STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER AND WASTE MANAGEMENT 601 57th 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 TO

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 and 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 Permit is proposed to replace the existing Stormwater Multi-Sector Permit No. WV0111457. All facilities covered under the existing general permit before September 1, 2013 will be required to submit a new registration form to obtain coverage under the new Multi-Sector Stormwater Permit. Upon receipt of the registration application form, the Division of Water and Waste Management (DWWM) will review it for completeness. DWWM then will advise applicant of its coverage under this general permit and advise applicable Sector and Monitoring Requirements. Proposed stormwater discharges or discharges without previous general permit coverage or applications are also eligible for coverage under the general permit;, - however, each discharge/facility must meet the public notice and public comment requirements.

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7. TYPES OF DISCHARGES COVERED

This general permit covers stormwater discharges associated with industrial activity from industrial categories which the EPA has determined to contain stormwater discharges consistent with the EPA's definition of "stormwater discharges associated with industrial activity," except those stormwater discharges described in the next section. These industrial categories have been regrouped into the 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 W. 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 associated with the following industrial activity through individual WV/NPDES Permits. Most of these facilities are subject to effluent guidelines and/or operating under 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

Primary Metals

Discharges Associated with Construction Activities.

Wood Preserving Facilities (SIC2491)

Hazardous Waste Treatment, Storage or Disposal Facilities

Leather Tanning or Finishing (SIC 3111)

Water Transportation Facilities

Ship and Boat Building or Repairing (SIC 3731)

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9. MONITORING REQUIREMENTS

This general permit requires analytical monitoring for discharges from certain classes of industrial facilities. 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. The general permit requires mainly analytical monitoring for the industry sectors or subsectors that demonstrated a potential to discharge pollutants at concentrations of concern. The general permit also requires effluent limitation monitoring for Sector H. Stormwater Discharges Associated with Industrial Activity from Vehicle Maintenance Areas, Equipment Cleaning Areas, or Deicing Areas Located at Air Transportation Facilities. This monitoring stems from a new effluent limitation established in May 2012, after the issuance of the FMSP. To determine when such analytical monitoring would be required, the EPA established "benchmark" concentrations for the pollutant parameters on which monitoring results had been received. The "benchmarks" are the pollutant concentrations above which the EPA determined represents a level of concern. The level of concern is a concentration at which a stormwater discharge could potentially impair, or contribute to impairing water quality or affect human health from ingestion of water or fish. The benchmarks are also viewed by the DWWM as a level, that if below, a facility represents little potential for water quality concern. As such, the benchmarks also provide an appropriate level to determine whether a facility's stormwater pollution prevention measures are 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 a stormwater pollution prevention plan. As such, these levels 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.

Parameter Benchmark Values West Virginia

Parameter Name	Benchmark Level	Source(*)
Biochemical Oxygen Demand (5)	30 mg/l	4
Chemical Oxygen Demand	120 mg/l	5
Total Suspended Solids	100 mg/l	14
Oil and Grease	15 mg/l	8
Nitrate+Nitrite Nitrogen	0.68 mg/l	7

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Total Phosphorus	2.0 mg/l	6
PH	6.0-9.0 s.u.	14
Acrylonitrile (c)	7.55 mg/l	2
Aluminum, Total (pH 6.5-9)	0.75 mg/l	1
Ammonia	4 mg/l	14
Antimony, Total	0.636 mg/l	9
Arsenic, Total (c)	0.16854 mg/l	9
Benzene	0.01 mg/l	10
Beryllium, Total (c)	0.13 mg/l	2
Butylbenzyl Phthalate	3 mg/l	3
Cadmium, Total (H)	0.0159 mg/l	9
Copper, Total(H)	0.0636 mg/l	1
Chloride	860 mg/l	1
Dimethyl Phthalate	1.0 mg/l	11
Ethylbenzene	0.1 mg/l	14
Flouranthene	0.042 mg/l	3
Fluoride	1.8 mg/l	6
Iron, Total	1.0 mg/l	12
Lead, Total (H)	0.0816 mg/l	1
Manganese	0.0636 mg/l	13
Mercury, Total	0.0024 mg/l	1
Nickel, Total (H)	1.417 mg/l	1
PCB-1016(c)	0.000127 mg/l	9
PCB-1221(c)	0.10 mg/l	10
PCB-1232(c)	0.000318 mg/l	9
PCB-1242(c)	0.00020 mg/l	10
PCB-1248(c)	0.002544 mg/l	9
PCB-1254(c)	0.10 mg/l	10

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PCB-1260(c)	0.000477 mg/l	9
Phenols, Total	1.0 mg/l	11
Pyrene (PAH.c)	0.01 mg/l	10
Selenium, Total	0.2385 mg/l	9
Silver, Total (H)	0.0318 mg/l	9
Toluene	0.10 mg/l	14
Trichloroethylene (c)	0.0027 mg/l	3
Zinc, Total (H)	0.117 mg/l	1

(*) Sources

- 1. "EPA Recommended Ambient Water Quality Criteria." Acute Aquatic Life Freshwater
- 2. "EPA Recommended Ambient Water Quality Criteria." LOEL Acute Freshwater
- 3. "EPA Recommended Ambient Water Quality Criteria." Human Health Criteria for Consumption of Water and Organisms
- 4. Secondary Treatment Regulations (40 CFR 133)
- 5. Factor of 4 times BOD5 concentration Benchmark
- 6. North Carolina stormwater benchmark derived from NC Water Quality Standards
- 7. National Urban Runoff Program (NURP) median concentration
- 8. Median concentration of Stormwater Effluent Limitation Guideline (40 CFR Part 419)
- 9. Minimum Level (ML) based upon highest Method Detection Limit (MDL) times a factor of 3.18
- 10. Laboratory derived Minimum Level (ML)
- 11. Discharge limitations and compliance data
- 12. "EPA Recommended Ambient Water Quality Criteria." Chronic Aquatic Life Freshwater
- 13. Colorado Chronic Aquatic Life Freshwater Water Quality Criteria
- 14. Baseline General Permit for Stormwater Discharges from Industrial Activity and Best Professional Judgment

Notes:

- (c) carcinogen
- (H) hardness dependent
- (PAH) Polynuclear Aromatic Hydrocarbon

Assumptions:

Receiving water temperature - 20° C

Receiving water pH - 7.8

Receiving water hardness CaCO3 - 100 mg/l

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Receiving water salinity - 20 g/kg Acute to Chronic Ratio (ACR) - 10

As can be seen here, benchmark concentrations were determined based upon a number of existing standards or 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 pollution prevention plan 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 under **Table 5**, <u>Parameter Benchmark Values</u>, with the exception of those benchmark values for Ammonia, Ethyl benzene, and Toluene. Generally, the DWWM has adopted values for these three (3) parameters from its Baseline General Permit for Stormwater Discharges in conjunction with the application of its Best Professional Judgement (BPJ).

10. CHANGES FROM 2009 PERMIT

The following change to monitoring requirements has been made to this sector.

Sector H-1B – Add effluent limits of 14.7 mg/l for Ammonia as Nitrogen for existing airports with over 1,000 jet departures yearly if urea containing deicers are used, - in order to comply with the effluent limit of no discharge of urea from airfield pavement also applies, in addition to a requirement for capturing 60% of airplane deicing fluid from the airplane deicing operations, and meeting an effluent limit of 271 mg/l daily maximum and 154 mg/l weekly average for COD. The parameter must be sampled and reported once a year.

The addition to the sampling for sector H-1 was based on the requirements of the recently issued effluent guidelines for airport deicing.

11. ANTIDEGRADATION REQUIREMENTS

The stormwater industrial multi sector permit is Best Management Practices based and has no discharge permit limits. The only exception is some activities in certain sectors have effluent limitation guidelines. These sectors are sector C-1B phosphate fertilizer manufacturing, D-2B Asphalt Paving and Roofing Materials Manufacturing and H-1 Air Transportation

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Facilities for airfield pavement deicing and airplane deicing (for new sources only). Currently there are approximately 1,000 facilities registered under the 2009 Stormwater Industrial Multi Sector 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 new multi sector general permit are now required to comply with antidegradation requirements. In order to comply with these requirements the Division of Water and Waste Management requires that these new facilities are sent to public notice. It also requires that best management practices are implemented and in place prior to any stormwater discharge. This office requires that stormwater pollution prevention plans and ground water protection plans be submitted with the new applications and reviewed prior to the issuance of individual registrations under the permit.

12. Chesapeake Bay TMDL and West Virginia Watershed Improvement Plan (WIP).

In the state of West Virginia the Counties of Jefferson, Berkeley, Morgan, Hampshire, Mineral, Grant, Hardy and Pendleton drain to the Chesapeake Bay and must address this issue. The existing facilities covered under this General Permit are not expected to have a reduction in loadings affecting the TMDL. However, significant growth in facilities covered under this general permit is not expected and all new industrial stormwater loadings will be included in the State's 2015 urban stormwater loading assessment. This assessment will evaluate the success or failure of the WIP strategy to not increase delivered loading from Potomac watershed urban stormwater sources beyond 2010NA levels. The proper implantation of required SWPPP's and GPP's by facilities renders stormwater discharges of quality similar to urban stormwater, hence the consideration of these discharges as urban stormwater discharges for WIP compliance purposes.

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 57th Street SE Charleston, WV 25304 Attention: Sharon Mullins

Phone: (304) 926-0499 ext. 1132

Fax: (304) 926-0446

E-mail: Sharon.A.Mullins@wv.gov

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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 57th 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 Sharon Mullins at (304) 926-0499 ext. 1132.