is directed to a basin to allow for settling.

Pineland Requirements

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

Basins

Basin is a collective term used to describe depressions in the ground that use for treatment and /or storage of either process wastewater, ground water, or stormwater.

Residuals

In meetings with the industry, the Bureau of Pretreatment and Residuals and the Bureau of Nonpoint Pollution Control agreed to allow the industry to conduct a study in lieu of residuals monitoring during the initial permit cycle. This agreement was reached prior to the addition of concrete manufacturing plants to this permit. To remain consistent with the requirements of the Concrete Products Manufacturing General Permit, residuals monitoring will be required for operation of the concrete manufacturing plants. Residual applications for concrete manufacturing plants are covered under Part II.H.1(a)-(g). Any person having questions about residuals can contact the Bureau of Pretreatment and Residuals at (609) 633-3823.

Best Management Practices (BMPs)

The Department is authorized under the Federal regulations (40 CFR 122.44) and under NJPDES rules (N.J.A.C. 7:14A-6.2(b)1) to impose Best Management Practices (BMPs) to control or abate the discharge of pollutants in lieu of numeric limitations in NJPDES permits. Numeric limitations will be required in instances where benchmarks are required to insure that the BMPs and the SPPP created are strictly adhered to.

BASIS FOR THE DRAFT PERMIT CONDITIONS

Sampling and analysis of pollutants associated with mining and quarrying operations are incorporated into this permit to evaluate the effectiveness of the SPPP and BMPs associated with this MQGP. The effluent parameters chosen for sampling and analysis in Part III, Specific Requirements, for the mining and quarrying industrial activities are consistent with existing facilities with individual permits. 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 (NJPDES, 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 or surface 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, treatment systems, storage of fuels, operating procedures and prevention of soil erosion. RFAs for existing facilities shall follow a schedule determined by the Department.

Permit Summary Tables

Table I and Table II contain the monitoring requirements for the first 27 months of the permit.

Discharge Type: Direct process wastewater and mine dewatering discharges to surface water of commingled (including stormwater and groundwater), process and wastewater

Table I: Direct and mine dewatering discharges to surface water

PARAMETER all values are mg/l unless otherwise stated	FW2(C1), FW2 (NT)¹	FW1	Pinelands	FW2(C1), FW2 (TP, TM)¹	SE, SC
Flow (MGD)	REPORT	No Discharge	REPORT	REPORT	REPORT
Benzene ^{7,8}	REPORT	No Discharge	REPORT	REPORT	REPORT
Flow (MGD)	REPORT	No Discharge	REPORT	REPORT	REPORT
Chromium, Total Recoverable ^{5,8}	REPORT	No Discharge	REPORT	REPORT	REPORT
Copper, Total Recoverable ^{5,8}	REPORT	No Discharge	REPORT	REPORT	REPORT
Lead, Total Recoverable ^{5,8}	REPORT	No Discharge	REPORT	REPORT	REPORT
Zinc, Total Recoverable ^{5,8}	REPORT	No Discharge	REPORT	REPORT	REPORT
Iron, Total Recoverable ⁴	1	No Discharge	1	1	1
Oil & Grease	REPORT	No Discharge	REPORT	REPORT	REPORT
Oxygen Demand, Chem. (High Level) (COD)	REPORT	No Discharge	REPORT	REPORT	REPORT
Oxygen, Dissolved (DO)	REPORT	No Discharge	REPORT	REPORT	REPORT
pH range (S.U.)	REPORT	No Discharge	REPORT	REPORT	REPORT
Solids, Total Dissolved (TDS)	REPORT	No Discharge	REPORT	REPORT	REPORT
Solids, Total Suspended	REPORT	No Discharge	REPORT	REPORT	REPORT
Solids, Total Suspended (SIC 1459)	No Discharge	No Discharge	No Discharge	No Discharge	No Discharge
Solids, Total Suspended (SIC 1499)	REPORT	No Discharge	REPORT	REPORT	REPORT
Solids, Total Suspended (SIC 1446)	REPORT	No Discharge	REPORT	REPORT	REPORT
Temperature (SC) ⁹		No Discharge			85°F
Temperature (SE) ⁹		No Discharge			80°F
Temperature ⁹	86°F	No Discharge	86°F	75°F	

Discharge Type: Stormwater only – Direct discharge to surface water

Table II: Stormwater only discharge

PARAMETER all values are mg/l unless otherwise stated	FW2(C1), FW2 (NT)¹	FW1	Pinelands	FW2(C1), FW2 (TP, TM)¹	SE, SC
Flow (MGD)	REPORT	No Discharge	REPORT	REPORT	REPORT
Iron, Total Recoverable ⁴	REPORT	No Discharge	REPORT	REPORT	REPORT
Oil & Grease	REPORT	No Discharge	REPORT	REPORT	REPORT
Oxygen Demand, Chem. (High Level) (COD)	REPORT	No Discharge	REPORT	REPORT	REPORT
Oxygen, Dissolved (DO)	REPORT	No Discharge	REPORT	REPORT	
pH range (S.U.)	REPORT	No Discharge	REPORT	REPORT	REPORT
Solids, Total Dissolved (TDS)	REPORT	No Discharge	REPORT	REPORT	REPORT
Solids, Total Suspended	REPORT	No Discharge	REPORT	REPORT	REPORT
Solids, Total Suspended (SIC 1459)	No Discharge	No Discharge	No Discharge	No Discharge	No Discharge
Solids, Total Suspended (SIC 1499)	20	No Discharge	20	20	20
Solids, Total Suspended (SIC 1446)	45	No Discharge	45	45	45
Temperature ⁹	REPORT	No Discharge	REPORT	REPORT	REPORT

Permit Summary Tables

Table III and Table IV contain the monitoring requirements that apply 27 months after the EDP.

Discharge Type: Direct process wastewater and mine dewatering discharges to surface water of commingled (including stormwater and groundwater), process and wastewater

Table III: Direct and mine dewatering discharges to surface water

PARAMETER all values are mg/l unless otherwise stated	FW2(C1), FW2 (NT)¹	FW1	Pinelands	FW2(C1), FW2 (TP, TM)¹	SE, SC
Benzene ^{7,8}	REPORT	No Discharge	REPORT	REPORT	REPORT
Flow (MGD)	REPORT	No Discharge	REPORT	REPORT	REPORT
Chromium, Total Recoverable ^{5,8}	REPORT	No Discharge	REPORT	REPORT	REPORT
Copper, Total Recoverable ^{5,8}	REPORT	No Discharge	REPORT	REPORT	REPORT
Iron, Total Recoverable ⁴	1	No Discharge	1	1	1
Lead, Total Recoverable ^{5,8}	REPORT	No Discharge	REPORT	REPORT	REPORT
Zinc, Total Recoverable ^{5,8}	REPORT	No Discharge	REPORT	REPORT	REPORT
Oil & Grease	15	No Discharge	15	15	15
Oxygen Demand, Chem. (High Level) (COD)	100	No Discharge	100	100	100
Oxygen, Dissolved (DO)	REPORT	No Discharge	REPORT	5 minimum	REPORT
pH range (S.U.)	6.0 – 9.0	No Discharge	3.5 – 5.5	6.0 – 9.0	6.0 – 9.0
Solids, Total Dissolved (TDS)	500	No Discharge	500	500	500
Solids, Total Suspended	40	No Discharge	40	25	50
Solids, Total Suspended (SIC 1459)	No Discharge	No Discharge	No Discharge	No Discharge	No Discharge
Solids, Total Suspended (SIC 1499)	20	No Discharge	20	20	20
Solids, Total Suspended (SIC 1446)	40	No Discharge	40	25	45
Surfactants (mbas) ^{6,8}	REPORT	No Discharge	REPORT	REPORT	REPORT
%Effect Statre 48hr Acute Ceriodaphnia ³	NOAEC ≥ 100	No Discharge	NOAEC ≥ 100	NOAEC ≥ 100	NOAEC ≥ 100
Temperature (SC) ⁹		No Discharge			85°F
Temperature (SE) ⁹		No Discharge			80°F

Temperature ¹⁰	86°F	No Discharge	86°F	75°F	
Industrial Activity	Develop, implement and maintain a site SPPP ² for all classifications				

Discharge Type: Stormwater only – Direct discharge to surface water

Table IV: Stormwater only discharge

PARAMETER all values are mg/l unless otherwise stated	FW2(C1), FW2 (NT)¹	FW1	Pinelands	FW2(C1), FW2 (TP, TM)¹	SE, SC
Benzene ⁷	REPORT	No Discharge	REPORT	REPORT	REPORT
Flow (MGD)	REPORT	No Discharge	REPORT	REPORT	REPORT
Chromium, Total Recoverable ⁵	REPORT	No Discharge	REPORT	REPORT	REPORT
Copper, Total Recoverable ⁵	REPORT	No Discharge	REPORT	REPORT	REPORT
Iron, Total Recoverable ⁴	REPORT	No Discharge	REPORT	REPORT	REPORT
Lead, Total Recoverable ⁵	REPORT	No Discharge	REPORT	REPORT	REPORT
Zinc, Total Recoverable ⁵	REPORT	No Discharge	REPORT	REPORT	REPORT
Oil & Grease	15	No Discharge	15	15	15
Oxygen Demand, Chem. (High Level) (COD)	REPORT	No Discharge	REPORT	REPORT	REPORT
Oxygen, Dissolved (DO)	REPORT	No Discharge	REPORT	REPORT	
pH range (S.U.)	REPORT	No Discharge	REPORT	REPORT	REPORT
Solids, Total Dissolved (TDS)	REPORT	No Discharge	REPORT	REPORT	REPORT
Solids, Total Suspended	REPORT	No Discharge	REPORT	REPORT	REPORT
Solids, Total Suspended (SIC 1459)	No Discharge	No Discharge	No Discharge	No Discharge	No Discharge
Solids, Total Suspended (SIC 1499)	20	No Discharge	20	20	20
Solids, Total Suspended (SIC 1446)	45	No Discharge	45	45	45
Surfactants (mbas) ⁶	REPORT	No Discharge	REPORT	REPORT	REPORT
Temperature	REPORT	No Discharge	REPORT	REPORT	
Industrial Activity	Develop, implement and maintain a site SPPP ² for all classifications				

NOTES

1. NT means non-trout, TP means trout production, TM means trout maintenance.
2. Stormwater Pollution Prevention Plan (SPPP) is derived from Federal (40 CFR 122.44) and State (N.J.A.C. 7:14A-11.2(a)3 rules and will be developed as a non-numeric effluent limit to replace the numeric limits of the prior permit, and to control parameters not listed above. The following outside areas must be addressed in the SPPP, if applicable: (1) vehicle fueling and maintenance areas; (2) waste management/handling areas; (3) ISRA clean-up areas; (4) loading docks; (5) storage areas; and (6) any other areas with "stormwater discharges associated with industrial activity" as defined by N.J.A.C. 7:14A-1.2.
3. Acute Toxicity Test shall be required when settling aids are used.
4. Iron shall be required for discharges from Concrete Products Manufacturing Plants.
5. Pollutant monitoring shall be required for discharges from Hot Mix Asphalt Plants.
6. Surfactant monitoring shall be required for Hot Mix Asphalt Plants using release agents.
7. Benzene monitoring shall be required for Hot Mix Asphalt Plants storing solvent based "cold-patch" at any time during the monitoring period.
8. Pollutant monitoring shall be required for discharges from Hot Mix Asphalt Plants that are commingled with process wastewater discharges from mine dewatering or direct process wastewater discharges.
9. All temperature samples are Grab-3 samples
10. Ongoing evaluation of temperature requirements may result in a lower limit for TP and TM waters

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.