FACT SHEET

VERMONT MULTI-SECTOR GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOICATED WITH INDUSTRIAL ACTIVITY (2011) MSGP 3-9003 NPDES NUMBER VTR05001

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Reference Sites: This document references Vermont statutes, Department rules and regulations, the Federal Clean Water Act, and Federal rules. See the specific web sites below for further information.

- The text of Vermont statutes can be found at: http://www.leg.state.vt.us/statutesMain.cfm
- The text of Department rules can be found at: http://www.anr.state.vt.us/dec/ww/Rules/WPC/chap1312.pdf
- The text of the Clean Water Act can be found at: http://www.epa.gov/npdes/pubs/cwatxt.txt
- The text of Title 40, Part 122 of the Federal rules can be found at: http://www.access.gpo.gov/nara/cfr/waisidx_08/40cfr122_08.html
- Additional information concerning the regulation of stormwater in Vermont may be found at: <u>http://www.vtwaterquality.org/stormwater.htm</u>

I. Summary

The Department of Environmental Conservation (Department) is providing this Notice of the issuance of General Permit 3-9003 for Stormwater Discharges Associated with Industrial Activity. This general permit is issued pursuant to the Department's federally-delegated National Pollutant Discharge and Elimination System (NPDES) program. This general permit replaces the Multi-Sector General Permit (MSGP) 3-9003 issued on August 18, 2006. All permittees with Authorizations to Discharge under this previously issued MSGP and those permittees who submitted Conditional Exclusions for No Exposure (NOX) must reapply to discharge under this new permit. This general permit describes permit coverage and limitations, definitions, requirements, procedures, and standard conditions.

II. Comment Period

The public comment period on this draft general permitwas from May 4, 2011 through June 3, 2011. All comments were considered by the Department in issuing this general permit. The Department reviewed the comments and made appropriate changes to the general permit. The comments received and the Department's responses are included in a separate "Response to Comments" document.

III. Public Meeting Schedule

The Department scheduled a public meeting regarding the draft general permit at10:00am on June 2, 2011 at Stanley Hall, Rm 107 at the State Office Complex in Waterbury, VT. At the meeting, Department staff were available to answer questions concerning the general permit and changes from the MSGP 2006.

IV. Contact Information

A copy of the proposed general permit is available on-line at <u>http://www.vtwaterquality.org/stormwater/htm/sw_msgp.htm</u>. For additional information concerning the permit contact:

VT Water Quality Division MSGP Program Coordinator 103 S Main Street – Building 10 North Waterbury, VT 05676

Or electronically to <u>christy.witters@state.vt.us</u> Or call: 802-241-4582.

V. Background

The Clean Water Act ("CWA") establishes a comprehensive program "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). The CWA "also seeks to attain 'water quality which provides for the protection and propagation of fish, shellfish and wildlife." <u>P.U.D. No. 1 of Jefferson City v. Washington Dep't of Ecology</u>, 511 U.S. 700, 704 (1994) (quoting 33 U.S.C. § 1251(a)(2)). To achieve these goals, the CWA requires U.S. Environmental Protection Agency (EPA) to authorize discharges through issuance of National Pollution Discharge Elimination System ("NPDES") permits.

Section 405 of the Water Quality Act of 1987 (WQA) added section 402(p) of the CWA, which directed the EPA to develop a phased approach to regulate stormwater discharges under the NPDES program. EPA published a final regulation on the first phase of this program on November 16, 1990, establishing permit application requirements for "stormwater discharges associated with industrial activity". See 55 FR 47990. EPA defined the term "stormwater discharge associated with industrial activity" in a comprehensive manner to cover a wide variety of facilities. See 40 CFR 122.26(b)(14). EPA notes that the issuance of this permit, including the requirements to submit information in the Notice of Intent (NOI) to be covered, is based, in addition, on the Agency's authority under section 308(a) of the CWA. See e.g., <u>NRDC v. EPA</u>, 822 F.2d 104, 119-120 (DC Cir. 1987) (finding EPA's NPDES permit application regulations at 40 CFR 122.21(g) can seek information on what "could" be discharged.)

The Vermont Department of Environmental Conservation is the EPA delegated authority for issuance of NPDES permits in the state of Vermont. The VTDEC is issuing the Multi-Sector General Permit (MSGP) under this statutory and regulatory authority.

This permit is being issued to replace the MSGP 2006, which will expire on August 18, 2011. Operators choosing to be covered by this new permit must submit a complete and accurate Notice of Intent (NOI) to be covered and certify in the NOI that they meet the requisite eligibility requirements, described in Part 1 of the permit, including the requirement to select, design, and install control measures to comply with the technology- and water quality-based effluent limits in Part 2 and to develop a SWPPP, pursuant to Part 5. Once covered under this permit, a permittee is required to take corrective action if it determines through inspection, evaluation, or monitoring that the control measures chosen to meet the limits are not adequately reducing pollutants in the discharge.

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby, unless, as a result of the remand, the permit would not meet the minimum legal requirements for NPDES permits under the CWA or its implementing regulations.

VI. Structure of This Permit

This permit is divided into eight parts: general requirements that apply to all permittees (i.e., permit coverage, control measures and effluent limits, corrective actions, inspections, SWPPP preparation, monitoring, and reporting and recordkeeping requirements (Parts 1 - 7)), and industry sector-specific conditions (Part 8). Additionally, the permit includes six appendices with additional conditions and guidance for permittees.

VII. Summary of Major Changes from the MSGP 2006

A. Distinction Between Effluent Limits and SWPPP Requirements

The permit has been reorganized to more clearly distinguish the effluent limitations (or effluent limits) from the documentation requirements relating to the SWPPP. Effluent limits (in Part 2 of the MSGP) are narrative and quantitative control requirements to which all permittees are subject, while the SWPPP (in Part 5 of the MSGP) is a document that must be prepared by facility operators to describe the site and the pollutants potentially discharged in stormwater and to document the control measures selected, designed, installed, and implemented to meet the effluent limit. In the MSGP 2006, many of the effluent limits and SWPPP requirements were combined in one section although the limits and SWPPP requirements were intended to be two distinct sets of permit conditions. That organization led to confusion about the distinction between substantive control requirements and planning and documentation requirements. The new permit now clearly delineates effluent limits and SWPPP requirements.

Additionally, consistent with EPA's 2008 MSGP, the Agency extracted SWPPP planning and development conditions from the documentation required to demonstrate compliance with permit requirements and SWPPP procedures.

Finally, the effluent limits themselves were reorganized to more clearly distinguish those that are technology-based from those that are water quality-based.

B. Water Quality-Based Effluent Limits

Consistent with EPA's 2008 MSGP, the Agency revised the permit's approach to requiring water quality-based effluent limits (WQBELs) to better ensure that discharges are controlled as necessary to meet water quality standards. This permit contains new, specific WQBEL requirements applicable to impaired waters and State antidegradation policies. The Secretary retains authority to assess each operator's discharge to determine if more stringent requirements are necessary to achieve water quality standards, including the option of requiring an operator to obtain coverage under an individual permit. The following is a more specific breakdown of the permit's new WQBEL requirements:

• <u>Discharges to Impaired Waters</u> – The permit contains requirements for new and existing discharges to impaired waters with or without EPA approved or established TMDLs. New dischargers are only eligible for discharge authorization if they receive an affirmative determination from the Secretary that their discharges will not contribute to the existing impairment. They must demonstrate (and document) that there is either no exposure of stormwater to the pollutant for which the water is impaired, or the impairment pollutant is not present at the facility, or that the discharge is not expected to cause or contribute to a water quality standards exceedance. In the latter case, the operator must provide data to the Secretary showing that any discharge of the pollutant will meet in-stream water quality criteria at the point of discharge or that there are sufficient remaining wasteload allocations (WLAs) in a TMDL to allow the discharge, and that the existing dischargers to the waterbody are subject to compliance schedules to

bring them into attainment of the water quality standards consistent with 40 CFR 122.4(i) requirements.

For existing discharges to impaired waters with EPA approved or established TMDLs, the Secretary will determine if more stringent requirements are necessary to ensure that the permittee is discharging consistent with the TMDL and applicable WLA. If the water is impaired but there is no completed TMDL, the discharger is required to control its discharge as necessary to meet applicable water quality standards and to routinely conduct monitoring for the pollutants for which the waterbody is impaired.

<u>Antidegradation Requirements</u> – The Agency has clarified its expectation of operators to meet state Tier 2 antidegradation requirements. For a new discharge or existing unpermitted discharge seeking coverage under this permit, the Secretary expects, in the absence of information demonstrating otherwise, that if a discharge complies with the stormwater control requirements of this permit it will not lower the water quality of the receiving water and will meet the requirements of Vermont's Anti-Degradation Policy (Vermont Water Quality Standards Section 1-03). The Secretary may require that an applicant submit additional information regarding the potential impact of a proposed discharge to a receiving water prior to granting coverage under this permit. New discharges to waters designated as Tier 3 (outstanding resources waters) so classified as a result of their water quality or habitat are not eligible for coverage under this permit. Operators must submit an application for an individual permit for discharges to these ORWs.

C. Protection of Endangered Species

EPA modified their MSGP 2008 as a result of EPA's consultation with the FWS and NMFS ("the Services") pursuant to section 7(a)(2) of the Endangered Species Act (ESA). Modifications were made to the directions provided to operators in Appendix E regarding steps that must be followed to properly certify eligibility under Part 1.2.4.5 (Endangered and Threatened Species and Critical Habitat Protection) and more specifically to certify eligibility under Criterion E. The Agency has made a similar change in the draft permit. Criterion E applies where the operator has determined that stormwater discharges associated with industrial activity and allowable non-stormwater discharges are not likely to adversely affect any federally-listed species or designated critical habitat. Appendix E has been revised to clarify the types of information that must accompany the NOI to properly support the Criterion E certification.

In addition, certain benchmarks have been revised to provide greater protection to listed species. The ammonia benchmark was revised from 19 mg/L to 2.14 mg/L to provide a better indicator of the adverse impact to endangered mussel species. EPA selected this benchmark based on a level that is considered protective of mussel species in waters up to pH 8; it will also be protective of other species in waters with a pH up to 8.5 and the Agency has similarly adopted this change in the draft permit.

Also, EPA adjusted the benchmarks for six hardness-dependent metals (i.e., silver, cadmium, lead, nickel, copper, and zinc) so that the benchmark concentrations reflect site-specific hardness levels. This change affects 12 sectors. This adjustment was made because the Services expressed concern that allowing operators to use a benchmark based on an assumed hardness value of 100 mg/L might not be adequately protective of endangered species in receiving waters where the hardness was below 100 mg/L. For operators to determine the

applicable benchmark values, they must first determine the hardness value of the receiving water. The benchmark concentration is then determined by comparing the table of hardness ranges (see Appendix J) to the actual, measured value for hardness in the receiving water. EPA has identified three possible methods for determining hardness, including individual grab sampling, grab sampling by a group of operators that discharge to the same receiving water, or using third-party data, such as information from government monitoring stations in the receiving water. The Agency has similarly adopted these changes in the draft permit.

D. Annual Report

Consistent with EPA's 2008 MSGP, the final permit requires all permittees to submit an annual report to the Agency that contains the results of the required comprehensive site inspection and a discussion of corrective actions required and/or taken at any time since the previous comprehensive site inspection or, for the first comprehensive inspection required under this permit, since permit authorization. These annual reports must be submitted (i.e., postmarked) to the Agency within 45 days after conducting the comprehensive site inspection.

The Agency is requiring submission of an annual report to gather information from permittees to identify potential water quality concerns and to assess compliance with permit provisions. The MSGP 2006 did not include a requirement to submit results of the annual comprehensive site inspections. Instead, it required all permittees to conduct benchmark monitoring for at least TSS and to submit the monitoring data to the Agency. Consistent with EPA, the Secretary believes that some form of regular reporting is necessary to assess compliance with the effluent limitations. The EPA determined that the results of the comprehensive annual inspection will provide a better indication of permit compliance and potential water quality concerns than would 4 sets of quarterly monitoring results for a limited number of benchmark parameters (in some cases, TSS only). While quarterly monitoring remains a requirement for most facilities, the comprehensive site inspection report provides a mechanism for assessing both the adequacy of a permittees' selected control measures and how well they are being implemented to meet the effluent limitations in the permit.

E. Corrective Actions

This new MSGP strengthens the corrective actions required, including establishing two tiers of actions based on the condition identified. The provisions in Part 3 specify the types of conditions at the site that trigger corrective action requirements, what must be done to eliminate such conditions or conduct further inquiries into their cause, and the deadlines for completing corrective action.

F. Monitoring

A number of significant changes were made to the monitoring provisions as compared to the MSGP 2006. Several of these changes are listed below.

• Inactive and unstaffed sites may exercise a waiver for benchmark monitoring and quarterly visual assessments as long as there are no industrial materials or activities exposed to stormwater at the sites. Operators of inactive and unstaffed mining sites may exercise this waiver without demonstrating their industrial materials or activities are not exposed to stormwater, but they are subject to alternate eligibility requirements concerning endangered species protection and the protection of water quality standards.

- Benchmark monitoring: At any time prior to completion of the first 4 quarters of monitoring the permittee determines that it is mathematically certain that his/her average after 4 quarters will exceed the benchmark (e.g., the sum of results to date exceeds 4 times the benchmark), the permittee must review its control measures and perform any required corrective action immediately (or document why no corrective action is required), without waiting for the full 4 quarters of monitoring data.
- A permittee who discharges a pollutant of concern to an impaired waterbody must monitor once-per-year for that pollutant. Monitoring may be waived after one year if the sample does not detect the pollutant and the permittee documents that the pollutant is not exposed to stormwater at the site. If a TMDL has been completed for the waterbody to which the permittee discharges, the Secretary will determine what monitoring is required and notify the discharger of the applicable pollutants and sampling frequencies.
- The application of the effluent limits affecting stormwater discharges from coal storage piles has been modified from prior permits so that only steam electric generating facilities are regulated, as intended by the 40 CFR Part 423 Federal effluent limitations guideline.

G. Industry Sector-specific Requirements

The following changes were made to Part 8 of the MSGP, which describes requirements specific to particular industry sectors:

- Clarified that the sector-specific requirements apply to both the primary industrial activity and any co-located industrial activities at the facility.
- Clarified that the sector-specific requirements are in addition to any requirements specified elsewhere in the permit.
- Deleted (for most sectors) the narrative section describing industrial activities covered by that sector. This narrative section was included in the MSGP 2006, however the activities covered by the permit, including SIC Code or Activity Code, are already listed in Appendix D. The section was deleted to avoid any confusion with the Appendix D list of activities.
- Deleted or moved technology-based requirements that broadly apply to all sectors and are better described in the Part 2.1 effluent limits.
- Renamed the "SWPPP requirements" subpart to be "Additional Requirements" to highlight that these requirements are in addition to those included elsewhere in the permit (e.g., in Part 5).
- Clarified some requirements when an activity needs to be addressed in the SWPPP.
- Similar to Parts 2, 4, and 5 of the permit, separated technology-based effluent limits, inspection requirements, and SWPPP documentation requirements into separate subsections of Part 8 of the permit, as appropriate, for each sector with any additional requirements.
- Consistent with EPA's 2008 MSGP, the TSS benchmark requirements have been removed from some sectors.
- EPA and the Agency adjusted the benchmarks for six hardness-dependent metals (i.e., cadmium, copper, lead, nickel, silver, and zinc) in order to further ensure compliance with water quality standards and provide additional protection for endangered species and their critical habitat. This change affects all or a portion of 12 sectors. See Appendix F.

- The MSGP 2006 included tables corresponding to specific sectors that, where applicable, consolidated both benchmark and effluent limitation guideline monitoring requirements. To minimize confusion between these two types of monitoring, which have different requirements and serve different functions in the permit, this permit separated benchmarks and effluent limitation guidelines into two tables. This change affects Sectors A, C, D, E, J, K, and L.
- Section 8 of the draft permit was modified in numerous places to clarify documentation requirements specific to any additional Section 8 requirements.
- To streamline the Sector-based requirements those conditions which are duplicative of the Part 2.1 technology-based effluent limits have been eliminated. The following is a list of requirements that were deleted or significantly modified in the "additional requirements" part of the proposed sector-specific conditions:
 - Sector C: C.4.1 (drainage area site map), C.4.2 (potential pollutant sources), and C.4.3 (good housekeeping measures);
 - Sector D: D.4.1 (inspections);
 - Sector E: E.3.3 (inspections);
 - Sector G: G.5.6.2 (sediment and erosion control) and G.5.6.3 (management of runoff);
 - Sector I: I.3.3 (inspections) and I.3.5 (contact with wastewater pollutants at exploration and production facilities);
 - Sector L: L.5.3 (good housekeeping measures) and L.5.9 (comprehensive site compliance evaluations);
 - Sector N: N.4.2.7 (spill prevention and response procedures), N.4.2.8 (inspections), and N.4.3.4;
 - Sector O: O.4.2.14 (vehicle maintenance activities) and O.4.2.15 (material storage areas);
 - Sector Q: Q.4.3.7 (general yard area) and Q.4.7 (comprehensive site compliance evaluation);
 - Sector R: R.3.3.7 (general yard area) and R.3.7 (comprehensive site compliance evaluation);
 - Sector V: V.4.5 (comprehensive site compliance evaluation);
 - Sector X: X.3.1 (drainage area site map) and X.3.2 (potential pollutant sources);
 - Sector AA: AA.3.5.3 (receiving, unloading, and storage areas) and AA.3.5.4 (storage of equipment); and
 - Sector AB: AB.3.2 (non-stormwater discharges).
- Minor modifications were made to other sector-specific requirements to eliminate duplication with other parts of the permit. For example, Sector L was modified to eliminate duplication of the requirement to maintain containers to prevent leaking (already required in Part 2.1.2.4 of the permit). All of these changes are organizational only. Except where otherwise noted, the substantive control requirements previously contained in these sections have not changed.

Sector C – Chemical and Allied Products Manufacturing and Refining

Industrial Activities Covered by Sector C (Part C.1). This permit defines the scope of coverage for discharges from chemical and allied products manufacturing and refining facilities.

- *Purpose:* Part C.1 defines the scope of coverage for facilities covered under Sector C.
- *Changes from MSGP 2006:* The language in the draft permit (Part C.1) was modified from MSGP 2006 to include petroleum refining activities (SIC 2911), previously covered under Sector I. This change was made because petroleum refining activities are much more similar to chemical and allied products manufacturing than to oil and gas extraction activities and stormwater controls for these activities are, likewise, expected to be similar. Sector I now includes requirements solely for oil and gas extraction activities.

Sector G – Metal Mining (Ore Mining and Dressing)

Sector G has been modified to include specific requirements for discharges from exploration and construction activities that previous industrial stormwater permits did not cover (exploration and construction were covered separately under the Agency's Construction General Permit). Also, the analytic monitoring requirements for hardness-dependent parameters have been adjusted, as have inspection and monitoring requirements for inactive and unstaffed mine sites.

Covered Stormwater Discharges (Part G.1). This permit defines the scope of coverage for discharges from inactive facilities, active and temporarily inactive facilities, exploration and construction facilities, and sites undergoing reclamation.

- *Purpose:* Part G.1 defines the scope of coverage for discharges from different types of mining activities.
- *Changes from MSGP 2006:* The Secretary modified the phrasing of "exploration and development" to be "exploration and construction" in the draft permit. This change was made to more accurately reflect the intention to cover construction-related activities under this permit.

Definitions (Part G.3). This section includes definitions of the major phases of mining activities, as well as terms related to whether mining is active or inactive. Definitions of the various phases of active and inactive mines have been revised.

- *Purpose:* This section clarifies the Secretary's intent with respect to the scope of coverage for Sector G facilities.
- *Changes from MSGP 2006:* The definition of "Mining operations" (Part G.3.1) was revised with the specific exclusion of the exploration and construction phases, and the inclusion of the temporarily inactive phase. Exploration and construction were excluded in order to clarify that these activities are not the same as disturbances associated with the extraction, removal, or recovery of mined materials.

The definition for "exploration and construction" was broken down into separate definitions for "exploration" and "construction."

"Active phase" (Part G.3.4) was revised by narrowing the definition to include just extraction, removal and recovery, by clarifying that this phase does not include land "where grading has returned the earth to a desired contour and reclamation has begun", and excising "through production of a salable product." The definition also specifies that the active mining phase is to be considered part of "mining operations." These changes were made to be more consistent with the definition of "active mining area" in 40 CFR 440.132(a).

"Reclamation phase" (Part G.3.5) was revised with the inclusion of language stating that such activities are done "in compliance with applicable mined land reclamation requirements" and that the reclaimed land is intended to be returned to "an appropriate post-mining land use" (instead of "pre-mining state"). This clarifies that the "reclamation phase" is part of "mining operations," and thus covered by the MSGP. These changes were made in order to describe more clearly when reclamation is considered to have begun and what it includes.

"Active metal mining facility" (Part G.3.6) includes a clarification that such a facility exists during the active phase, but does not include any land where grading has returned the earth to a desired contour and reclamation has begun.

"Inactive metal mining facility" (Part G.3.7) was revised with additional language that clarifies these facilities have identifiable owners / operators. The definition also clarifies, consistent with the definition at 40 CFR 122.26(b)(14)(iii), that sites where mining claims are maintained prior to disturbances and sites where minimal activities are undertaken for maintaining a mining claim are not considered either active or inactive metal mining facilities and do not require an NPDES industrial stormwater permit . These changes were made to more closely conform to the description of "inactive mining operations" in the definition of "stormwater discharges associated with industrial activity" at 40 CFR 122.26(b)(14)(iii).

"Final stabilization" (Part G.3.9) has been introduced to describe the condition that a disturbed mining site must be returned to before permit coverage can be terminated. "Final stabilization" was modified by including the implementation of applicable Federal and State reclamation requirements, and to delete the requirements related to achieving a 70 percent vegetative cover.

Technology-Based Effluent Limits for Clearing Grading and Excavation Activities (Part G.4). This section of the permit addresses requirements for the exploration and construction phase, which were activities that could result in discharges covered under the Construction General Permit but not by the MSGP 2006. Part G.4 includes required management practices, inspection procedures, maintenance and corrective action protocols, and final stabilization provisions.

- *Purpose:* This section of the permit addresses requirements that were addressed by the Construction General Permit but not by the prior version of the MSGP.
- *Changes from MSGP 2006:* These provisions were revised to remove where appropriate any duplication of requirements between G.4 and the effluent limits in Part 2.1. These revisions resulted in changes to G.4.

Additional Requirements (Part G.5). Under these sections, additional sector-specific effluent limits, SWPPP requirements, and inspection requirements are specified.

- Purpose: These sections specify additional requirements applicable to Sector G facilities.
- *Changes from MSGP2006:* specific controls that were duplicative of Part 2.1 requirements were deleted.

Sector-Specific Benchmarks (Part G.8). All monitoring requirements for Sector G facilities are specified in Part G.8. The monitoring changes affecting all sectors are addressed separately in

the Fact Sheet, as are the newly included hardness-dependent benchmark levels for Sector G analytes (Part G.8.2).

- Purpose: This section details all monitoring requirements for Sector G facilities.
- *Changes from MSGP 2006:* Hardness-dependent benchmarks have been changed. These revisions are discussed elsewhere in the Fact Sheet. Additionally, Part G.7.4 (reporting requirements for stormwater discharges from waste rock and overburden piles) was deleted as unnecessary since all permittees are required to report monitoring results from each outfall discharging stormwater.

Inactive and Unstaffed Sites – Conditional Exemption from No Exposure Requirements for Routine Facility Inspections and Quarterly Visual Assessments (Part G.8.4). The facility inspection frequency is reduced to a minimum of once per year for inactive and unstaffed facilities in any sector. Unlike the inactive and unstaffed facilities in other sectors (except for Sectors H and J), in Sector G, there is no requirement, subject to the conditions in Part G.8.4, to certify that "there are no industrial materials or activities exposed to stormwater." Inspections should be carried out during the season when rain events are more frequent, and permittees are required to conduct additional inspections as needed to determine whether severe weather or natural disasters have adversely affected the site in such a way as to damage control measures or to increase the discharge of pollutants. Similarly, if a site is inactive and unstaffed in Sector G (as well as Sectors H and J), the permit authorizes the operator to waive its visual monitoring requirements without having to certify that "there are no industrial materials or activities exposed to stormwater", as is required of other facilities in Part 4.2.3, as long as certain conditions are met.

- *Purpose:* To provide operators of inactive and unstaffed sites flexibility with regard to conducting routine facility inspections and quarterly visual assessments. With respect to routine facility inspections, it is important that Sector G sites be inspected at least once per year, and more frequently where the operator has reason to believe that severe weather or natural disasters may have damaged control measures or increased discharges.
- *Changes from MSGP 2006*: In the 2006 permit, there was no flexibility provided for inactive and unstaffed facilities to reduce the frequency of inspections from the required monthly frequency. Consistent with EPA's 2008 MSGP, the draft permit includes a conditional exemption from the no exposure requirement for Sector G inactive and unstaffed facilities.

Final Stabilization for Sites Reclaimed After December 17, 1990 (Part G.9.1). A site or a portion of a site that has been released from applicable state or federal reclamation requirements after December 17, 1990, is no longer required to maintain coverage under this (or any other NPDES) permit. This language is based on 40 CFR 122.26(b)(14)(iii).

- *Purpose:* To provide clarification to affected sites of their permit status depending on when the land was reclaimed.
- *Changes from MSGP 2006:* The revised language is consistent with 40 CFR 122.26(b)(14)(iii).

Sector H – Coal Mines and Coal Mining-Related Facilities

Definitions (Part H.3). The permit includes definitions of the following terms: mining operation, exploration phase, construction phase, active phase, reclamation phase, inactive coal mining facility, temporarily inactive coal mining facility, and final stabilization.

- *Purpose:* To clarify regarding the scope of coverage and the permit's requirements.
- Changes from MSGP 2006: Definitions were not included in the MSGP 2006.

Clearing, Grading, and Excavation Activities (Part H.4). The permit includes requirements for stormwater discharges associated with clearing, grading, and excavation activities being conducted as part of the exploration and construction phase of mining activities. Discharges associated with these activities would have been covered under the Construction General Permit. Part H.4 includes required management practices, inspection procedures, maintenance and corrective action protocols, and final stabilization provisions.

- *Purpose:* This section of the permit addresses requirements regarding discharges previously authorized by the Construction General Permit and not under the previous version of the MSGP.
- *Changes from MSGP2006:* The Secretary modified the phrasing of "exploration and development" to be "exploration and construction" in the draft permit. This change was made to more accurately reflect the intention to cover construction-related activities under this permit. Similar provisions were included in the sections dealing with the two other mining sectors, Sectors G and J.

Drainage Area Site Map (Part H.6.2). This section of the permit describes specific features of a site that are exposed to stormwater that must be included in the site map as part of the operator's SWPPP.

- Purpose: This section specifies site map requirements for Sector H facilities.
- *Changes from MSGP 2006:* The site map requirements have been modified to include haul and access roads; railroad spurs, sliding, and internal hauling lines; conveyor belts, chutes, and aerial tramways; equipment storage and maintenance yards; coal handling buildings and structures; and inactive mines and related areas.

Inactive and Unstaffed Sites – Conditional Exemption from No Exposure Requirement for Routine Inspections, Quarterly Visual Assessments, and Benchmark Monitoring (Part H.8.1). Inactive and unstaffed sites do not need to conduct visual and benchmark monitoring providing operators submit a report stating no data will be forthcoming since the site is inactive and unstaffed. This waiver for Sector H facilities is conditionally exempt from the requirement for other industrial sectors to certify that "there are no industrial materials or activities exposed to stormwater" providing the report referenced above are submitted. Similarly, for reductions in the quarterly inspection requirement to a once annual requirement, Sector H facilities are conditionally exempt from having to certify that "there are no industrial materials or activities exposed to stormwater." The Secretary can still require greater frequencies for visual assessments, benchmark monitoring, and/or routine inspections if there are concerns about water quality standard excursions. Also, if circumstances change such that the facility has now become active and/or staffed, this exception no longer applies and the permittee must immediately begin complying with the applicable requirements as if that permittee was in the first year of permit coverage.

- *Purpose:* This waiver provision enables inactive and unstaffed mining operators to obtain a conditional exemption from the requirements in Parts 4.1.3, 4.2.3, and 6.2.1.3 to certify that "there are no industrial materials or activities exposed to stormwater."
- *Changes from MSGP 2006:* The MSGP 2006 required all inactive and unstaffed sites to monitor and to visually assess their discharge with no reduction in frequency, unless there were no industrial materials or activities exposed to stormwater. The exemption is now available for Sector H, which enables inactive and unstaffed facilities to waive these requirements.

Additionally, this permit's flexibility in Part H.8.1 to reduce inspection frequencies to an annual frequency for inactive and unstaffed facilities represents a change from the MSGP 2006 quarterly routine inspection frequency required of all Sector H facilities.

Sector I – Oil and Gas Extraction

Covered Stormwater Discharges (Part I.1). This permit defines the scope of coverage for discharges from field activities or operations associated with oil and gas exploration, production, processing, or treatment operations or transmission facilities.

- Purpose: Part I.1 defines the scope of coverage for facilities covered under Sector I.
- *Changes from MSGP 2006:* The draft permit includes language clarifying that discharges composed entirely of stormwater runoff from field activities or operations associated with oil and gas exploration, production, processing, or treatment operations or transmission facilities are exempt from NPDES permit coverage except in accordance with 40 CFR 122.26(c)(1)(iii). The Secretary also made a change to Sector I, referenced above, by moving petroleum refining activities to Sector C.

Stormwater Discharges Subject to Effluent Limitation Guidelines (Part I.2.1). This section of the permit addresses limitations on coverage for discharges not authorized under this permit for Sector I facilities.

- *Purpose:* This permit clarifies that discharges from petroleum refining or drilling operations that are subject to effluent limitation guidelines are not authorized under this permit.
- *Changes from MSGP 2006:* The additional discussion on runoff subject to 40 CFR Part 419 effluent guidelines is a clarification that facility discharges are not authorized from petroleum refining or drilling operations that are subject to effluent limitation guidelines.

Sector J – Non-Metallic Mineral Mining and Dressing

For this permit, Sector J has undergone modifications in a few areas. These include new requirements for discharges from exploration and construction activities that the previous MSGP did not cover (exploration and construction were covered separately under the Construction General Permit.

Covered Stormwater Discharges (Part J.1). This permit defines the scope of coverage for discharges from inactive facilities, active and temporarily inactive facilities, exploration and construction facilities, and sites undergoing reclamation.

• *Purpose:* Part J.1 defines the scope of coverage for discharges from different types of mining activities.

- *Changes from MSGP 2006:* The draft permit replaces language describing the scope of coverage for active and temporarily inactive facilities with more precise language from the effluent limitations guideline for the mineral mining and processing category (40 CFR Part 436).
- Modified the phrasing of "exploration and development" to be "exploration and construction" in the final permit. This change was made to reflect the intention to cover construction-related activities under this permit.

Limitations on Coverage (Part J.2). This permit clarifies that "uncontaminated" groundwater seepage is an allowed discharge under this permit.

- *Purpose:* This section describes limitations on coverage under this permit.
- *Changes from MSGP 2006:* The use of the term "uncontaminated" to describe the type of groundwater seepage covered by the permit is a change.

Definitions (Part J.3). This section includes definitions of the major phases of mining activities, as well as terms related to whether mining is active or inactive.

- *Purpose:* This section clarifies the Agency's intent with respect to the scope of coverage for Sector J facilities.
- *Changes from MSGP 2006:* The following definitions were either changed or added as follows:

"Final stabilization" was modified by including the implementation of applicable Federal and State reclamation requirements.

"Mining operations" (Part J.3.1) was revised to make clear the exclusion of the exploration and construction phases, and the inclusion of the temporarily inactive phase. Exploration and construction were excluded in order to clarify that these activities are not the same as disturbances associated with the extraction, removal, or recovery of mined materials. Per EPA, exploration and construction activities were brought under MSGP coverage for the sole purpose of reducing administrative redundancies related to regulating the mining industry through two different stormwater permits. Exploration and construction are distinct from "mining operations".

The definition for "exploration and construction" was broken down into separate definitions for "exploration" and "construction."

"Active phase" (Part J.3.4) was revised by narrowing the definition to include just extraction, removal and recovery, by clarifying that this phase does not include land "where grading has returned the earth to a desired contour and reclamation has begun", and excising "through production of a salable product." The definition also specifies that the active mining phase is to be considered part of "mining operations." These changes were made to be more consistent with the definition of "active mining area" in 40 CFR 440.132(a).

"Reclamation phase" (Part J.3.5) was revised with the inclusion of language stating that such activities are done "in compliance with applicable mined land reclamation requirements" and that the reclaimed land is intended to be returned to "an appropriate

post-mining land use" (vice "pre-mining state"). This clarifies that "reclamation phase" is part of "mining operations", and thus covered by the MSGP.

"Final stabilization" (Part J.3.9) has been introduced to describe the condition that a disturbed mining site must be returned to before permit coverage can be terminated. This definition mirrors the language in the Construction General Permit with the addition of the requirement to implement Federal and State reclamation requirements.

"Uncontaminated" was introduced in order to clarify term.

Technology-Based Effluent Limits for Clearing Grading and Excavation Activities (Part J.4). This section of the permit addresses requirements regarding discharges associated with the exploration and construction phase, which were activities previously covered under the Construction General Permit and not under the previous version of the MSGP. Part J.4 includes required management practices, inspection procedures, maintenance and corrective action protocols, and final stabilization provisions.

- *Purpose:* This section of the permit addresses requirements relevant to discharges previously authorized by the Construction General Permit and not by the previous version of the MSGP.
- *Changes from MSGP 2006:* A provision was added (Part J.4.4.2) which addresses final stabilization requirements for the cessation of clearing, grading, and excavation activities. This same language is included in Sector G for metal mining facilities (see Part G.4.4.2). All other language in the comparable section of Sector G is the same as in Sector J (Part J.4.4).

Sector-Specific Benchmarks and Effluent Limitations Based on Effluent Limitations Guidelines (Part J.8 and J.9). All monitoring requirements for Sector J facilities are specified in Part J.8 and J.9.

- Purpose: This section details all monitoring requirements for Sector J facilities.
- *Changes from MSGP 2006:* The draft permit removes language that applied additional monitoring and reporting requirements to discharges from waste rock and overburden piles (see Part J.7.2 and J.7.3 of MSGP 2006). These changes were made in response to EPA's determination that such language is not suitable for use for Sector J facilities.

Inactive and Unstaffed Sites – Conditional Exemption from No Exposure Requirement for Routine Inspections, Quarterly Visual Assessments, and Benchmark Monitoring (Part J.8.1). The routine facility inspection frequency is reduced to a minimum of once per year for inactive and unstaffed facilities in any sector. Unlike the inactive and unstaffed facilities in other sectors (except for Sectors G and H), in Sector J, there is no requirement to certify that "there are no industrial materials or activities exposed to stormwater." Inspections should be carried out during the season when rain events are more frequent, and permittees are required to conduct additional inspections as needed to determine whether severe weather or natural disasters have adversely affected the site in such a way as to damage control measures or to increase the discharge of pollutants. Similarly, if a site is inactive and unstaffed in Sector J (as well as Sectors G and H), the permit authorizes the operator to waive its visual assessment and benchmark monitoring requirements without having to certify that "there are no industrial materials or activities exposed to stormwater", as is required of other facilities in Part 4.2.3, as long as certain conditions are met.

- *Purpose:* To provide operators of inactive and unstaffed sites flexibility with regard to conducting routine facility inspections and quarterly visual assessments. It is important that Sector J sites be inspected at least once per year, and more frequently where the operator has reason to believe that severe weather or natural disasters may have damaged control measures or increased discharges.
- *Changes from MSGP 2006:* In the MSGP 2006, there was no flexibility provided for inactive and unstaffed facilities to reduce the frequency of inspections from the required monthly frequency. The reduction in inspection frequency was restored consistent with EPA's 2008 MSGP.

Sector K – Hazardous Waste Treatment Storage or Disposal

Industrial Activities Covered by Sector K (Part K.2). Part K.2 identifies facilities that are eligible for coverage under Sector K. It also clarifies that disposal facilities that have been properly closed and capped do not need coverage under an NPDES permit.

- *Purpose:* This section identifies Sector K facilities that require permit coverage under this permit.
- *Changes from MSGP 2006:* Language has been included in the draft permit to exempt from permitting requirements those facilities that have properly closed and capped their disposal areas consistent with applicable Subtitle C Resource Conservation and Recovery Act (RCRA) regulations and no longer have any significant materials exposed to stormwater. In addition, definitions in the permit for "land treatment facility," "pile," and "surface impoundment" were deleted as these terms are not used in the permit, and thus serve no purpose in the permit.

Sector M – Automobile Salvage Yards

- *Purpose:* This section identifies Sector M facilities that require permit coverage under this permit.
- Changes from MSGP 2006: Part 8.M.2.1, Spill and Leak Prevention Procedures has been updated to be consistent with the salvage yard operational standards in 24 V.S.A. § 2248. Part 8.M.2.4, Mercury Switch Removal has been added to this permit to be consistent with 10 V.S.A. § 7108.

Sector N – Scrap Recycling Facilities

Sector-Specific Benchmarks (Table 8.N-1). This table presents benchmarks for all non source-separated recycling facilities.

- Purpose: To specify benchmarks for all non source-separated recycling facilities.
- Changes from MSGP 2006: The MSGP 2006 included benchmark monitoring requirements for source-separated facilities. Consistent with EPA's MSGP 2008 source separated recycling facilities no longer have benchmark monitoring requirements. Part 8.N.3.1.9, Mercury Switch Removal has been added to this permit to be consistent with 10 V.S.A. § 7108.

Sector O – Steam Electric Generating Facilities

Facilities covered by this sector are described narratively rather than by SIC codes. In this permit, any facility generating power using steam may be eligible for coverage under this permit regardless of its SIC code.

Industrial Activities Covered by Sector O (Part O.2.3). "Dual fuel co-generation facilities" has been replaced with "dual fuel facilities that could employ a steam boiler."

Per EPA, EPA's and the accepted industry definition of *cogeneration* is "the merging of a system designed to produce electric power and a system used for producing industrial heat and steam" (Profile of the Fossil Fuel Fired Electric Power Generation Industry notebook, September, 1997). Cogeneration technologies are classified as "topping cycle" and "bottoming cycle" systems, depending on whether the electrical (topping cycle) or thermal (bottoming cycle) energy is derived first. Most cogeneration systems use a topping cycle. The most common configurations are: 1) a boiler connected to a steam turbine; or 2) a gas turbine, followed by a heat recovery steam generator (HRSG) which may include a duct burner for supplemental firing, followed by a steam turbine. Regardless of the configuration, both electricity and steam (or heat) are end products. Typically, the boilers in configuration 1 are fired with coal or oil and the gas turbines in configuration 2 are primarily fired with natural gas with fuel oil as a back up at some facilities. The duct burner in the HRSG is typically fired with natural gas. Boiler facilities (configuration 1) generate their electricity from the use of steam, whereas gas combustion turbine facilities (configuration 2) generate their electricity primarily from the gas turbine cycle. Configuration 1 facilities are the type EPA has always required to obtain permit coverage.

The EPA and accepted industry definition of *combined-cycle generation* is "a configuration using both gas turbines and steam generators. In a combined-cycle gas turbine, the hot exhaust gases of a gas turbine are used to provide all, or a portion of, the heat source for the boiler, which produces steam for the steam generator turbine." This type of facility produces only electric power, and needs permit coverage. Typical configurations include a gas turbine, a fired or unfired HRSG, and a steam turbine generator. The gas turbines are primarily fired with natural gas and some may fire fuel oil as a back up (see dual-fuel discussion below).

The previous permit term "dual-fuel cogeneration facilities" (identified as needing coverage) has been dropped from this permit because it is not used within the power generation industry. The concept of dual fuel will be addressed to preserve the intent of past permits. A *dual-fuel* facility has the capability of generating electricity by burning either natural gas or another fossil fuel (typically oil). Thus, a simple-cycle dual-fuel facility being regulated would have the capability of using both a gas turbine and an oil-fired steam boiler (or both in tandem), but <u>would not</u> include a facility that burns oil to generate power without a steam boiler (as in a diesel generator).

A regulated combined-cycle facility would also have a gas-steam option (in this context, prior to the HRSG component). For dual-fuel facilities, the <u>option</u> to burn fossil fuel for use in a steam boiler is sufficient to cause the facility to need permit coverage (regardless of whether the gas turbine alone is actually used). The inclusion of dual-fuel facilities, but only those that could employ a steam boiler, in this permit is consistent with the intent of previous stormwater permits.

- *Purpose:* There has been considerable confusion about the types of power generation facilities covered or not covered by stormwater permitting requirements. One source of confusion stemmed from use of the term "dual-fuel cogeneration facilities" (which were covered by the MSGP). Because this term was not previously defined in the permit, and has, subsequent to its introduction, become archaic within the power generation industry, the applicable terminology has been updated.
- *Changes from MSGP 2006:* The language in this version (see Part O.2.3) was not included in the MSGP 2006.

Limitations on Coverage (Part O.3). Those types of facilities that do not need permit coverage (i.e., they do not have a steam component in their power generation) have been listed in this section of the permit due to the numerous types of power plants using different combinations of processes and technologies. One of these plant types not covered under the permit that uses multiple technologies was previously identified as a "heat capture co-generation facility," but the use of this terminology has long been a source of confusion and is regarded as obsolete. Clarifying language for this term has been added, as well as extra explanations regarding the absence of steam boilers for the other non-covered facility types, ancillary facilities and gas turbine facilities.

As previously noted, duct burners in HRSGs are typically fired with natural gas. Along with simple-cycle gas turbine facilities (see O.3.2.2) and configuration 2-type gas turbine cogeneration facilities (see O.3.2.3), combined-cycle generation facilities are also not covered by stormwater permitting requirements, provided no supplemental fuel oil is burned in the HRSG and the facility is not otherwise a dual-fuel facility which uses steam.

Cogeneration facilities, which are of the type described under configuration 2 above, are equivalent to the obsolete term "heat capture cogeneration facilities." Therefore, gas turbine cogeneration facilities (only those that do not have an oil-fired steam boiler as a back up; see the dual-fuel discussion above) are likewise excluded from stormwater permit coverage.

- *Purpose:* Excising obsolete terminology and adding more appropriate terms and additional clarifying language.
- *Changes from MSGP 2006:* The language in this version (see Part O.3.2) was not included in the MSGP 2006.

Additional Requirements (Part O.4). Part O.4 imposes additional requirements that supplement the Part 2.1 technology-based requirements.

• *Purpose:* To impose additional requirements that are sector-specific to supplement the Part 2.1 effluent limits.

Changes from MSGP 2006: The following requirements were removed from Part O.4 because they were duplicative of Part 2.1: O.4.2.14 (vehicle maintenance activities) and O.4.2.15 (material storage areas).