

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF WATER AND WASTE MANAGEMENT  
601 57<sup>th</sup> STREET SE  
CHARLESTON, WV 25304

WEST VIRGINIA/NPDES  
MULTI-SECTOR GENERAL WATER POLLUTION CONTROL PERMIT

FACT SHEET AND RATIONALE

1. NAME AND ADDRESS OF APPLICANT: Any establishment with discharges composed entirely of stormwater associated with industrial activity agreeing to be regulated under the terms of this proposed general permit (except as noted herein).
2. GENERAL WV/NPDES PERMIT NO.: WV0111457
3. COUNTY: Any WV county
4. RECEIVING STREAM: Any WV stream
5. PUBLIC COMMENT PERIOD FROM: January 8, 2009 to February 7, 2009
6. BACKGROUND

The West Virginia Multi-Sector Stormwater General Permit for Industrial Activities is intended to cover stormwater discharges to waters of the State from a wide variety of industrial activities. It is derived from, and based in large part upon the Final National Pollutant Discharge Elimination System Multi-Sector Stormwater General Permit For Industrial Activities as promulgated by the Environmental Protection Agency (EPA) in Federal Register / Vol. 60. No. 189 / Monday, September 29, 2008 / Notices (the "Federal Multi-Sector Permit" or FMSP).

The West Virginia Multi-Sector Stormwater General Permit is proposed to replace the existing Multi-Sector Stormwater General Permit No. WV0111457. Facilities covered under the existing general permit before September 1, 2008, will be required to submit a new registration form to obtain coverage under the new Multi-Sector Stormwater General Permit. Upon receipt, the Division of Water and Waste Management (DWWM) will review the registration application form for completeness. DWWM will then advise the applicant of their coverage under this general permit and advise applicable Sector and Monitoring Requirements. Applications approved on or after September 1, 2008 are covered under this general permit and pending applications will be covered under the general permit upon approval; however, each discharge/facility must meet the public notice and public comment requirements.

7. TYPES OF DISCHARGES COVERED

The Multi-Sector Stormwater General Permit covers stormwater discharges associated with activities from industrial categories that the EPA has determined to contain stormwater discharges consistent with their definition of “stormwater discharges associated with industrial activity,” except those stormwater discharges described in the next section. DWWM has regrouped EPA’s industrial categories into 23 sectors based upon similarities in the nature of the industrial activity, the type of materials handled and material management practices employed. This general permit also covers stormwater discharges associated with industrial activity from those industries which will not, or are not, covered under sectors A through V. Refer to the general permit, Part A, for the type of discharges covered under each sector.

8. TYPES OF DISCHARGES NOT COVERED

The State of West Virginia has decided to regulate stormwater discharges associated with the following industrial activities through individual WV/NPDES Permits. Most of these facilities are subject to effluent guidelines and/or are operating under an individual WV/NPDES permit.

- Cement Manufacturing (40 CFR 411)
- Feedlots (40 CFR 412)
- Fertilizer Manufacturing (40 CFR 418)
- Petroleum Refining (40 CFR 419)
- Phosphate Manufacturing (40 CFR 422)
- Steam Electric (40 CFR 423)
- Coal Mining (40 CFR 434)
- Mineral Mining and Processing (40 CFR 436)
- Ore Mining and Dressing (40 CFR 440)
- Asphalt Emulsion (40 CFR 443)
- Oil and Gas Extraction (SIC Major Group 13)
- Publicly Owned Treatment Works (SIC33)
- Landfills
- Land Application Sites
- Hazardous Waste Treatment, Storage, or Disposal Facilities
- Leather Tanning and Finishing
- Primary Metals
- Discharges Associated with Construction Activities
- Wood Preserving Facilities (SIC2491)

9. MONITORING REQUIREMENTS

The Multi-Sector Stormwater General Permit **only** requires analytical monitoring for discharges from industry sectors or subsectors that demonstrate a potential to discharge pollutants at concentrations of concern. The EPA established “benchmark” concentrations for the pollutant parameters on which monitoring results had been received to determine when such analytical monitoring would be required and decided that concentrations above these benchmarks represent a level of concern. The level of concern is a concentration at which a stormwater discharge could potentially impair or contribute to the impairment of water quality or affect human health from ingestion of water or fish.

The DWWM believes that industries may reduce the level of pollutants in stormwater runoff from their sites through the development and proper implementation of a stormwater pollution prevention plan (SWPPP). The EPA’s benchmarks provide an appropriate level to determine whether a facility’s SWPPP has been successfully implemented. The benchmark concentrations are not effluent limitations and should not be interpreted or construed as such. These values are merely levels which the DWWM is using to determine if a stormwater discharge from any given facility merits further monitoring to insure that the facility has been successful in implementing their SWPPP. As such, these benchmark values represent a target concentration for a facility to achieve through implementation of pollution prevention measures at the facility.

The following table lists the parameter benchmark values as selected by the DWWM. As can be seen here, the EPA’s benchmark concentrations were determined based upon a number of existing standards and other sources to represent a level above which water quality concerns could arise. The DWWM has sought to develop values which can realistically be measured and achieved by industrial facilities. Moreover, stormwater discharges with pollutant concentrations occurring below these levels would not warrant further analytical monitoring due to their minor potential effect on water quality. The DWWM believes that each of these benchmark values represents a reasonable level below which water quality impacts should not occur and they, therefore, represent a useful level to assess whether a SWPPP is controlling pollution in the stormwater discharges.

The DWWM has adopted each of the benchmark values as determined by the EPA and tabulated in the FMSP Rationale with the exception of the benchmark value for Ammonia. DWWM has adopted this value from its Baseline General Permit for Stormwater Discharges in conjunction with the application of its Best Professional Judgment (BPJ).

**Parameter Benchmark Values  
 West Virginia**

Parameter	Benchmark Level	EPA's Source
Biochemical Oxygen Demand (5)	30 mg/l	Secondary Treatment Regulations (40 CFR 133)
Chemical Oxygen Demand	120 mg/l	Factor of 4 times BOD5 concentration - Benchmark
Total Suspended Solids	100 mg/l	Baseline General Permit for Stormwater Discharges from Industrial Activity and Best Professional Judgment
Oil and Grease	15 mg/l	Median concentration of Stormwater Effluent Limitation Guideline (40 CFR Part 419)
Nitrate + Nitrite Nitrogen	0.68 mg/l	Urban Runoff Program (NURP) median concentration
Total Phosphorus	2.0 mg/l	North Carolina stormwater benchmark derived from NC Water Quality Standards
PH	6.0-9.0 s.u.	Baseline General Permit for Stormwater Discharges from Industrial Activity and BPJ
Aluminum, Total (pH 6.5-9)	0.75 mg/l	"EPA Recommended Ambient Water Quality Criteria." Acute Aquatic Life Freshwater
Ammonia	4 mg/l	Baseline General Permit for Stormwater Discharges from Industrial Activity and BPJ
Arsenic, Total (c)	0.16854 mg/l	Minimum Level (ML) based upon highest Method Detection Limit (MDL) times a factor of 3.18
Copper, Total(H)	0.0636 mg/l	"EPA Recommended Ambient Water Quality Criteria." Acute Aquatic Life Freshwater
Chloride	860 mg/l	"EPA Recommended Ambient Water Quality Criteria." Acute Aquatic Life Freshwater
Iron, Total	1.0 mg/l	"EPA Recommended Ambient Water Quality Criteria." Chronic Aquatic Life Freshwater
Lead, Total (H)	0.0816 mg/l	"EPA Recommended Ambient Water Quality Criteria." Acute Aquatic Life Freshwater
Zinc, Total (H)	0.117 mg/l	"EPA Recommended Ambient Water Quality Criteria." Acute Aquatic Life Freshwater

Notes:

(c) Carcinogen  
 (H) hardness dependent

Assumptions:

Receiving water temperature - 20° C  
 Receiving water pH - 7.8  
 Receiving water hardness CaCO<sub>3</sub> - 100 mg/l  
 Receiving water salinity - 20 g/kg  
 Acute to Chronic Ratio (ACR) - 10

10. CHANGES FROM 2004 PERMIT

The following changes to monitoring requirements have been made to these sectors.

- Sector C-3 – Add monitoring for Surfactants
- Sector T has been changed to extraction of shale for use in NONMANUFACTURING applications. The monitoring requirements are as follows – Total Suspended Solids and Total Iron.
- Sector U is a new sector that has been added which is the storage of less than 50,000 tons of salt. The monitoring requirements are as follows – Total Suspended Solids, Chlorides, Cyanide and Total Iron. In addition, the following special conditions apply to Sector U: Salt piles must be covered at all times by an impervious cover unless product is being added or removed. All ponds and diversion ditches must have an impervious liner of  $10^{-7}$ . All salt piles must be entirely stored on an impervious pad.
- Sector V is a new sector that has been added which is the Transloading of Ammonia Nitrate. The monitoring requirements are as follows – Total Suspended Solids, Ammonia Nitrogen, Nitrate + Nitrate Nitrogen, Oil and Grease and pH.
- Sector W replaces Sector T in the 2004 Multi-Sector Stormwater General Permit.

The changes and / or additions to the benchmarks for the various Sectors were made based on observations of the DWWM. These changes reflect the Division's position that these additional parameters are necessary to protect waters of the State from potential violations of Water Quality Standards.

This agency is concerned about the use of cherry woods in hardwood dimensions and flooring mills; special products sawmills, millwork, veneer, plywood and structural wood, wood containers, wood buildings and mobile homes, reconstituted wood products general sawmills and planing mills facilities and wood products. The concern is about the pollutant arsenic which may be present in these types of facilities and may be added to a future permit.

The sampling waiver provided in the current Multi-Sector Stormwater General Permit will still be made available under the terms of the reissued Multi -Sector Stormwater General Permit. However, the permittee will be required to provide an additional set of sample results in order to maintain this waiver in the reissued Multi -Sector Stormwater General Permit. This is being required to reflect any changes or modifications of production activities at the production site.

The new permit now allows for a waiver for natural background pollutants as follows:

### **Addressing Natural Background Pollutant Levels**

DWWM is including an option for permittees to justify benchmark exceedences based on local natural background concentrations. DWWM recognizes that there may be circumstances where benchmark values reasonably may not be achieved. For example, high natural background levels of iron in soils or groundwater could cause exceedences of a benchmark value. DWWM notes that this provision for establishing natural background levels is not available for demonstrating compliance with effluent limitation guidelines or for monitoring for pollutants causing a water body impairment.

Section B.5. of the Multi-Sector Stormwater General Permit allows for an exception from evaluation of control measures and further benchmark monitoring when natural background levels are solely responsible for the exceedence of a benchmark value. This can be determined if (1) natural background pollutant concentrations are greater than the corresponding benchmark value, and (2) there is *no* net facility contribution of the pollutant (i.e., average concentration detected in runoff from all facility outfalls required to be monitored under the MSGP for two separate events minus the average natural concentration of the parameter for two separate events does not exceed zero). For example, if a facility determines that the natural background concentration of TSS from an undisturbed watershed is 200 mg/L, they can claim an exemption from further benchmark monitoring if the average of their two benchmark samples is equal to or less than 200 mg/L. In this example, if the average of their two benchmark samples is greater than 200 mg/L, the facility could not claim this exception.

This natural background exception could apply to parameters such as metals derived from natural mineral deposits and nutrients attributable to background soil, vegetation, or wildlife sources. If background concentrations are not responsible for the benchmark exceedence, the facility will need to review its control measures and take further action where necessary as required in Section B.6. of the Multi-Sector Stormwater General Permit. Facilities must use the same sample collection, preservation, and analysis methods for natural background monitoring as required for benchmark monitoring.

After monitoring for two separate events and adequately determining that exceedences are the result of pollutants present in the natural background, permittees must notify DWWM of these findings to claim the natural background exception. The exception allows the permittee to avoid the requirement for further evaluation of the effectiveness of control measures and to discontinue further benchmark sampling after the first year of permit coverage. To do this, the permittee must document the basis for concluding that benchmark exceedences are attributable solely to natural background pollutant levels. This explanation must include any data previously collected by the facility staff or others that describe the levels of natural background pollutants in the facility's receiving waters. The permittee must notify DWWM that it is claiming the exception for natural background pollutant levels when submitting its monitoring data and provide a summary of the natural background conditions that justify the exception. The full

justification for this exception must be kept on-site with the facility's additional documentation and made available to DWWM upon request.

The following information, describing the rationale for claiming the natural background exception, must be documented and kept onsite with the facility's SWPPP:

- Map showing the reference site location in relation to facility along with available land cover information
- Reference site and test site elevation
- Available geology and soil information for reference and test sites
- Photographs showing site vegetation
- Site reconnaissance survey data regarding presence of roads, outfalls, or other human-made structures
- Records from relevant state or federal agencies indicating no known mining, forestry, or other human activities upstream of the proposed reference site
- The background concentration of a pollutant in runoff from a non-human impacted reference site in the same watershed should be determined by evaluation of ambient monitoring data or by using information from a peer-reviewed publication or a local, state, or federal government publication specific to runoff or stormwater in the immediate region. Studies that are in other geographic areas, or are based on clearly different topographies or soils, are not eligible. When no data are available, and there are no known sources of the pollutant, the background concentration should be assumed to be zero.

In cases where historic monitoring data from a site are used for generating a natural background value, and the site is no longer accessible or able to meet reference site acceptability criteria, then there must be documentation (e.g., historic land use maps) that the site did meet reference site criteria (indicating absence of human activity) during the time data collection occurred.

DWWM may review a permittee's determination that a benchmark exceedence is based solely on natural background concentrations, and disallow the exception if it finds the documentation inadequate.

## 11. ANTIDegradation Requirements

The Multi -Sector Stormwater General Permit is based on Best Management Practices and has no discharge permit limits. Currently there are approximately 900 facilities registered under the 2004 Multi -Sector Stormwater General Permit. These facilities are existing discharges and as so are not subject to antidegradation requirements. Any new facility wishing to be covered under the Multi -Sector Stormwater General Permit is now required to comply with antidegradation requirements. In order to comply with these requirements the DWWM requires that the registration applications of these new facilities are sent to public notice. It also requires that BMPs are implemented and in place prior to any stormwater discharge. DWWM requires

that SWPPPs and ground water protection plans be submitted with the new applications and reviewed prior to the issuance of individual registrations under the permit.

The State of West Virginia, Department of Environmental Protection, Division of Water and Waste Management, has made a tentative decision for a State NPDES Permit as listed on this Fact Sheet. In order to provide public participation on the proposed issuance of the required permit, the following information is being supplied in accordance with Title 47, Series 10, Section 11.3.e.2 and 3, of the West Virginia Legislative Rules.

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing. A request for a public hearing shall be made in writing and addressed to:

**Director, Division of Water and Waste Management**  
**Department of Environmental Protection**  
**601 57<sup>th</sup> Street SE**  
**Charleston, WV 25304**  
**Attention: Carrie Taylor**  
**Phone: (304) 926-0499 ext. 1132**  
**Fax: (304) 926-0446**  
**E-mail: [Carrie.L.Taylor@wv.gov](mailto:Carrie.L.Taylor@wv.gov)**

The request shall state the nature of the issues proposed to be raised in the hearing and must be received within the comment period. The Director shall hold a public hearing whenever he or she finds, on the basis of requests, a significant degree of public interest on issues relevant to the draft permit. Any person may submit oral or written statements and data concerning the draft permit; however, reasonable limits may be set upon the time allowed for oral statements, and the submission of statements in writing may be required. A tape recording or written transcript of the hearing shall be made available to the public upon request.

If information received during the public comment period appears to raise substantial new questions, the Director may reopen the public comment period.

All applicable information concerning any permit application and the tentative decisions is on file and may be inspected by appointment, or copies obtained at a nominal cost, at the offices of the Division of Water and Waste Management, 601 57<sup>th</sup> Street SE, Charleston, West Virginia 25304, Monday through Friday (except State holidays) between 8:00 a.m. to 4:00 p.m.

Hearing impaired individuals having access to a Telecommunication Device for the Deaf (TDD) may contact our agency by calling (304) 926-0489. Calls must be made between 8 a.m. to 3:30 p.m. Monday through Friday.

Requests for additional information should be directed to Carrie Taylor at (304) 926-0499 ext. 1132.