

Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP) – Fact Sheet

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I. 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.’” P.U.D. No. 1 of Jefferson City v. Washington Dep’t of Ecology, 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 is issuing the Multi-Sector General Permit (MSGP) under this statutory and regulatory authority. 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., NRDC v. EPA, 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.)

This permit is being issued by EPA Regions 1, 2, 3, 5, 6, 9, and 10 to replace the expired MSGP 2000. This permit is actually 35 separate permits covering either areas within an individual State, Tribal land, or U.S. territory, or federal facilities. These 34 permits contain provisions that require industrial facilities in 29 different industrial sectors to, among other things, implement control measures and develop site-specific stormwater pollution prevention plans (SWPPP) to comply with NPDES requirements. In addition, the MSGP includes a thirtieth sector, available for EPA to permit additional industrial activities which the Agency determines require permit coverage for industrial stormwater discharges not included in the other 29 industrial sectors. Currently, an estimated 4100 facilities are authorized to discharge (or “covered”) through the administrative continuance of the now expired MSGP 2000.

This permit replaces the MSGP 2000 that was issued for a five-year term on October 30, 2000 (65 FR 64746). The MSGP 2000 was subsequently corrected on January 9, 2001 (66 FR 1675-1678) and March 23, 2001 (66 FR 16233-16237). On April 16, 2001 (66 FR 19483-19485), EPA re-issued the permit, as corrected, for facilities in certain areas of EPA Regions 8 and 10. The MSGP 2000 expired on October 30, 2005 but is administratively continued for facilities that were covered under the permit at the time it expired.

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.

II. Organization of the Final Permit and Summary of Changes from the MSGP 2000 and the December 1, 2005 Proposed Permit

II.A. Development of Final Permit

The provisions of this final permit were developed through review of public comments, meetings with stakeholders, and consultations with the U.S. Fish & Wildlife Service (FWS), National Marine Fisheries Services (NMFS), Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers. On December 1, 2005, EPA issued a proposed MSGP to replace the MSGP 2000. EPA held a public meeting in Washington, DC on December 20, 2005, to answer stakeholder questions about the proposed permit. The public meeting was attended by a wide variety of stakeholders including representatives from industry, government agencies, and environmental organizations. The public meeting included an EPA presentation covering the major provisions of the proposed permit and a question and answer session. A copy of the presentation is available in the public docket for this permit. The public comment period closed on February 16, 2006.

EPA received 92 comment letters or emails on the proposed permit from industry (52), government (20), and the public (20) representing 1,151 individual comments submitted by these groups. EPA responded to all comments received, with these comments and responses also available in the public docket for this permit. To review the comment response document, go to <http://www.regulations.gov/fdmspublic/component/main> for the docket for this permit, EPA-HQ-OW-2005-0007.

EPA also met with various stakeholders to better understand their comments. A summary of all of these meetings is included in the docket at <http://www.regulations.gov/fdmspublic/component/main>. The Agency also consulted with the Federal agencies responsible for implementing the Endangered Species Act (ESA) and National Historic Preservation Act (NHPA) to ensure that this permit included provisions that are adequately protective of listed species and critical habitat, and historic properties.

II.B. Structure of This Permit / Terminology

II.B.1. General

This permit is divided into nine 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)), industry sector-specific conditions (Part 8), and specific requirements applicable in individual States and Tribes (Part 9). Additionally, the permit includes ten appendices with additional conditions and guidance for permittees.

The organization and numbering of this permit have been revised from the MSGP 2000 and the 2005 proposal to clarify permittee responsibilities. For instance, this permit separates into distinct parts those requirements dealing with the implementation of stormwater control measures to meet required technology-based and water quality-based limitations (Part 2), corrective actions to address conditions at the site that are indicative of control measure deficiencies (Part 3), and the inspection and evaluation of the performance of existing stormwater control measures (Part 4), from those addressing preparation of the SWPPP (Part 5). In addition, EPA consolidated in Part 3 all requirements for corrective actions and in Part 5.4 those provisions which require the permittee to document activities demonstrating compliance with permit requirements. EPA believes these organizational changes clarify the requirements of the permit.

Throughout this fact sheet, EPA uses consistent terms when referring to different responsible entities. For instance, the permit holder is referred to either as the “permittee” or “operator” in this fact sheet. Typically, the term “operator” will be used when discussing those actions required prior to permit authorization, while “permittee” will be used where the fact sheet is referring to provisions that affect a covered discharger. “You” and “Your” – as used in the permit are intended to refer to the permittee, the operator, or the discharger as the context indicates and that party’s facility or responsibilities. The use of “you” and “your” refers to a particular facility and not to all facilities operated by a particular entity. For example, “you must submit” means the permittee must submit something for that particular facility. Likewise, “all your discharges” would refer only to discharges at that one facility.

II.B.2. Regarding Conformance of this Permit to Recent Court Decisions

EPA has restructured this permit as compared with prior permits to conform the MSGP to recent court decisions related to stormwater general permits. One of these cases held that because the terms of the Nutrient Management Plan (NMP) employed by concentrated animal feeding operations (CAFO) imposed restrictions on discharges, those restrictions amounted to effluent limitations that needed to be made part of the permit and to be subject to public and permit writer review. *Waterkeeper Alliance, Inc. v. EPA*, 399 F.3d 486 (2nd Cir. 2005). In another case, *Environmental Defense Center v. EPA*, 344 F.3d 832 (9th Cir. 2003), the court found that under the MS4 regulations, the “NOIs were functional equivalents of permits” and “EPA’s failure to make NOIs available to the public or subject to public hearings contravene the

express requirements of the Clean Water Act.” EDC at 858.¹ Consistent with these decisions, EPA explicitly established effluent limitations in Parts 2 and 8 of the MSGP and in a separate part of the permit (Part 5) clarified that the requirement to develop a SWPPP is an information gathering tool for dischargers to document, among other things, how control measures will be selected, designed, installed, and implemented to comply with the permit’s effluent limitations.

Effluent Limitations in the Permit

Parts 2.1 and 8² of the MSGP contain the technology-based effluent limitations. Parts 2.2.1 – 2.2.3 and the Part 1 eligibility criteria (specifically Parts 1.1.4.7 and 1.1.4.8) in the permit contain the water quality-based effluent limitations. These Parts of the permit contain effluent limitations, defined in the CWA as restrictions on quantities, rates, and concentrations of constituents which are discharged. CWA section 502(11). Violation of any of these effluent limitations constitutes a violation of the permit.

The technology-based effluent limitations set forth in Part 2.1.2 require the permittee to minimize exposure of raw, final, or waste materials to rain, snow, snowmelt, and runoff. In doing so, the permittee is required, to the extent technologically available and economically practicable and achievable, to either locate industrial materials and activities inside or to protect them with storm resistant coverings. (See Part 2.1.2.1). In addition, permittees are required to: (1) use good housekeeping practices to keep exposed areas clean (See Part 2.1.2.2), (2) regularly inspect, test, maintain and repair all industrial equipment and systems to avoid situations that may result in leaks, spills, and other releases of pollutants in stormwater discharges (See Part 2.1.2.3), (3) minimize the potential for leaks, spills and other releases that may be exposed to stormwater and develop plans for effective response to such spills if or when they occur (See Part 2.1.2.4), (4) stabilize exposed area and contain runoff using structural and/or non-structural control measures to minimize onsite erosion and sedimentation, and the resulting discharge of pollutants (See Part 2.1.2.5), (5) divert, infiltrate, reuse, contain or otherwise reduce stormwater runoff, to minimize pollutants in your discharges (See Part 2.1.2.6), (6) enclose or cover storage piles of salt or piles containing salt used for deicing or other commercial or industrial purposes, including maintenance of paved surfaces (See Part 2.1.2.7), (7) achieve any additional non-numeric limits stipulated in the relevant sector-specific section(s) of Part 8 of this permit (See Part 2.1.2.8), (8) train all employees who work in areas where industrial materials or activities are exposed to stormwater, or who are responsible for implementing activities necessary to meet the conditions of this permit (e.g., inspectors, maintenance personnel), including all members of your Pollution Prevention Team (See Part 2.1.2.9), (9) eliminate non-stormwater discharges not authorized by an NPDES permit (See Part 2.1.2.10), (10) ensure that waste, garbage and floatable debris are not discharged to receiving waters by keeping exposed areas free of such materials or by intercepting them before they are discharged (See Part 2.1.2.11), (11) minimize generation of dust and off-site tracking of raw, final or waste materials (see Part 2.1.2.12), and (12) meet any applicable numeric effluent limitations based on EPA’s effluent limitation guidelines (See Part 2.1.3). And, to meet the non-numeric effluent limitations in Part 2.1.2 and

¹ In *Environmental Defense Center v. EPA*, 344 F.3d 832 (9th Cir. 2003), petitioners challenged EPA’s regulations addressing discharges from small municipal storm sewers and construction sites (“MS4 regulations”). These regulations allowed dischargers to seek permission to discharge under an individual or general permit.

² Part 8 of this permit contains the industry sector-specific effluent limitations based on nationally promulgated effluent limitations guidelines and standards.

meet the effluent limitations guidelines-based limits in 2.1.3, the permit requires dischargers to select control measures (including best management practices) to address the selection and design considerations in Part 2.1.1.

In addition to the technology-based effluent limitations, Parts 2.2.1 – 2.2.3 and Parts 1.1.4.7 and 1.1.4.8 of the eligibility criteria contain the water quality-based effluent limitations in the permit. The permittee must control its discharge as necessary to meet applicable water quality standards. EPA expects that compliance with the technology-based effluent limitations and other terms and conditions in this permit will meet this effluent limitation. However, if at any time the permittee, or EPA, determines that the discharge causes or contributes to an exceedance of applicable water quality standards, the permittee must take corrective actions as required in Part 3.1, and conduct follow-up monitoring as required in Part 6.3; as well as report the exceedance(s) to EPA as required in Parts 6.3.1 and 7.3. (See Part 2.2.1). Furthermore, EPA may impose additional water quality-based limitations on a site-specific basis, or require the discharger to obtain coverage under an individual permit, if information in an NOI, required reports, or from other sources indicates that, after meeting the water quality-based limitations in this section, the discharges are not controlled as necessary to meet applicable water quality standards. (See Part 2.2.1). Part 2.2.2 describes the permit requirements that apply to discharges to water quality impaired waters. This part is broken into requirements for: (1) existing discharges to an impaired water with an EPA approved or established TMDL (See Part 2.2.2.1), (2) existing discharges to an impaired water without an EPA approved or established TMDL (See Part 2.2.2.2), and (3) new discharges to an impaired water (See Part 2.2.2.3). And, Part 2.2.3 contains antidegradation requirements.

“Term and Condition” to Provide Information in a SWPPP

Distinct from the effluent limitation provisions in the permit, Part 5 of the permit requires the discharger to prepare a Stormwater Pollution Prevention Plan (SWPPP) for its facility before submitting its Notice of Intent (NOI) for permit coverage.³ The SWPPP, together with the additional documentation requirements (see Part 5.4), is intended to document the selection, design, installation, and implementation (including inspection, maintenance, monitoring, and corrective action) of control measures being used to comply with the effluent limits set forth in Part 2.

In general, Part 5 requires that the following be documented in the SWPPP: (1) stormwater pollution prevention team (see Part 5.1.1), (2) site description (see Part 5.1.2), (3) summary of potential pollutant sources (see Part 5.1.3), (4) description of control measures (see Part 5.1.4), (5) schedules and procedures (see Part 5.1.5), (6) and documentation to support eligibility considerations under other federal laws (see Part 5.1.6). The SWPPP must be signed in accordance with the requirements in the permit. Additionally, there are additional documentation requirements in Part 5.4. In general, the SWPPP must be kept up-to-date, and modified whenever necessary to document that any of the triggering conditions for corrective action in Part 3.1 have occurred, or to document any changes in control measures that were found to be necessary following the triggering conditions in Part 3.2 to meet the effluent limitations in this permit.

³ If a SWPPP was prepared for coverage under a previous NPDES permit, it must be reviewed and updated to implement all provisions of this permit prior to submitting the NOI.

The requirement to prepare a SWPPP is not an effluent limitation, instead it documents what practices the discharger is implementing to meet the effluent limitations in the permit. The SWPPP is not an effluent limitation because it does not restrict quantities, rates, and concentrations of constituents which are discharged. CWA section 502(11). Instead, the requirement to develop a SWPPP is a permit “term or condition” authorized under sections 402(a)(2) and 308 of the Act. Section 402(a)(2) states, “[t]he Administrator shall prescribe conditions for [NPDES] permits to assure compliance with the requirements of paragraph (1) of this subsection, including conditions on data and information collection, reporting, and such other requirements as he deems appropriate.” The SWPPP requirements set forth in the MSGP are terms or conditions under the CWA because the discharger is documenting information on how it intends to comply with the effluent limitations (and inspection and evaluation requirements) contained elsewhere in the permit. Thus, the requirement to develop a SWPPP and keep it updated is no different than other information collection conditions, as authorized by section 402(a)(2), in other permits.

The MSGP is consistent with the decision in Texas Independent Producers and Royalty Owners Assoc., et. al. v. EPA, 410 F.3d 964 (7th Cir. 2005), where petitioners challenged EPA’s issuance of the construction general permit (“CGP”) that covers stormwater discharges. In this case, the only one to specifically address SWPPPs, the court found that neither the SWPPP nor the NOIs are permits or permit applications because they do not amount to limits. 410 F.3d at 978. Further, the court found that the permit requirement to develop a SWPPP is not an effluent limit.

While the permit at Part 2.1 requires the discharger to select control measures to meet the effluent limitations in this permit, the control measures themselves described in the SWPPP are not effluent limitations because the permit does not impose on the permittee the obligation to comply with the SWPPP; rather, the permit imposes on the permittee the obligation to meet the effluent limitations prescribed in Part 2. Therefore, the discharger is free to change at any time the control measures used in order to meet the effluent limitations contained in the permit. This flexibility helps ensure that the permittee is able to adjust its practices as necessary to ensure continued compliance with the permit’s effluent limitations. However, the permit also contains a recordkeeping condition that requires that the SWPPP be updated with any such changes in the permittee’s practices. See Part 5.2. Thus, if a permittee’s on the ground practices differ from what is in the SWPPP, this would constitute a violation of the permit’s recordkeeping requirement to keep the SWPPP kept up-to-date, but not a violation of the permit’s effluent limitations, which are distinct from the SWPPP and contained in Part 2 of the permit. EPA recognizes, however, that because the SWPPP documents how the discharger is meeting the effluent limitations contained in the permit, not following through with actions identified by the discharger in the SWPPP as the method of complying with the effluent limitations in the permit may be relevant to evaluating whether the permittee is complying with the permit’s effluent limitations.

Public Notice

Once the EDC and Waterkeeper courts found that the plan or NOI contained effluent limitations, they stated that the plan or NOI must be available for public comment. The CWA contains provisions that relate to public participation in the issuance of permits. For instance, section 402(j) states, in relevant part: “A copy of each permit application and each permit issued

under this section shall be available to the public.” Consistent with these rulings and in compliance with the CWA, EPA proposed the permit for public comment, including the effluent limitations, and provided an opportunity to request a public hearing on the permit. See 70 Fed. Reg. 72116 (December 1, 2005).

Public availability of documents

Part 5.3 of the permit requires that the permittee retain a copy of the current SWPPP at the facility and it must be immediately available, at the time of an onsite inspection or upon request, to EPA, a State, Tribal or local agency approving stormwater management plans, the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS). Additionally, interested persons can request a copy of the SWPPP through EPA. By requiring members of the public to request a copy of the SWPPP through EPA, the Agency is able to provide the permittees with assurance that any Confidential Business Information contained within its SWPPP is not released to the public. See Part 5.4. Additionally, consistent with the EDC case, the NOIs, although not “functional equivalents” to permits here, are publicly available once submitted through the eNOI system. See www.epa.gov/npdes/noisearch.

Conclusion

The discussion above demonstrates that unlike the cases where courts found plans such as the NMP and the SWMP to be functional equivalents of effluent limitations (because compliance with the plan constituted compliance with the permit or the statutory standard), under the MSGP, the permittee must comply with the effluent limitations and other requirements contained in the MSGP; the permittee is not required to comply with the SWPPP itself. However, the permittee is required to comply with the permit requirement to develop a SWPPP (Part 5.1), to modify the SWPPP from time to time as required (Part 5.2), to make the SWPPP available as required (Part 5.3), and to retain documentation with the SWPPP (Part 5.4). The SWPPP is not an effluent limitation itself, nor does it not contain effluent limitations, only information about the discharger and the receiving water and documentation of how the discharger is complying with the effluent limitations.

II.C. Summary of Major Changes from the MSGP 2000

Distinction Between Effluent Limits and SWPPP Requirements

As mentioned in Section B above, 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 prior permits, 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, EPA 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.

Discharge Authorization Time Frame

The waiting period for operators who have correctly completed and submitted their NOIs was extended from two days to 30 days, and in some cases 60 days, to provide for sufficient review by the FWS and/or the NMFS to determine if the operator's certification of eligibility, and the control measures described in the SWPPP, are protective of federally-listed species and critical habitat. During this period, the public may also review this information. The waiting period begins after EPA posts the operator's NOI on the eNOI website (www.epa.gov/npdes/eNOI). The duration of the waiting period depends on when the operator commenced or proposes to commence discharging. For example, if the operator is an existing discharger who was in operation as of October 30, 2005 and authorized for coverage under the MSGP 2000, the waiting period is 30 days. New dischargers who are commencing discharge after January 5, 2009, have a 60-day waiting period, except for those dischargers who agree to post a link to their SWPPP, in which case the waiting period is 30 days in duration. However, if the new discharger commenced discharging between October 30, 2005 and January 5, 2009, the waiting period is 30 days. Existing dischargers are given automatic extension of coverage under the MSGP 2000 until January 5, 2009 or until they have been granted coverage under this or an alternative general permit.

Operators are authorized to commence discharging after the end of the waiting period unless EPA notifies the operator of a delay in such authorization. In these instances, operators are not authorized to discharge until EPA notifies the operator that they are authorized. In some instances, the operator may be required to implement additional controls before the Agency will authorize such discharge.

Electronic Systems for Submittal of NOIs, Location of Receiving Waters, and Reporting Monitoring Data

EPA is launching an updated electronic system for submitting NOIs. (Note that an electronic NOI system was available to new dischargers seeking authorization to discharge under the MSGP 2000 for the last several months of the permit term.) Previously, all dischargers were required to submit NOIs in paper form. This "eNOI" system is available to all operators. The system provides operators with a user-friendly tool for completing NOIs quickly and more accurately and should expedite operators' coverage under the permit. EPA encourages all operators to use this eNOI system. EPA will notify permittees when authorized to discharge and of their specific monitoring requirements. Permittees using eNOI will be notified via e-mail; permittees submitting paper NOI forms will be informed via U.S. mail.

EPA has added a new web-based tool, the Water Locator, that will help operators determine their latitude and longitude, their receiving water, applicable total maximum daily loads (TMDLs), and potential pollutants of concern (i.e., those for which there are specific water quality criteria in the receiving water, and those for which a receiving water is impaired). The Water Locator can be accessed at www.epa.gov/npdes/stormwater/msgp. In addition, permittees will now be able to report all monitoring data electronically through the eNOI system. This system for electronic reporting will be available within 6 months of the permit effective date. All electronic reporting will be through EPA's on-line eNOI system, available at www.epa.gov/npdes/eNOI. EPA is delaying monitoring requirements in the permit for six months to ensure that the electronic reporting system is operational when monitoring begins.

Information Required for NOIs

This permit revises the information required in NOIs to provide EPA with adequate information to determine eligibility, to determine whether additional water quality-based requirements are necessary, and to enable EPA to inform the operator of its specific monitoring requirements (including identifying facilities that are inactive and unstaffed which are not required to monitor). Operators now need to include more specific information regarding classification of the receiving water into which they discharge and information about any impairments and TMDLs specific to that waterbody. The operator must also include basic information to allow the Agency to determine applicability of effluent limits and clarification of the basis for eligibility under certain criteria related to protection of threatened and endangered species and critical habitat.

Water Quality-Based Effluent Limits

EPA 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 and Tribal antidegradation policies. EPA 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:

- Discharges to Impaired Waters – 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 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 applicable EPA Region 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, EPA 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 conduct routine monitoring for the pollutants for which the waterbody is impaired.

- **Antidegradation Requirements** – EPA has clarified its expectation of operators to meet antidegradation requirements as part of the permit authorization process as well as to comply with these provisions after authorization to discharge is received. If an NOI indicates that an operator is seeking coverage for a new discharge to a Tier 2 or Tier 2.5 water, EPA will determine if additional requirements are necessary to be consistent with the applicable antidegradation requirements, or if alternatively, an individual permit application is necessary. Furthermore, new dischargers are no longer eligible for coverage under this permit for discharges to waters designated by a State or Tribe as Tier 3 for antidegradation purposes.

Protection of Endangered Species

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 have been made to the directions provided to operators in Appendix E regarding steps that must be followed to properly certify eligibility under Part 1.1.4.5 (Endangered and Threatened Species and Critical Habitat Protection) and more specifically to certify eligibility under Criterion E. 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. EPA revised the ammonia benchmark 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.

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 (as included in the proposed permit) 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.

Protection of Historic Properties

EPA has modified this permit's eligibility provisions relating to the protection of historic properties following discussions with the Advisory Council on Historic Preservation. In general, EPA does not anticipate effects on historic properties from the pollutants in stormwater and allowable non-stormwater discharges from industrial facilities covered under this permit. Notwithstanding this expectation, there could be potential impacts on historic properties where compliance with this permit requires the construction and/or installation of stormwater control measures that involve subsurface disturbance and impact less than 1 acre of land. (Ground disturbances of 1 acre or more require coverage under a different permit, the Construction General Permit.) For this reason, Appendix F and the eligibility provisions have been revised so that if the operator is establishing new or altering existing control measures to manage its stormwater that will involve subsurface ground disturbance of less than 1 acre, the operator will need to (1) ensure that historic properties will not be impacted by the activities or (2) consult, with the State Historic Preservation Office (SHPO) or Tribal Historic Preservation Office (THPO) regarding measures to mitigate or prevent any adverse effects on historic properties. The permit does provide that if the operator contacts the State Historic Preservation Officer or Tribal Historic Preservation Officer, or other tribal representative and EPA in writing informing them of the potential to have an effect on historic properties and no response is received within 30 days, the operator has met its eligibility criteria for historic property preservation. Additional discussion on this approach is provided in Section XIV.F. of this fact sheet.

Corrective Actions

The MSGP 2000 required certain "follow-up actions" (e.g., see Part 4.9.3 of MSGP 2000) to modify the SWPPP document or BMPs to correct identified problems. This new MSGP strengthens the corrective actions required, including establishing two tiers of actions based on the condition identified. EPA modified the permit to devote considerably more attention to corrective actions required of permittees. 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. The permit also clarifies that not conducting required corrective action is a permit violation in and of itself, in addition to any underlying violation that may have triggered the initial requirement for corrective action. (Note: Not all conditions triggering corrective action review are permit violations, but even where the triggering event is not itself a permit violation, failing to conduct required corrective action is.) A summary of all corrective actions initiated and/or completed each year must be reported to EPA in the annual comprehensive site inspection report and kept with the SWPPP.

Monitoring

A number of significant changes were made to the monitoring provisions as compared to the MSGP 2000. Several of these changes are listed below. For a more detailed discussion of each of these changes, see Section X.B.1 of the fact sheet.

- 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.

- Unless subject to a waiver, or an alternative schedule for climates with irregular stormwater runoff, benchmark monitoring must occur during the first 4 full quarters of permit coverage commencing no earlier than April 1, 2009. Following 4 quarters of benchmark monitoring, if the average of the 4 monitoring values does not exceed the benchmark for that specific parameter, the permittee has fulfilled his/her monitoring requirements for that parameter for the permit term. If the average of the 4 quarters of monitoring values exceeds the benchmark, the permittee is required to either:
 1. perform corrective actions, and conduct an additional 4 quarters of monitoring until the average value is below the benchmark, or
 2. determine that no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice to meet applicable effluent limits, and continue to monitor once-per-year. If such a determination is made, the permittee may reduce monitoring for that pollutant to once per year for the duration of the permit term.

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. Monitoring may also be waived if the permittee documents that the presence of a pollutant of concern in its discharge is attributable to natural background pollutant levels, and not to the activities of the permittee. If a TMDL has been completed for the waterbody to which the permittee discharges, EPA will determine what monitoring is required and notify the discharger of the applicable pollutants and sampling frequencies.
- Follow-up monitoring requirements have been added when results indicate a permittee's discharge exceeds a numeric effluent limitation, to verify that control measures have been modified to control the discharge as necessary to meet the effluent limit. If the follow-up monitoring also exceeds the limit, the permittee must report to EPA within 30 days of receiving the analytical data.
- Manganese was removed as a benchmark monitoring parameter for Waste Rock and Overburden Piles from Active Ore Mining or Dressing Facilities under Sector G – Metal Mining (Ore Mining and Dressing).
- 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.

- EPA has added provisions enabling dischargers to eliminate corrective action and subsequent monitoring requirements if the exceedance of benchmarks is attributable solely to natural background levels of that pollutant. To use this provision, the discharger must: (1) have benchmark results that show pollutant levels are less than or equal to the concentration of that pollutant in the natural background; (2) document the supporting rationale for concluding that benchmark exceedances are attributable solely to natural background pollutant levels; and (3) notify EPA in the final quarterly benchmark monitoring report that benchmark exceedances are attributable solely to natural background pollutant levels.

Annual Report

Permittees are required to submit to EPA an annual report that includes the findings from their annual comprehensive site inspection report and a report detailing any conditions triggering corrective action and the status of those actions taken in response. EPA is providing a form that each permittee can use in filing its annual report. See Appendix I of the MSGP. This change was made to enhance accountability by requiring that all permittees report to EPA at least annually, thus allowing EPA to confirm that required annual inspections and corrective actions have been performed. EPA incorporated this annual reporting requirement as a substitute for its approach in the 2005 draft MSGP to require all facilities to monitor and report total suspended solids (TSS) as a measure of overall control of stormwater. The Agency believes results from the annual comprehensive site inspection and information on corrective actions will provide a better basis on which to judge permittee performance.

Industry Sector-specific Requirements

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

- For many sectors, general requirements to address pollutant discharges from material handling areas, fueling areas, etc. were pulled out of the sector-specific requirements and consolidated in the technology-based effluent limits in Part 2.1 that are applicable to all sectors. Requirements that remain are specified as additional, sector-specific effluent limits, SWPPP requirements, and/or inspection requirements.
- Sector G, Metal Mining – Metal Mining requirements have been revised. The permit enables operators to include coverage for construction and exploration activities under this permit where in the past those activities were required to be covered separately under the Construction General Permit (CGP). To facilitate such coverage, additional requirements have been added regarding contaminated seeps and springs discharging from waste rock dumps; final stabilization; management, inspection, maintenance, and cessation of clearing, grading, and excavation activities; site map preparation; and monitoring frequency. These new requirements largely mirror those in the CGP for these activities. The scope of coverage has also been clarified, and the requirements of the routine inspection and visual assessment waivers for inactive and unstaffed sites were modified.
- Sector H, Coal Mining – As with Sector G above, the permit now specifically enables operators to include coverage for construction and exploration activities under this permit

where in the past those activities were required to be covered separately under the CGP. Parallel requirements to those for Sector G have been added, including modified waiver language for benchmark monitoring for inactive and unstaffed sites.

- Sector J, Mineral Mining and Dressing – As with Sectors G and H above, the permit now specifically enables operators to include coverage for construction and exploration activities under this permit where in the past those activities were required to be covered separately under the Construction General Permit. Parallel requirements to those for Sectors G and H have been added, including modified waiver language for benchmark monitoring for inactive and unstaffed sites.
- Sector P, Land Transportation – Text has been added to include illicit plumbing connections among the potential pollutant sources addressed, and a requirement has been added to document specific good housekeeping control measures used in each of the facility areas.
- Sector S, Air Transportation – Requirements have been added emphasizing control measures, facility inspections, good housekeeping, vehicle and equipment washwater, and monitoring during the deicing season and for implementing controls to collect or contain contaminated melt water from collection areas used for disposal of contaminated snow.

III. Geographic Coverage of this Permit

This permit provides coverage for classes of point source discharges that occur in areas not covered by an approved State NPDES program. EPA notes that unlike the MSGP 2000, facilities located in Regions 4 and 8 are not covered by this permit. The State of Maine is also no longer covered by this permit, as the State now administers the program for Tribal areas that was previously overseen by EPA. The areas of geographic coverage of this permit are listed in Appendix C, and include the States of New Hampshire, Massachusetts, New Mexico, Alaska, and Idaho as well as all Indian Country lands, and federal facilities in selected states. Permit coverage is also provided in Puerto Rico, the District of Columbia, and the Pacific Island territories.

IV. Categories of Facilities Covered by Final MSGP

This permit is available for stormwater discharges from the following 29 sectors of industrial activity (Sector A – Sector AC), as well as any discharge not covered under the 29 sectors (Sector AD) that has been identified by EPA as appropriate for coverage. The sector descriptions are based on Standard Industrial Classification (SIC) Codes and Industrial Activity Codes consistent with the definition of stormwater discharge associated with industrial activity at 40 CFR 122.26(b)(14)(i-ix, xi). See Appendix D in this permit for specific information on each sector. The sectors are listed below:

Sector A – Timber Products	Sector P – Land Transportation
Sector B – Paper and Allied Products Manufacturing	Sector Q – Water Transportation
Sector C – Chemical and Allied Products Manufacturing	Sector R – Ship and Boat Building or Repairing Yards
Sector D – Asphalt Paving and Roofing Materials Manufactures and Lubricant Manufacturers	Sector S – Air Transportation Facilities
Sector E – Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing	Sector T – Treatment Works
Sector F – Primary Metals	Sector U – Food and Kindred Products
Sector G – Metal Mining (Ore Mining and Dressing)	Sector V – Textile Mills, Apparel, and other Fabric Products Manufacturing
Sector H – Coal Mines and Coal Mining-Related Facilities	Sector W – Furniture and Fixtures
Sector I – Oil and Gas Extraction and Refining	Sector X – Printing and Publishing
Sector J – Mineral Mining and Dressing	Sector Y – Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries
Sector K – Hazardous Waste Treatment Storage or Disposal	Sector Z – Leather Tanning and Finishing
Sector L – Landfills and Land Application Sites	Sector AA – Fabricated Metal Products
Sector M – Automobile Salvage Yards	Sector AB – Transportation Equipment, Industrial or Commercial Machinery
Sector N – Scrap Recycling Facilities	Sector AC – Electronic, Electrical, Photographic and Optical Goods
Sector O – Steam Electric Generating Facilities	Sector AD – Reserved for Facilities Not Covered Under Other Sectors and Designated by the Director

V. Coverage under this Permit

V.A. Eligibility (Part 1.1)

As with previous permits, to be eligible for coverage under this permit, operators of industrial facilities must meet the eligibility provisions described in Part 1.1 of the permit. If they do not meet the eligibility requirement, discharges of stormwater associated with industrial activity that require permit coverage will be in violation of the CWA, unless the operator has obtained coverage under another permit.

V.A.1. Allowable Stormwater Discharges (Part 1.1.2).

Part 1.1.2 specifies which stormwater discharges are eligible for coverage under the permit. As described in section V.A.3 of this fact sheet, not all stormwater discharges associated with industrial activity are eligible for coverage under this permit (e.g., stormwater discharges regulated by certain national effluent limitations guidelines).

- *Purpose:* This provision lists the type of stormwater discharges eligible for coverage under the permit. Dischargers should use this section to determine which stormwater discharges from their site can be covered under the MSGP. For example, Part 1.1.2.3 specifies that discharges that are not otherwise required to obtain NPDES permit authorization, but are commingled with discharges that are authorized under this permit (e.g., under-drain water combining groundwater and surface water subject to this permit), are eligible for coverage under this permit.

- *Comparison to MSGP 2000:* The following changes were made from the MSGP 2000:
 1. Part 1.1.2.1 clarifies that co-located activities are eligible for coverage in addition to the primary industrial activity; and
 2. Part 1.1.2.5 consolidates language from another section of the MSGP 2000 (i.e., Part 1.2.4.1) which addressed relevant requirements for discharges subject to new source performance standards.

EPA considers these changes to be clarifications of existing regulatory authority of past permit provisions. In addition, Part 1.2.2.1.2 from MSGP 2000 was deleted as it was duplicative of 1.2.2.2 with the language from 1.2.2.2 retained in this permit in Part 1.1.3.

- *Changes from the Proposed Permit:* In addition to editorial changes to clarify permit language, the following changes were made from the proposed permit:
 1. Part 1.1.2.1 was modified to clarify that co-located activities are eligible for coverage, which entailed moving a similar provision from proposed Part 1.2.1.
 2. Table 1-1 was modified to include the new source date to assist permittees in determining whether 40 CFR Part 6 National Environmental Policy Act (NEPA) requirements apply to their discharges. EPA referenced the September 28, 2006 EPA memo, entitled, “*New Source Dates for Direct and Indirect Dischargers*” as signed by Linda Boornazian and Mary Smith and available on the EPA website at www.epa.gov/npdes.

V.A.2 Allowable Non-Stormwater Discharges (Part 1.1.3).

This provision lists the non-stormwater discharges authorized under the permit.

- *Purpose:* To specify which non-stormwater discharges are covered under the permit as exceptions to the general exclusion of non-stormwater discharge from eligibility. To be authorized under this permit, any sources of non-stormwater (except flows from fire fighting activities) must be identified in the SWPPP.
- *Comparison to MSGP 2000:* No noteworthy changes were made to the comparable MSGP 2000 list.
- *Changes from Proposed Permit:* No noteworthy changes were made to the list in the proposed permit.

V.A.3 Limitations on Coverage (Part 1.1.4).

For this permit, EPA modified the eligibility requirements for many of the criteria in this section. The rationale for these changes and for limitations on coverage under this permit is described below.

Discharges Mixed with Non-Stormwater (Part 1.1.4.1). The MSGP does not authorize stormwater discharges that are mixed with non-stormwater other than those non-stormwater discharges listed in Part 1.1.3.

- *Purpose:* In the 1995 MSGP, EPA explained that the prohibition on mixed stormwater and non-stormwater discharges further ensures that non-stormwater discharges (except

for those classes of non-stormwater discharges that are specifically authorized by the permit) are not authorized by this permit. Where a stormwater discharge is mixed with non-stormwater that is not authorized by the MSGP or another NPDES permit, the operator must submit the appropriate application forms to obtain authorization to discharge the non-stormwater portion of the discharge.

- *Comparison to MSGP 2000:* Substantially similar language was included in the MSGP 2000 (see Part 1.2.3.1 of the MSGP 2000).
- *Changes from Proposed Permit:* No significant modifications were made to the proposed provision.

Stormwater Discharges Associated with Construction Activity (Part 1.1.4.2). This permit does not apply to stormwater discharges associated with construction activity, defined in 40 CFR 122.26(b)(14)(x) and (b)(15), unless it is in conjunction with mining or oil and gas activities, where the applicable sector-specific requirements for construction stormwater discharges as specified in sectors G, H, I and J are met. The exception to this provision is that discharges from land disturbances less than one (1) acre in size are covered by this permit consistent with Part 1.1.2.3 of the permit for discharges not otherwise required to obtain permit coverage but that are commingled with discharges that are authorized under this permit.

- *Purpose:* The exclusion of coverage for construction stormwater discharges recognizes the distinction that has been made between construction and other types of stormwater discharges associated with industrial activity. The exception to this provision for sectors G, H, I, and J acknowledges that many of the industrial activities associated with mining and oil and gas extraction are similar to construction activities and adding construction activities for these sectors establishes a more streamlined approach for operators preferring to be covered by one permit, instead of two.
- *Comparison to MSGP 2000:* With the exception of the new language addressing sectors G, H, I, and J, the MSGP 2000 contained a provision substantially similar to the one now appearing in Part 1.1.4.2.
- *Changes from Proposed Permit:* Based on comments received, EPA added Sectors H and I to this provision to account for the fact that these two sectors have construction activities which are substantially similar and integrated into the other industrial activities, similar to activities in Sectors G and J.

Discharges Currently or Previously Covered by Another Permit (Part 1.1.4.3). This section of the MSGP describes situations where an operator is ineligible for coverage under this permit because of coverage under another permit. These include operators covered by a permit within the past five years prior to the effective date of this permit, which established site-specific numeric water quality-based limitations developed for the stormwater component of the discharge; or operators with discharges from facilities where the associated NPDES permit has been or is in the process of being denied, terminated, or revoked by EPA, although this last provision does not apply to the routine reissuance of permits every five years.

- *Purpose:* The 1995 MSGP contained general prohibitions on coverage where a discharge was covered by another NPDES permit and where a permit had been terminated other than at the request of the permittee. It was possible to obtain coverage by requesting termination of an individual permit and then submitting an NOI for coverage under the

MSGP. To avoid conflict with the anti-backsliding provisions of the CWA, transfer from an individual permit to the MSGP was only allowed under limited conditions, including that the individual permit did not contain numeric water quality-based effluent limits. Where a transfer was permissible, EPA believed that compliance with all the conditions of the MSGP was at least as stringent as meeting the conditions of an individual permit.

- *Comparison to MSGP 2000:* The provision in this permit is substantially similar to the one in the MSGP 2000, with two exceptions:
 1. EPA deleted language that was in MSGP 2000 which required an operator covered under the MSGP to include in the SWPPP any sector-specific BMPs specifically required in any previous individual permit issued to that same facility. EPA concluded this language was unnecessary given the structural modifications made to the permit related to effluent limits and SWPPP requirements; and
 2. EPA added language that provides that EPA, in certain instances, may specifically allow a facility to be covered under this permit even though one of the three identified criteria is not met. This second point acknowledges the fact that EPA may perform a detailed analysis and determine that for a specific facility, coverage under this permit is appropriate (e.g., does not backslide from previous permit requirements).
- *Changes from Proposed Permit:* In the proposed permit, EPA had revised the language from the MSGP 2000 (referenced above) to make operators ineligible if they were previously covered by an individual permit or alternative general permit and fail to implement control measures that provide equal or better pollution prevention or pollutant removal to that required by the previous permit. EPA concluded that it was unnecessary to retain this part of the provision given that this permit already requires the installation and implementation of control measures that provide a similar level of protection (i.e., control measures that minimize pollutant discharges, as well as more stringent measures where necessary to meet water quality standards and any TMDL-related requirements). Also, EPA added item (2) allowing EPA to allow a facility coverage under this permit in certain instances for the reasons described above.

Discharges Subject to Effluent Limitations Guidelines (Part 1.1.4.4). Discharges subject to stormwater-specific effluent limitations guidelines that are eligible for coverage under this permit are listed in Table 6-1. All other stormwater and non-stormwater discharges subject to effluent limitation guidelines must be covered under any applicable alternate general permit or an individual permit.

- *Purpose:* This provision ensures that discharges subject to Federal effluent limitations guidelines comply with all relevant limits.
- *Comparison to MSGP 2000:* The final permit's language is substantially similar to the MSGP 2000, except that the effluent limits for coal pile runoff have been limited to steam electric generating facilities (Sector O). This was done for consistency with the original effluent limitations rulemaking which established these limits, which was only applicable to this industrial category. EPA also moved language regarding the National Environmental Policy Act (NEPA) compliance from the section addressing limitations on coverage to the section dealing with allowable stormwater discharges to clarify that these

discharges are eligible for coverage under this permit provided certain procedures are taken to demonstrate consistency with NEPA requirements.

- *Changes from Proposed Permit:* This section is substantially similar to the proposed permit.

Endangered and Threatened Species and Critical Habitat Protection (Part 1.1.4.5). The Endangered Species Act (ESA) of 1973 requires all Federal Agencies to ensure, in consultation with the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) (the “Services”), that any Federal action carried out by the Agency is not likely to jeopardize the continued existence of any species that is federally-listed as endangered or threatened (“listed”), or result in the adverse modification or destruction of habitat of such species that is Federally-designated as critical (“critical habitat”). See 16 U.S.C. 1536(a)(2), 50 CFR 402 and 40 CFR 122.49(c). After consultation with the Services, EPA has determined that issuance of the MSGP is not likely to adversely affect federally-listed threatened or endangered species and federally-designated critical habitat.

To further ensure consistency with this determination, Part 1.1.4.5 requires the operator to determine that he/she is eligible for permit coverage under one of six criteria (A - F). The criteria are summarized as follows:

- A. There are no listed species or critical habitat in proximity to the facility.
- B. Consultation between a Federal agency and the Fish and Wildlife Service and/or the National Marine Fisheries Service (together, the “Services”) under section 7 of the ESA has been concluded, and this consultation addressed the effects of the facility’s stormwater discharges on listed species and their critical habitat.
- C. The activities are authorized by a permit issued under Section 10 of the ESA, and that authorization addresses the effects of the stormwater and allowable non-stormwater discharges and discharge-related activities on listed species and critical habitat.
- D. The operator has coordinated with the appropriate Service (generally FWS for freshwater species and NMFS for marine species) and obtained a written statement from the Service concluding that authorizing its stormwater discharges, discharge-related activities, and allowable non-stormwater discharges is consistent with the determination that the issuance of the MSGP is not likely to adversely affect federally-listed threatened or endangered species and federally-designated critical habitat.
- E. The operator has concluded that authorizing its stormwater discharges associated with industrial activity, discharge-related activities, and allowable non-stormwater discharges is consistent with the determination that the issuance of the MSGP is not likely to adversely affect any federally-listed species or designated critical habitat. To support this conclusion, certain documentation is required. Existing dischargers must include with their NOI the following information: 1) identification of the pollutant parameters that have been discharged in excess of benchmarks, applicable effluent limitations, or water quality standards; 2) a list of endangered species or critical habitat in the facility’s proximity; and 3) the rationale for concluding that the discharges and discharge-related activities will not adversely affect listed species or critical habitat, including any control measures

implemented to avoid adverse effects. New dischargers will not have historical data to submit for item 1 above, but must submit a list of potential pollutants in their discharge, along with the information required in items 2 and 3 above. This information will enable EPA, the Services and other interested parties to better determine whether operators have properly followed the procedures to ensure that listed species and critical habitat are not adversely impacted.

- F. The stormwater and allowable non-stormwater discharges and discharge-related activities were already addressed in another operator's certification of eligibility under Criteria A – E above, provided both facilities' activities and sites are addressed. By certifying eligibility under this Part, an operator agrees to comply with any measures or controls upon which the other operator's certification was based. Criterion F, while not likely to be widely used, is meant for situations such as airports where one operator (e.g., the airport authority) has covered the entire airport through its certification. Using this example, individual airlines, which may need separate coverage under this permit if they are responsible for some aspect of stormwater management, could then use Criterion F if their discharges and activities have already been addressed in the airport authority's certification.
- *Purpose:* EPA's issuance of this permit is an action subject to Endangered Species Act Section 7 consultation in that it may affect listed species or critical habitat. EPA's consultation obligations are described further in the final Memorandum of Agreement (MOA) between EPA and the Services (see 66 Fed. Reg. 11216-11217, February 22, 2001).

The FWS and NMFS are the Federal agencies responsible for administration of the Endangered Species Act (ESA) and as such are responsible for maintaining a list of protected species and critical habitat. Once listed as endangered or threatened, a species is afforded the full range of protections available under the ESA, including prohibitions on killing, harming or otherwise taking a species. In certain instances, the FWS or NMFS may establish a critical habitat for a threatened or endangered species as a means to further protect those species. Critical habitats are areas determined to be essential for the conservation of a species and may not necessarily be in an area currently occupied by the species. Some, but not all, listed species have designated critical habitat. Exact locations of such critical habitat are provided in the Services regulations at 50 CFR Parts 17 and 226.

- *Comparison to MSGP 2000:* The eligibility criteria relating to endangered and threatened species protection are similar to the corresponding provisions in the MSGP 2000. To be eligible for coverage under MSGP 2000, the permittee also had to certify compliance with one of the six criteria (A-F). However, in this permit, EPA has strengthened the documentation requirements for Criterion E. Because certification under this criterion assumes the presence of listed species or critical habitat in the vicinity of the facility (otherwise the permittee would certify under Criterion A) and because it is based on a determination by the operator, with no involvement from the Services, EPA believes it is important that operators document in their NOI the listed species, pollutants of concern, and scientific basis for their certification. This will assist the operator, EPA, the Services, and any outside parties who review the NOI in ensuring that the discharges and activities will not adversely affect listed species and critical habitat.

- *Changes from the Proposed Permit:* A minor change was made to move the criteria from Appendix E to Part 1.1.4.5.

In addition, as a result of EPA's consultation with the Services, a number of modifications were made to the description of steps in Appendix E for properly certifying eligibility. The enhanced description provides more complete guidance to the operator on preparing this certification. If the operator is certifying eligibility under Criterion E, he/she must also include information in the NOI to support his/her determination as described above.

Historic Properties Preservation (Part 1.1.4.6) Coverage under this permit is available only if the operator certifies to one of the eligibility criteria related to compliance with the National Historic Preservation Act (NHPA). To be eligible for coverage under this permit, an operator must meet one or more of the four criteria (A-D) detailed in Appendix F. The operator must certify in their NOI which criterion was met prior to submitting their NOI.

- *Purpose:* Section 106 of the NHPA requires Federal agencies to take into account the effects of Federal "undertakings" on historic properties that are either listed on, or eligible for listing on, the National Register of Historic Places. The term Federal "undertaking" is defined in the NHPA regulations to include a project, activity, or program of a Federal agency including those carried out by or on behalf of a Federal agency, those carried out with Federal financial assistance, and those requiring a Federal permit, license or approval. See 36 CFR 800.16(y). Historic properties are defined in the NHPA regulations to include prehistoric or historic districts, sites, buildings, structures, or objects that are included in, or are eligible for inclusion in, the National Register of Historic Places. This term includes artifacts, records, and remains that are related to and located within such properties. See 36 CFR 800.16(1).

EPA's issuance of this permit is a Federal undertaking within the meaning of the NHPA regulations. To address any issues relating to historic properties in connection with issuance of the permit, EPA has included criteria for operators to certify that potential impacts of their covered activities on historic properties have been appropriately considered and addressed. Although individual applications for coverage under the general permit do not constitute separate Federal undertakings, the screening criteria and certifications provide an appropriate site-specific means of addressing historic property issues in connection with EPA's issuance of the permit. Operators seeking coverage under the MSGP are thus required to make certain certifications regarding the potential effects of their stormwater discharge, allowable non-stormwater discharge, and discharge-related activities on properties listed or eligible for listing on the National Register of Historic Places.

EPA does not anticipate effects on historic properties from the pollutants in the stormwater discharges covered by this permit. Thus, to the extent EPA's issuance of this permit authorizes discharges of such constituents, confined to existing stormwater channels or natural drainage areas, the permitting action does not have the potential to cause effects on historic properties. In addition, the overwhelming majority of sources covered under this permit will be operators that are seeking renewal of previous permit coverage. These existing dischargers should have already addressed NHPA issues in the MSGP 2000 as they were required to certify that they were either not affecting historic properties or they had obtained written agreement from the applicable State Historic

Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO) regarding methods of mitigating potential impacts. EPA is not aware of any impacts on historic properties under the 2000 MSGP, or, for that matter, any need for a written agreement. Therefore, to the extent this permit authorizes renewal of prior coverage without relevant changes in operation, it has no potential to affect historic properties.

However, operators could undertake activities in connection with this permit that might affect historic properties if they install new control measures that involve subsurface disturbance. This is the only situation that EPA envisions where activities authorized in connection with this permit may affect historic properties. Since both new and existing dischargers could undertake such activities, both are required to follow the historic property screening process to document eligibility.

- *Comparison to MSGP 2000:* The wording of the eligibility provision is similar in most respects to the provision in the MSGP 2000. However, the underlying criteria and procedures used by the operator in determining its eligibility, as explained in Appendix F, have been significantly modified. The eligibility criteria were modified to better reflect and detail the few circumstances that EPA expects could result in a discharge or discharge-related activity affecting historic properties. For instance, because EPA views the installation of control measures which disturb less than 1 acre of total land area and involve some level of subsurface disturbance as the one activity that could foreseeably impact historic properties, criterion B has been modified to include an option for eligibility where such an activity will not affect historic properties. In addition, EPA recognizes that there may be circumstances where a permittee makes a good faith effort to reach agreement with a SHPO or THPO regarding appropriate measures to address potential impacts to historic properties but is unable to do so. EPA believes that failure to reach agreement in this situation would not necessarily disqualify the operator from seeking coverage under the MSGP. Rather, EPA would review such cases to determine what measures, if any, were appropriate to address potential impacts and incorporate such measures as site-specific permit conditions. EPA believes that the possibility of such an outcome was implicit in previous versions of the MSGP, but has addressed this scenario in Criterion C, which enables operators to indicate their inability to reach agreement with the applicable historic property authorities. EPA may then notify individual operators of their need to implement additional controls to become eligible for permit coverage. See Part 1.1.4.6 of the permit and Appendix F for the specific language used in the criteria and procedures to be used by operators in determining their eligibility, and refer to the related discussion of the changes made to this part of the permit in Section XIV.F of the fact sheet.
- *Changes from Proposed Permit:* This permit's eligibility criteria and procedures set forth in Appendix F are similar to the proposal.

New Discharges to Water Quality Impaired Waters (Part 1.1.4.7). Part 1.1.4.7 of this permit requires any new discharger to demonstrate its ability to comply with 40 CFR 122.4(i) (prohibiting the issuance of permits to new dischargers that will cause or contribute to the violation of water quality standards) prior to coverage under the permit. To satisfy the requirements of 40 CFR 122.4(i), an operator must (a) eliminate all exposure to stormwater of the pollutant(s) for which the waterbody is impaired, and document no exposure and retain such documentation with the SWPPP; or (b) demonstrate that the pollutant for which the waterbody is impaired is not present at the site, and retain documentation of this finding with the SWPPP; or

(c) submit data to the appropriate EPA Region documenting that the pollutant discharge will not cause or contribute to an excursion of water quality standards because the discharge will meet in-stream water quality standards at the point of discharge or because there are sufficient remaining wasteload allocations in an approved TMDL and the discharge is controlled at least as stringently as similar discharges subject to that TMDL.

- *Purpose:* Part 1.1.4.7, which applies to new dischargers and not to existing dischargers, is designed to comply with 40 CFR 122.4(i) requirements that address new discharges to waterbodies not meeting instream water quality standards.
- *Comparison to MSGP 2000:* This permit provides greater guidance for the potential permittees, explaining EPA’s approach for ensuring consistency with 40 CFR 122.4(i). In the MSGP 2000, the permit merely required compliance with 40 CFR 122.4(i), without providing further details on how this may occur. In this permit, EPA has included three specific ways in which a new discharger who is discharging to an impaired waterbody may be eligible for coverage under this permit, as discussed above.
- *Changes from Proposed Permit:* EPA specified what information a new discharger needs to provide the Region for a determination that the operator does not cause or contribute to an excursion of the water quality standards, and therefore be eligible for permit coverage. The provision also includes a new alternative for establishing eligibility where the discharger can show that the pollutant causing the impairment is not present at the site.

New Discharges to Waters Designated as Tier 3 for Antidegradation Purposes (Part 1.1.4.8). Coverage under this permit is not available to new dischargers who discharge to waters designated by a State or Tribe as Tier 3 (outstanding national resource waters or “ONRW”) for antidegradation purposes. Any such discharges must, therefore, apply for coverage under an individual permit.

- *Purpose:* The purpose of this provision is to make any new discharges to Tier 3 waters ineligible for general permit coverage. For background, State and Tribal water quality standards must include an antidegradation policy. In addition, each State and Tribe must identify implementation methods for their policy that, at a minimum, provide a level of protection that is consistent with the three-tiered approach of the Federal antidegradation provisions. See 40 CFR 131.12.

Tier 3 maintains and protects water quality in outstanding national resource waters (ONRWs). Waters designated as ONRWs by States and Tribes are generally the highest quality waters of the United States. However, the ONRW classification also offers special protection for waters of exceptional ecological significance, i.e., those that are important, unique, or sensitive ecologically, but do not necessarily have high water quality.

Except for certain temporary changes, water quality cannot be lowered in such waters. 40 CFR 131.12(a)(3). EPA expects few industrial stormwater discharges into ONRWs will be covered under an NPDES permit. For example, for the five primary states covered by this permit (Alaska, Idaho, Massachusetts, New Mexico, and New Hampshire), New Mexico is the only state with identified ONRWs. Specifically, ONRWs include (1) the Rio Santa Barbara (west, middle and east forks) within the Pecos Wilderness and (2) the surface waters within the United States Forest Service Valle Vidal Special Management Unit, including:

- Rio Costilla, Comanche Creek, La Cueva Creek, Fernandez Creek, Chuckwagon Creek, Little Costilla Creek, Holman Creek, Gold Creek, Grassy Creek, LaBelle Creek, Powderhouse Creek and Vidal Creek. (Rio Grande Watershed drainage); and
- Shuree lakes, Middle Ponil Creek, Greenwood Canyon, North Ponil Creek, McCrystal Creek, Seally Canyon Creek and Leandro Creek. (Canadian Watershed drainage).

EPA is not aware of any facilities covered by MSGP 2000 that discharge to these waters.

- *Comparison to MSGP 2000:* The antidegradation eligibility requirements of the MSGP 2000 simply stated that “you are not authorized for discharges that do not comply with your State or Tribe’s antidegradation policy for water quality standards.” This permit specifically reflects 40 CFR 131.12(a)(3) by indicating that any new or increased discharges to Tier 3 waters are ineligible for permit coverage.
- *Changes from Proposed Permit:* The proposed permit contained a version of the antidegradation eligibility requirement that was substantially similar to the provision in the MSGP 2000. Consistent with 40 CFR 131.12(a)(3), the final permit now prohibits any new dischargers discharging to Tier 3 waters from obtaining coverage under this permit.

EPA has determined that coverage under the MSGP for new discharges to Tier 3 waters is not consistent with Tier 3 antidegradation requirements. First, the time it would take a State and/or EPA to determine that such discharges would maintain and protect Tier 3 water quality would be better devoted to the issuance of an individual permit. Second, the one State or Tribe that has thus far designated Tier 3 waters within the scope of the MSGP’s coverage (i.e., New Mexico) has precluded coverage for all discharges under this general permit through its CWA § 401(c) certification. EPA believes that it is advisable to remove any doubt for any additional Tier 3 designations by other States or Tribes that may occur during this permit term by precluding such discharges from coverage under the permit.

The decision to make new discharges to waters designated as Tier 3 ineligible for coverage under the MSGP only applies to this permit. EPA reserves the right to take a new approach in subsequent permits depending on the types of discharges being covered and the ability of the general permit process to appropriately screen new discharges to Tier 3 waters.

The 122.4(i) requirements apply to both new discharges and increased discharges. Although EPA is not aware of any facilities covered by MSGP 2000 that discharge to ONRWs, should such a discharger exist, EPA expects that this discharger would notify EPA consistent with Appendix B, B.12.A requirements which specify that permittees are to notify EPA as soon as possible of any planned physical alterations or additions to the permitted facility when these could significantly change the nature or increase the quantity of pollutants discharged. As such, the eligibility provision is limited only to new dischargers.

Hazardous Substances. This permit’s eligibility provisions do not include language from the proposal relating to hazardous substances.

- *Purpose:* This provision would have made an operator ineligible if it had discharges of a hazardous substance or oil in excess of reportable quantities caused by a non-stormwater discharge (e.g., a spill of oil into a separate storm sewer).
- *Comparison to MSGP 2000:* The MSGP 2000 did not include a similar hazardous substances eligibility provision.
- *Changes from Proposed Permit:* This permit does not include the proposed eligibility provision on discharge of hazardous substances, but still includes relevant permit conditions that apply after facilities are authorized to discharge. Commenters were either opposed to this provision, because it appeared to authorize certain hazardous substance discharges, or were confused as to its meaning. EPA agrees, after further consideration, that the proposed criterion was confusing and was inappropriately included in the eligibility section of the MSGP. The main purpose behind including such language was to require permittees to comply with any applicable regulations for hazardous material spills or leaks. EPA agrees that the prevention and notification of spills and leaks is an issue to be dealt with in site management after the permittee is covered by the permit. Specific procedures are described in Part 2.1.2.4 of the permit. Failure to implement such controls and procedures would constitute a violation of the permit.

Wasteload Allocations. The eligibility provisions do not include language from the proposal relating to wasteload allocations (WLAs), which would have made an operator ineligible from coverage under the MSGP when a TMDL applies to the operator and specifically articulates a WLA requiring more stringent controls than required by this permit, or applies a WLA of zero (0) to its discharge.

- *Purpose:* EPA's intent in the proposed permit was to require operators subject to more stringent WLAs or WLAs of zero to file an application for an individual permit. As stated above, this condition has been removed. Several commenters objected to this provision, stating that an operator should be given the opportunity to modify its control measures where the TMDL is more stringent than the new MSGP, and thereby be eligible for coverage.
- *Comparison to MSGP 2000:* The MSGP 2000 included language making an operator ineligible whose discharge was subject to an approved or established TMDL, unless the discharge is consistent with that TMDL.
- *Changes from Proposed Permit:* The proposed eligibility condition was deleted. This change was made in response to several public comments questioning the need for this provision, and objecting to the fact that, as stated, the condition did not give the operator the opportunity to modify its control measures to meet the effluent limitations that would be consistent with the TMDL and thereby become eligible for coverage. Upon reexamination, EPA agrees with these commenters. EPA also believes that it is inappropriate to expect an operator to obtain a copy of an applicable TMDL document and then determine, based on the operator's reading of that TMDL, what additional control measures are necessary to be consistent with the assumptions of that TMDL. EPA has concluded that omitting this condition is justified in light of permit language in the NOI and Part 2.2.2 that now requires the operator to identify whether or not it discharges to a waterbody with a TMDL and then placing the burden on EPA to assess whether any more stringent requirements are necessary to comply with the WLA, or whether an individual permit may be necessary. By providing oversight in cases where a

WLA applies, this permit strengthens the corresponding provision in the MSGP 2000 and ensures that all permittees will implement control measures sufficient to meet WLAs in EPA approved or established TMDLs. See Part 2.2.2.1.

V.B. Permit Compliance (Part 1.2)

Part 1.2 explains that any failure to comply with the conditions of this permit constitutes a violation of the CWA. Where requirements and schedules for taking corrective actions are included, the time intervals are not grace periods, but are schedules considered reasonable for making repairs and improvements. For provisions specifying a time period to remedy noncompliance, the initial failure, such as a violation of a numeric or non-numeric effluent limit, constitutes a violation of the MSGP and the CWA, and subsequent failure to remedy such deficiencies within the specified time periods constitutes an independent, additional violation of this permit and CWA. However, where corrective action is triggered by an event, which does not itself constitute permit noncompliance, such as an exceedance of an applicable benchmark, there is no permit violation provided the permittee takes the required corrective action within the deadlines in Part 3.3.

- *Purpose:* Part 1.2 is intended to instruct the permittee of the ramifications for failure to comply with the conditions of the permit. Also applicable to all permittees is the standard NPDES permit condition for the “duty to comply”, included in Section B.1 of Appendix B.
- *Comparison to MSGP 2000:* Part 1.2 is a new provision, which was not previously included in prior versions of the MSGP.
- *Changes from Proposed Permit:* The final provision was modified slightly to clarify that corrective action timelines are not grace periods. This permit language is similar as that in Part 1.3 of the proposed permit.

V.C. Authorization Under This Permit (Part 1.3)

How to Obtain Authorization (Part 1.3.1). To obtain authorization under this permit, operators must be located in a State, territory, Indian Country, or Federal Facility identified in Appendix C where EPA is the permitting authority; meet the Part 1.1 eligibility requirements; select, design, install, and implement control measures in accordance with Part 2.1 to meet numeric and non-numeric effluent limits; submit a complete and accurate NOI according to the requirements in Appendix G; and develop a SWPPP according to the requirements of Part 5 of the permit. These requirements apply to operators previously covered by the MSGP 2000, as well as new facilities seeking coverage.

Part 1.3.1 specifies applicable deadlines for different categories of operators to submit NOIs to obtain permit coverage. As presented in Table 1-2, the following deadlines apply:

- Existing dischargers in operation as of October 30, 2005 and authorized for coverage under MSGP 2000: no later than January 5, 2009;
- New dischargers that commenced discharging between October 30, 2005 and January 5, 2009: as soon as possible but no later than January 5, 2009;

- New dischargers that commence discharging after January 5, 2009: A minimum of 60 days prior to commencing discharge, or a minimum of 30 days prior to discharging if your SWPPP is posted on the Internet during this period and the Internet address (i.e., URL) to your SWPPP is provided on the NOI form;
- New owners or operators of existing dischargers: A minimum of 30 days prior to the date that the transfer will take place to the new owner/operator; or
- Other eligible dischargers in operation prior to October 30, 2005 but not covered under MSGP 2000 or another NPDES permit: Immediately, to minimize the time discharges from the facility will continue to be unauthorized.

Part 1.3.1 also provides authorization dates for the different discharge categories of dischargers discussed above. These dates define the amount of time operators may have to wait after submittal of their NOI until their discharge is authorized under this permit. These “waiting periods” differ based on the different discharger categories used in Part 1.3.1. Table 1-2 stipulates the following discharge authorization dates:

- Existing dischargers in operation as of October 30, 2005 and authorized for coverage under MSGP 2000: 30 days after EPA posts the operator’s complete NOI on EPA’s website. (Note that the operator’s authorization under the MSGP 2000 is administratively continued until coverage under this or an alternative permit is granted, or a Notice of Termination is submitted);
- New dischargers that have commenced discharging between October 30, 2005 and January 5, 2009: 30 days after EPA posts the operator’s complete NOI on EPA’s website;
- New dischargers that commence discharging after January 5, 2009: If the operator posts its SWPPP on the Internet, 30 days after the NOI is posted on EPA’s website. Otherwise, 60 days after the NOI is posted on EPA’s website;
- New owners or operators of existing dischargers: 30 days after the NOI is posted on EPA’s website; or
- Other eligible dischargers in operation prior to October 30, 2005 not covered under MSGP 2000 or another NPDES permit: If the operator posts its SWPPP on the Internet, 30 days after the NOI is posted on EPA’s website. Otherwise, 60 days after the NOI is posted on EPA’s website.

Based on a review of the NOI or other information, EPA may delay the authorization of the operator’s discharge, or may deny coverage under this permit and require submission of an application for an individual NPDES permit

- *Purpose:* Part 1.3.1 explains the basis for operators to be covered under the permit and provides the deadlines for NOI submission and the minimum timeframes following NOI submission for discharge authorization. To be authorized to discharge, the operator must have met all the eligibility conditions, including but not limited to submitting an NOI; selecting, designing, and installing control measures as necessary to meet applicable effluent limits, and developing a SWPPP. Part 1.3.1 describes the different operator categories that are affected by the final permit and provides, in one table, information about deadlines for submitting NOIs and the applicable “waiting period” before authorization is effective.

One important purpose of the waiting period is to provide the FWS and NMFS (the Services) with an opportunity to review the proposed discharge for protection of threatened and endangered species and critical habitat consistent with the goals of ESA. Where one or both of the Services requests that they or EPA need to further explore whether or not a particular facility is eligible for permit coverage, EPA can delay authorization to allow such an assessment to take place. EPA may also use the waiting period to determine whether any more stringent requirements are necessary to meet applicable water quality standards, to be consistent with an applicable WLA, or to comply with State or Tribal antidegradation requirements.

Additionally, during this waiting period, the public has an opportunity to review the NOIs and request to review the SWPPPs. Anyone wishing to provide feedback to EPA can send information to the appropriate EPA Regional Office listed in Part 7.6 of the permit for consideration. EPA clarifies that this waiting period is not a formal permit public notice and comment period. EPA will consider any information provided to it during the waiting period but does not plan to provide formal responses to comments received. Where appropriate, EPA will address concerns raised, e.g., require the relevant industrial operator to make improvements to the control measures. Depending on the nature of the issue and the timing of the comments, EPA will require appropriate action either prior to or following discharge authorization. In addition, EPA may delay authorization if warranted, or may determine that the discharge is not eligible for authorization under this permit.

- *Comparison to MSGP 2000:*

NOI Deadlines: The deadlines for submitting NOIs have been modified for all discharge categories. Some of the changes can be attributed to the adoption of the eNOI system, and the incorporation of a “30-day waiting period” to accommodate review of the NOI by EPA and the Services.

The deadline for existing dischargers, as described above, was increased from 60 days from the effective date of the final MSGP 2000 to approximately 90 days for this permit. Also, the permit distinguishes between two categories of new dischargers, and provides distinct NOI deadlines depending on which category the discharger falls under. The first category of new discharger, those who will have commenced discharging between October 30, 2005 and January 5, 2009 (approximately 90 days after the date of permit issuance) are required to submit NOIs as soon as possible but no later than January 5, 2009. There was no counterpart in the MSGP 2000 for this category of new discharger. The second category, those dischargers that commence discharging after January 5, 2009 (i.e., more than approximately 90 days after the permit issuance date), which is similar to the “new discharger” of the MSGP 2000, are required to submit their NOIs to EPA either 60 days or 30 days in advance of commencing discharge, depending on whether they post a copy of their SWPPP on the Internet during the NOI review period. EPA intends to provide an incentive for new dischargers to provide electronic access to their initial SWPPP document by establishing a shorter waiting period for those that do. New dischargers in the MSGP 2000 were required to submit NOIs 2 days prior to commencing operation of the facility.

In this permit, the NOI deadline for new owners or operators of existing discharges is at least 30 days prior to the transfer of ownership or operational control,

compared to a deadline of within 2 days of assuming operational control of the facility in the MSGP 2000. This permit establishes a new category of dischargers that was not identified in the MSGP 2000, “other eligible dischargers not covered under MSGP 2000 or another NPDES permit”, which include facilities for which coverage under a general permit for stormwater discharges has lapsed or for which no prior permit coverage had been obtained despite ongoing stormwater discharges. Such “other eligible dischargers” are required to submit their NOIs “immediately, to minimize the time discharges from the facility will continue to be unauthorized.”

In addition, unlike when the MSGP 2000 was issued, EPA’s electronic NOI system (eNOI) is now available for operators to file their NOIs. EPA strongly encourages all operators to use the eNOI system, using its step-by-step, electronic system. The eNOI system allows industrial operators to complete and submit the NOI form more quickly and more accurately, thereby allowing operators to be authorized to discharge sooner.

Discharge Authorization Date: Under the MSGP 2000, existing dischargers were given continued coverage under the MSGP 1995 for a period of 90 days while those dischargers obtained permit coverage. This permit allows for administrative continuance of the permit for existing dischargers until the new permit is issued and the existing discharger obtains coverage under the new permit or an alternative permit, or submits a Notice of Termination.

New dischargers under the MSGP 2000 were required to wait 2 days to be covered. In this permit, as mentioned, there are two different categories of new dischargers. For new dischargers that have commenced discharging between October 30, 2005 and January 5, 2009, authorization will begin 30 days after EPA posts the operator’s complete NOI on the website, unless further time is required by the Agency to consider the eligibility of the discharger. New dischargers that commence discharging after January 5, 2009 are provided coverage after 30 days if their SWPPP is posted on an Internet site accessible to the public, or 60 days without SWPPP posting on the Internet.

- *Changes from Proposed Permit:* The final permit modified the proposal in several ways, including the expansion of Table 1-2 to include both NOI submission deadlines and authorization timeframes.

NOI Deadlines: For existing and new dischargers, the proposed permit used the permit “effective date” to arrive at the NOI deadline, whereas this permit uses the “permit issuance date.” Although the effective date and the permit issuance date are the same for this permit, EPA determined that use of the permit issuance date is clearer. For new dischargers commencing discharge after January 5, 2009 (i.e., approximately 90 days after this permit is issued), the proposal required the NOI to be submitted 30 days prior to discharging, while this permit requires either 60 days or 30 days prior to discharging depending upon whether the operator chooses to post its SWPPP on a publicly accessible Internet page. This permit clarifies what was meant in the proposal by “existing dischargers without permit coverage” by rephrasing the description as “other eligible dischargers in operation prior to October 30, 2005 but covered under the MSGP 2000 or another NPDES permit.” The NOI deadlines for the former is approximately 90 days after the effective date of the permit, while for the latter, the deadline is immediate, to minimize unauthorized discharges.

Discharge Authorization Dates: The proposed permit generally provided that dischargers would need to wait 30 days after EPA posts the operator's NOI on the website before being authorized to discharge. EPA added in the 60-day waiting period for new and "other eligible" dischargers, and provided for the reduction to 30 days where an Internet link to the dischargers' SWPPP is included in their NOIs. EPA also inserted language into Table 1-2 addressing the time frames for existing dischargers covered by the MSGP 2000 under administrative continuance. Similar language (with different coverage durations) was included in the MSGP 2000 and in the proposal.

Continuation of this permit (Part 1.3.2). If this permit is not reissued or replaced (or revoked or terminated) prior to its expiration date, existing dischargers are covered under an administrative continuance, in accordance with 40 CFR § 122.26. If coverage is provided to a permittee prior to the expiration date of this permit, the permittee is authorized to discharge under this permit until the earliest of: (1) the authorization for coverage under a reissuance or replacement of this permit, following timely and appropriate submittal of a complete NOI; (2) submittal of a Notice of Termination; (3) issuance or denial of an individual permit for the permittee's discharges; or (4) a formal permit decision by EPA not to reissue this general permit, at which time EPA will identify a reasonable time period for covered dischargers to seek coverage under an alternative general permit or an individual permit.

- *Purpose:* Where EPA fails to issue a final general permit prior to the expiration of a previous general permit, EPA has the authority to administratively extend the permit for permittees authorized to discharge under the prior general permit. However, EPA does not have the authority to provide coverage to facilities not authorized to discharge under that prior general permit. EPA followed this approach for permittees covered under the MSGP 2000, which expired on October 30, 2005, to extend coverage for these permittees under a permit vehicle until the issuance of this permit.
- *Comparison to MSGP 2000:* The same provision is included in MSGP 2000 (see expired permit Part 9.2).
- *Changes from Proposed Permit:* No significant changes were made to Part 1.3.5 between the proposed and final permit.

V.D. Terminating Coverage (Part 1.4)

Submitting a Notice of Termination (Part 1.4.1). Part 1.4.1 indicates that permittees should use either the eNOI system or the paper form to file Notices of Termination. To terminate coverage under this permit, the permittee is required under the permit to submit a Notice of Termination in accordance with Appendix H. The permittee's authorization to discharge under the permit terminates at midnight of the day that a complete Notice of Termination is processed and posted on EPA's website (www.epa.gov/npdes/noisearch).

- *Purpose:* EPA requires permittees to file a Notice of Termination to notify EPA that its obligation to manage industrial stormwater no longer is necessary for one of the EPA-approved reasons (as described in Part 1.4.2). Once a valid Notice of Termination is submitted, this permit no longer applies to stormwater discharges associated with industrial activities at the site. If EPA determines that the Notice of Termination is incomplete or the permittee has not satisfied one of the conditions in Part 1.4.2 for being

able to submit a Notice of Termination, then the notice is not valid; the permittee must continue to comply with the conditions of the permit.

- *Comparison to MSGP 2000:* The eNOI system did not exist when the MSGP 2000 was first issued. Part 1.4.1 reflects the advent of the eNOI system, and the fact that EPA intends to process Notices of Termination through that system. EPA will continue to make a paper Notice of Termination form available although the Agency strongly recommends use of the eNOI system to expedite the processing of these notices. The basic concept of the Notice of Termination is the same as in MSGP 2000 (i.e., permit coverage is no longer necessary).
- *Changes from Proposed Permit:* EPA modified the proposed language to clarify that if the Agency requires a permittee to obtain an individual or alternative general permit under Part 1.6.1, then the permittee is not required to submit a Notice of Termination. This change was made in response to a comment.

When to Submit a Notice of Termination (Part 1.4.2). Once a stormwater discharge associated with industrial activity is eliminated from a facility, the permittee must submit a Notice of Termination, as described in Part 1.4.1, within 30 days after one or more of the following conditions have been met: (1) a new owner or operator has assumed responsibility for the facility; (2) operations have ceased at the facility and there no longer are discharges of stormwater associated with industrial activity and necessary sediment and erosion controls have already been implemented at the facility as required by Part 2.1.2.5; (3) you are covered under one of the three mining-related sectors in the permit (i.e., Sectors G, H, and J) and you have met the specific termination requirements described in the specific sector under which you are covered; or (4) permit coverage has been obtained under an individual or alternative general permit for all discharges requiring NPDES permit coverage, either because EPA required you to obtain such coverage or you petitioned EPA requesting coverage under an alternative permit.

- *Purpose:* Part 1.4.2 specifies when and under what conditions a Notice of Termination must be filed.
- *Comparison to MSGP 2000:* This permit differs from the MSGP 2000 by providing two new conditions for permittees to be eligible to submit a Notice of Termination. These conditions are listed as (3) and (4), above. EPA added new language specific to mining activities to address the sector-specific termination requirements in Sectors G, H, and J. EPA also added condition number (4) to clarify a Notice of Termination for coverage under this permit must be filed when coverage is obtained under another permit. EPA added item (4) for administrative reasons as a way to confirm that coverage under this permit is no longer necessary. In some instances, facilities may want discharges eligible for coverage under this permit and other discharges not eligible for coverage under this permit both regulated under one permit. Similarly, EPA or others may have valid reasons for requesting that a facility covered under this permit be regulated under an individual permit. To confirm that no discharges need to continue to be covered under this permit, EPA is requiring these permittees to also submit a Notice of Termination.
- *Changes from Proposed Permit:* EPA added the termination criterion for mining activities described in Sectors G, H, and J as described above.

V.E. Conditional Exclusion for No Exposure (Part 1.5)

Part 1.5 states that after submittal of a No Exposure Certification, a permittee is no longer authorized by, nor required to comply with, the MSGP (including the Notice of Termination requirements). To be excluded from NPDES industrial stormwater requirements, the discharger must submit a No Exposure Certification once every five years. Operators are to file their No Exposure Certification using the eNOI system at www.epa.gov/npdes/stormwater/eNOI.

- *Purpose:* This provision allows permittees who become eligible for a no exposure exclusion from permitting under 40 CFR 122.26(g) to file a No Exposure Certification to EPA. For background, under the conditional no exposure exclusion, operators of industrial facilities have the opportunity to certify to a condition of "no exposure" if their industrial materials and operations are not exposed to stormwater. As long as the condition of "no exposure" exists at a certified facility, the operator is excluded from NPDES industrial stormwater permit requirements provided that the operator notifies the permitting authority at least every five years consistent with 40 CFR 122.26(g) requirements.
- *Comparison to MSGP 2000:* No significant changes were made to the MSGP 2000 provision (Part 1.4).
- *Changes from Proposed Permit:* In response to confusion over whether the certification must be renewed every permit term, EPA clarified in Part 1.5 that the No Exposure Certification must be submitted once every five years. Submission of these certifications do not have to correlate with issuance/reissuance dates of this MSGP (i.e., a strict five-year timeframe, starting on the day the certification is last submitted).

V.F. Alternative Permits (Part 1.6)

EPA Requiring Coverage Under an Alternative Permit (Part 1.6.1). EPA may require an individual permit (in accordance with 40 CFR 122.28(b)(3)(ii)) or coverage under an alternative NPDES general permit instead of the MSGP. These regulations also provide that any interested party may petition EPA to take such an action. The issuance of the individual permit or alternative NPDES general permit is in accordance with 40 CFR Part 124 and provides for public comment and appeal of any final permit decision. The circumstances in which such an action would be taken are set forth at 40 CFR 122.28(b)(3).

- *Purpose:* Part 1.6.2 clarifies that EPA may require any discharger covered under this general permit to apply for and obtain coverage under an individual permit. Similarly, any interested person may petition EPA requesting the same.
- *Comparison to MSGP 2000:* No significant changes were made to the MSGP 2000 provision (see Part 9.12.1).
- *Changes from Proposed Permit:* No significant modifications were made to the proposed provision. EPA emphasizes that where EPA requires the permittee to obtain coverage under an individual permit or alternative general permit, that permittee is not required to submit a Notice of Termination.

Permittee Requesting Coverage Under an Alternative Permit (Part 1.6.2). After being covered by this permit, the permittee may request to be excluded from such coverage by applying for an individual permit. In this case, the permittee must submit an individual permit application in

accordance with 40 CFR 122.28(b)(3)(iii), along with a statement of reasons supporting the request, to EPA at the applicable EPA Regional Office listed in Part 7.6 of this permit. The request may be granted by issuance of an individual permit or authorization of coverage under an alternative general permit if the reasons are adequate to support the request. Under this scenario, if an individual permit is issued, or authorization to discharge under an alternative general permit is granted, coverage under this permit is automatically terminated under 40 CFR 122.28(b)(3)(iv) on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit.

- *Purpose:* Part 1.6.2 reminds permittees of their ability to apply for coverage under an individual permit in lieu of coverage under this general permit and describes the steps they must take to exclude themselves from this permit after being authorized under this permit. Cases where an individual NPDES permit may be required, are described in 122.28(b)(3)(iii) and include the following:
 - (A) The discharger or “treatment works treating domestic sewage” is not in compliance with the conditions of the general NPDES permit;
 - (B) A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source or treatment works treating domestic sewage;
 - (C) Effluent limitation guidelines are promulgated for point sources covered by the general NPDES permit;
 - (D) A Water Quality Management plan containing requirements applicable to such point sources is approved;
 - (E) Circumstances have changed since the time of the request to be covered so that the discharger is no longer appropriately controlled under the general permit, or either a temporary or permanent reduction or elimination of the authorized discharge is necessary;
 - (F) Standards for sewage sludge use or disposal have been promulgated for the sludge use and disposal practice covered by the general NPDES permit; or
 - (G) The discharge(s) is a significant contributor of pollutants. In making this determination, the Director may consider the following factors:
 - (1) The location of the discharge with respect to waters of the United States;
 - (2) The size of the discharge;
 - (3) The quantity and nature of the pollutants discharged to waters of the United States; and
 - (4) Other relevant factors;

EPA may require a permittee to apply for an individual permit only if EPA notifies the owner or operator in writing that a permit application is required. This notice must include a brief statement of the reasons for this decision, an application form, a statement setting a time for the owner or operator to file the application, and a statement that on the effective date of the individual NPDES permit the general permit as it applies to the individual permittee shall automatically terminate. EPA may grant additional time upon request of the applicant.

When an individual NPDES permit is issued to an owner or operator otherwise subject to a general NPDES permit, the applicability of the general permit to the individual NPDES permittee is automatically terminated on the effective date of the individual permit.

- *Comparison to MSGP 2000:* No significant changes were made to the MSGP 2000 provision (see Part 9.12.2).
- *Changes from Proposed Permit:* No significant modifications were made to the proposed provision.

Termination of Coverage Under the MSGP (Part 1.6.3 – deleted). This provision was deleted in the final permit. The procedure to terminate permit coverage for cause is referenced from 40 CFR 122.64 and is provided in Part B.6 (in Appendix B) of the permit. Therefore, EPA determined that it was unnecessary to also include this language in this section.

Modification or Revocation and Reissuance (Part 1.6.4 – deleted). This provision was deleted in the final permit. The procedure to modify or revoke this permit for any reason is referenced from 40 CFR 122.62, 122.63, and 124.5 and is provided in Part B.6 (in Appendix B) of the permit. Therefore, EPA determined it was unnecessary to include this language in this section.

V.G. Severability (Part 1.7).

Invalidation of a portion of this permit does not necessarily render the whole permit invalid. EPA’s intent is that the permit remain in effect to the extent possible; in the event any part of this permit is invalidated, EPA will advise the regulated community as to the effect of such invalidation.

- *Purpose:* Part 1.7 provides a severability clause.
- *Comparison to MSGP 2000:* This clause was included in Part 9.11 of the MSGP 2000, and is substantially similar to the language used in the final permit. The language is based on 40 CFR 124.16(a)(2) and 124.60.
- *Changes from Proposed Permit:* This clause was not included in the proposed permit, but was included in the MSGP 2000 and is typically included in NPDES permits.

VI. Effluent Limits (Part 2)

VI.A. Control Measures and Technology-Based Effluent Limits – Definition of “Minimize” (Part 2)

This permit contains effluent limits that correspond to required levels of technology-based control (BPT, BCT, BAT) for various discharges under the CWA. Where an effluent limitation guideline or NSPS applies, the requirement must be incorporated into the permit as an effluent limitation. These limits are included as applicable in the sector-specific requirements of Part 8. Where EPA has not yet issued an effluent limitation guideline, EPA is to determine the appropriate technology-based level of control based on best professional judgment. CWA section 402(a)(1); 40 CFR § 125.6. Because of the nature of stormwater discharges, it is infeasible to use numeric effluent limits to demonstrate the appropriate levels of control. (Refer to more detailed discussion below under “EPA’s Authority To Include Non-Numeric

Technology-Based Effluent Limits In NPDES Permits” and “EPA’s Decision To Include Non-Numeric Technology-Based Effluent Limits In This Permit”.) In such situations, the CWA authorizes EPA to include non-numeric effluent limits in NPDES permits.⁴ The MSGP includes a number of such non-numeric effluent limits. Several of these require facilities to “minimize” various types of pollutant discharges. Consistent with the control level requirements of the CWA, EPA is clarifying in this permit that the term “minimize” means to reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically achievable (BAT) and practicable (BPT) in light of best industry practice. EPA has determined that the technology-based numeric and non-numeric effluent limits in this permit, taken as a whole, constitute BPT for all pollutants, BCT for conventional pollutants, and BAT for toxic and nonconventional pollutants that may be discharged in industrial stormwater.

- *Purpose:* This permit defines the term “minimize” to provide a clear definition as to what is required of the discharger under this permit. To meet the effluent limits that require the discharger to “minimize” pollutants,” permittees are required to select, design, install and implement control measures that reduce or eliminate discharges of pollutants in stormwater to the extent achievable. These control measures must reflect best industry practice considering their technological availability and economic practicability (BPT) and achievability (BAT). Because toxic and nonconventional pollutants are controlled in the first step by BPT and in the second step by BAT, and the second level of control is “increasingly stringent” {EPA v. National Crushed Stone, 449 U.S. 64, 69 (1980)}, for simplicity of discussion, the rest of this discussion will focus on BAT. Similarly, because the BAT levels of control are BMPs and pollution prevention measures, they will also control conventional pollutants. Therefore this discussion will focus on BAT rather than BCT or BPT for conventional pollutants. To determine technological availability and economic achievability, operators need to consider what control measures are considered “best” for their industry, and then select and design control measures for their site that are viable in terms of cost and technology. EPA believes that for many facilities minimization of pollutants in stormwater discharges can be achieved without using highly engineered, complex treatment systems. The specific limits included in Part 2.1 emphasize effective “low-tech” controls, such as minimizing exposure to stormwater (albeit, without significantly increasing impervious surfaces), regular cleaning of outdoor areas where industrial activities may take place, proper maintenance of equipment, diversion of stormwater around areas where pollutants may be picked up, minimization of runoff through infiltration and flow dissipation practices, and effective advanced planning and training (e.g., for spill prevention and response).
- *Comparison to MSGP 2000:* The MSGP 2000 did not provide a definition of “minimize”, though the term is used throughout the permit. For instance, when

⁴ *Natural Res. Def. Council, Inc. v. EPA*, 673 F.2d 400, 403 (D.C. Cir. 1982) (noting that "section 502(11) defines 'effluent limitation' as 'any restriction' on the amounts of pollutants discharged, not just a numerical restriction"; holding that section of CWA authorizing courts of appeals to review promulgation of "any effluent limitation or other limitation" did not confine the court's review to the EPA's establishment of numerical limitations on pollutant discharges, but instead authorized review of other limitations under the definition) (emphasis added). In *Natural Res. Def. Council, Inc. v. Costle*, 568 F.2d 1369 (D.C. Cir. 1977), the D.C. Circuit stressed that when numerical effluent limitations are infeasible, EPA may issue permits with conditions designed to reduce the level of effluent discharges to acceptable levels.

explaining how the permit's best management practices and traditional stormwater practices to prevent stormwater contamination, EPA indicated "the permit conditions applicable to these discharges are not numeric effluent limitations, but rather are flexible requirements for developing and implementing site specific plans to minimize and control pollutants in stormwater discharges associated with industrial activity." 65 Fed. Reg. 64759, October 30, 2000. The current MSGP is intended to clarify, rather than change, the meaning of "minimize" as used in MSGP 2000. The non-numeric effluent limits themselves also provide greater specificity as to what is required to minimize pollutant discharges.

- *Changes from Proposed Permit:* The proposed permit used similar language when describing the requirements for control measure selection to meet the effluent limits in the permit. For instance, Part 2 of the proposed permit stated that you "must include Best Management Practices (BMPs), economically reasonable and appropriate in light of current industry practices, that are selected, designed, installed, implemented and maintained in accordance with good engineering practices to eliminate or reduce all pollutants in your discharge, as well as any more stringent measures necessary to meet the water quality standards provisions..." In addition, the proposed fact sheet included the following discussion: "BMPs should be a suite of stormwater controls that are effective at pollution prevention and reduction AND are also economically reasonable and appropriate in light of current industry practice for your type of facility. 'Best' refers to cost-effective measures using controls appropriate for the situation that will result in the necessary pollutant reductions. Prevention measures, such as keeping areas clean, storing materials inside, and properly maintaining equipment will usually be sufficient." See Section 3.19 of the proposed fact sheet.

The revisions made to the proposed permit language were relatively minor and intended to further clarify the requirements. EPA included and defined the term "minimize" to establish greater consistency throughout the effluent limit section. The final permit uses the phrase "technologically and economically practicable and achievable" instead of "economically reasonable and appropriate." The final permit also replaced "*current* industry practices" with "best industry practice." Together, EPA believes that these changes emphasize the need to consider the best available control measures that are economically and technologically practicable and achievable when selecting stormwater controls to meet the permit limits. The language concerning "any more stringent measures necessary to meet the water quality standards provisions" was deleted from this part, which only addresses technology-based effluent limits. EPA determined that further specificity was needed to clarify what is meant by "more stringent measures necessary to meet water quality standards" since the specific control measures necessary to meet such standards, beyond the controls required to meet technology-based limits, may not be evident to permittees. Therefore, EPA reorganized the final permit to address and provide greater specificity for applicable water quality-based effluent limits in a different section (Part 2.2) separate from the technology-based effluent limits of the permit (Part 2.1).

VI.A.1. Introduction to CWA Requirements to Control Pollutants in Discharges

The CWA requires that discharges from existing facilities, at a minimum, must meet technology-based effluent limitations reflecting, among other things, the technological capability of permittees to control pollutants in their discharges. Water quality-based effluent limitations (WQBELs) are required by CWA Section 301(b)(1)(C). Water quality-based requirements will be discussed in greater depth in Section VII.B. Both technology-based and water quality-based effluent limitations are implemented through NPDES permits. CWA sections 301(a) and (b).

VI.A.2. Types of Technology-Based Effluent Limitations

Technology-based effluent limitations are in many cases established by EPA in regulations known as effluent limitations guidelines, or “ELGs.” EPA establishes these regulations for specific industry categories or subcategories after conducting an in-depth analysis of that industry.⁵ The Act sets forth different standards for the effluent limitations based upon the type of pollutant or the type of permittee involved.

The CWA establishes two levels of pollution control for existing sources. In the first stage, existing sources that discharge pollutants directly to receiving waters were initially subject to effluent limitations based on the “best practicable control technology currently available” or “BPT.” 33 U.S.C. § 1314(b)(1)(B). BPT applies to all pollutants. In the second stage, existing sources that discharge conventional pollutants are subject to effluent limitations based on the “best conventional pollutant control technology,” or “BCT.” 33 U.S.C. §1314(b)(4)(A); see also 40 C.F.R. §401.16 (list of conventional pollutants) while existing sources that discharge toxic pollutants or “nonconventional” pollutants (*i.e.*, pollutants that are neither “toxic” nor “conventional”) are subject to effluent limitations based on “best available technology economically achievable,” or “BAT.” 33 U.S.C. §1311(b)(2)(A); see also 40 C.F.R. §401.15 (list of toxic pollutants). The factors to be considered in establishing the levels of these control technologies are specified in section 304(b) of the CWA and EPA’s regulations at 40 CFR §125.3.

All NPDES permits are required to contain technology-based limitations. 40 CFR §§122.44(a)(1) and 125.3. CWA sections 301(b)(1)(A) for (BPT); 301(b)(2)(A) for (BAT); and 301(b)(2)(E) for (BCT). Technology-based limits in this permit represent the BPT (for conventional, toxic, and non-conventional pollutants), BCT (for conventional pollutants), and BAT (for toxic pollutants and non-conventional) levels of control for the applicable pollutants. When EPA has not promulgated effluent limitation guidelines for an industry, or if an operator is discharging a pollutant not covered by the effluent guideline, permit limitations may be based on the best professional judgment (BPJ, sometimes also referred to as “best engineering judgment”) of the permit writer. 33 U.S.C. § 1342(a)(1); 40 CFR 125.3(c). See Student Public Interest Group v. Fritzsche, Dodge & Olcott, 759 F.2d 1131, 1134 (3d Cir. 1985); American Petroleum Inst. v. EPA, 787 F.2d 965, 971 (5th Cir. 1986). For this permit, most of the technology-based limits are based on BPJ decision-making because no ELG applies. However, the permit also

⁵ Where EPA has not issued effluent guidelines for an industry, EPA and State permitting authorities establish effluent limitations for NPDES permits on a case-by-case basis based on their best professional judgment. See 33 U.S.C. § 1342(a)(1); 40 C.F.R. § 125.3(c)(2).

includes technology-based limits based on the stormwater-specific ELGs listed in Table 1-1 of the permit, where applicable.

VI.A.3. EPA's Authority to Include Non-Numeric Technology-Based Limits in NPDES Permits

The BPJ limits in this permit are in the form of non-numeric requirements. Under EPA's regulations, non-numeric effluent limits are authorized in lieu of numeric limits, where "[n]umeric effluent limitations are infeasible." 40 CFR 122.44(k)(3). As far back as 1977, courts have recognized that there are circumstances when numeric effluent limitations are infeasible and have held that EPA may issue permits with conditions (e.g., BMPs) designed to reduce the level of effluent discharges to acceptable levels. Natural Res. Def. Council, Inc. v. Costle, 568 F.2d 1369 (D.C.Cir.1977).

Through the Agency's NPDES permit regulations, EPA interpreted the CWA to allow BMPs to take the place of numeric effluent limitations under certain circumstances. 40 C.F.R. §122.44(k), entitled "Establishing limitations, standards, and other permit conditions (applicable to State NPDES programs ...)," provides that permits may include BMPs to control or abate the discharge of pollutants when: (1) "[a]uthorized under section 402(p) of the CWA for the control of stormwater discharges"; or (2) "[n]umeric effluent limitations are infeasible." 40 C.F.R. § 122.44(k).

And, as recently as 2006, The U.S. Court of Appeals for the Sixth Circuit has once again held that the CWA does not require the EPA to set numeric limits where such limits are infeasible. Citizens Coal Council v. United States Environmental Protection Agency, 447 F3d 879, 895-96 (6th Cir. 2006). The Citizens Coal court cited to Waterkeeper Alliance, Inc. v. EPA, 399 F.3d 486, 502 (2d Cir. 2005), stating "site-specific BMPs are effluent limitations under the CWA." "In sum, the EPA's inclusion of numeric and non-numeric limitations in the guideline for the coal remaining subcategory was a reasonable exercise of its authority under the CWA."

Additionally, the Sixth Circuit cited to Natural Res. Def. Council, Inc. v. EPA, 673 F.2d 400, 403 (D.C.Cir.1982) noting that "section 502(11) [of the CWA] defines 'effluent limitation' as 'any restriction' on the amounts of pollutants discharged, not just a numerical restriction."

EPA has substantial discretion to impose non-quantitative permit requirements pursuant to Section 402(a)(1)), especially when the use of numeric limits is infeasible. See NRDC v. EPA, 822 F.2d 104, 122-24 (D.C. Cir. 1987) and 40 CFR 122.44(k)(3).

VI.A.4. EPA's Decision to Include Non-Numeric Technology-Based Effluent Limits in This Permit

Numeric effluent limitations are not always feasible for industrial stormwater discharges as such discharges pose challenges not presented by the vast majority of NPDES-regulated discharges. Stormwater discharges can be highly intermittent, are usually characterized by very high flows occurring over relatively short time intervals, and carry a variety of pollutants whose source, nature and extent varies. See 55 FR at 48,038; 53 FR at 49,443. This is in contrast to process discharges from a particular industrial or commercial facility where the effluent is more predictable and can be more effectively analyzed to develop numeric effluent limitations. To

develop numeric technology-based effluent limitations, EPA generally obtains efficacy data concerning removals achieved from representative facilities employing the technology viewed as representing the BAT level of control. Even in this situation, there is some variability in performance at facilities properly using the BAT levels of control and EPA is often subject to challenge that it did not sufficiently take into account the variability that occurs even in a well-controlled discharge. In other words, facilities argue that the numeric effluent limits cannot be met even when they are properly operating BAT levels of control.

The variability of effluent and efficacy of appropriate control measures makes setting uniform effluent limits for stormwater extremely difficult. The record for this permit indicates that there is a high level of variability among discharges, in terms of both flow rates and volumes and levels of pollutants, since the volume and quality of stormwater discharges associated with industrial activity depend on a number of factors, including the industrial activities occurring at the facility, the nature of precipitation, and the degree of surface imperviousness. Due to the dissimilarity among the 29 different industrial sectors covered by this permit, and among the individual facilities within the different industrial sectors, the sources of pollutants in stormwater discharges differ with the type of industry operation and specific facility features. For example, material storage operations may be a significant source of pollutants at some facilities, shipping and receiving areas at others, while runoff from such areas at other facilities may result in insignificant levels of pollutants. Additionally, because it is often not reasonable to use traditional wastewater treatment technologies to control industrial stormwater discharges due to the absence of a steady flow of wastewater, control measures for such discharges tend to focus on pollution prevention and BMPs. In addition, the same set of pollution prevention measures or BMPs typically is not appropriate for all the different types of facilities and discharges covered by this permit. The pollutant removal/reduction efficacies of these pollution prevention and BMP-based control measures are not amenable to the type of comparative analyses conducted for non-stormwater treatment technologies and used to set numeric limits. While EPA continues to study the efficacy of various types of pollution prevention measures and BMPs, EPA at this time does not have a record basis for developing numeric limits that would reasonably represent a well-run application of BMPs. Because the flow and content is so variable, if EPA were to try to base numeric limits on a few sites, it is likely that any number it would develop would not to be technologically available and economically achievable by all well-run facilities.

These factors create a situation where, at this time, it is generally not feasible for EPA to calculate numeric effluent limitations, with the limited exception of certain effluent limitations guidelines that have already been established through national rulemaking. For example, covering exposed areas where feasible and cleaning them regularly where they are not covered may be an effective way of significantly reducing stormwater pollutant discharges, but the degree of pollutant reduction will be highly site-specific and cannot be generally quantified. Therefore, EPA has determined that it is not feasible for the Agency to calculate numeric, technology-based limits for many of the discharges covered under this permit and, based on the authority of 40 CFR 122.44(k), has chosen to adopt non-numeric effluent limits.

The BAT/BPT/BCT effluent limits in this permit are expressed as specific pollution prevention requirements for minimizing the pollutant levels in the discharge. In the context of this general permit, these requirements represent the best technologically available and economically practicable and achievable controls. EPA has long maintained that the combination of pollution prevention approaches and structural management practices required by

these limits are the most environmentally sound way to control the discharge of pollutants in stormwater runoff from industrial facilities to meet the effluent limits. This approach is supported by the results of a comprehensive technical survey⁶ EPA completed in 1979. Pollution prevention continues to be the cornerstone of the NPDES stormwater program.

VI.A.5. Control Measures Used to Meet the Technology-Based Effluent Limits

EPA generally does not mandate the specific control measures operators must select, design, install and implement. It is up to the operator to determine what must be done to meet the applicable effluent limits. For example, Part 2.1.2.1 requires operators to minimize the exposure of raw, final and waste materials to stormwater and runoff. How this is achieved will vary by facility: For some facilities, some or all activities may be moved indoors, while for others this will not be feasible. However, even for the latter, many activities may be moved indoors, others may be “covered” by roofing or tarps, while still other activities may be limited to times when exposure to precipitation is not likely. Each of these control measures is acceptable and appropriate in some circumstances. In this respect, the non-numeric effluent limits in this permit are analogous to more traditional numeric effluent limits, which also do not require specific control technologies as long as the limits are met.

Control measures can be actions (including processes, procedures, schedules of activities, prohibitions on practices and other management practices), or structural or installed devices to prevent or reduce water pollution. They can be just about anything that “does the job” of preventing deleterious substances from entering the environment, and of meeting applicable limits. In this permit, industrial facility operators are required to select, design, install, and implement site-specific control measures to meet these limits. Most industrial facilities already have such control measures in place for product loss prevention, accident and fire prevention, worker health and safety or to comply with other environmental regulations. The permit along with this fact sheet provides examples of control measures, but operators must tailor these to their facilities as well as improve upon them as necessary to meet permit limits. The examples emphasize prevention over treatment. However, sometimes more traditional end-of-pipe treatment may be necessary, particularly where a facility might otherwise cause or contribute to a violation of water quality standards.

There are many control measures that could be used to meet the limits in this permit. The following are helpful resources for developing and implementing control measures for your facility:

- Sector-specific *Industrial Stormwater Fact Sheet Series*, (www.epa.gov/npdes/stormwater/msgp);

⁶ This survey found that two classes of management practices are generally employed at industrial facilities to control the non-routine discharge of pollutants from sources such as stormwater runoff, drainage from raw material storage and waste disposal areas, and discharges from places where spills or leaks have occurred. The first class of management practices includes those that are low in cost, applicable to a broad class of industries and substances, and widely considered essential to a good pollution control program. Some examples of practices in this class are good housekeeping, employee training, and spill response and prevention procedures. The second class includes management practices that provide a second line of defense against the release of pollutants. This class addresses containment, mitigation, and cleanup.

- *National Menu of Stormwater BMPs* (www.epa.gov/npdes/stormwater/menuofbmps);
- *National Management Measures to Control Nonpoint Source Pollution from Urban Areas* (www.epa.gov/owow/nps/urbanmm/index.html); and
- *Stormwater Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices* (http://cfpub2.epa.gov/npdes/pkeyword.cfm?keywords=industrial+activities&program_id=0).

VI.B. Control Measures (Part 2.1)

Part 2.1 requires the operator to select, design, install and implement control measures to meet the technology-based effluent limits listed in Part 2.1.2 and 2.1.3. The selection, design and implementation of these control measures must be in accordance with good engineering practices and manufacturer's specifications. Regulated stormwater discharges from the facility include stormwater run-on that commingles with stormwater discharges associated with industrial activity at the facility. If operators find their control measures are not reducing pollutant discharges adequately, the control measures must be modified as expeditiously as practicable.

- *Purpose:* Part 2.1 establishes the requirements for selecting, designing and implementing control measure practices to meet the technology-based effluent limitations in this permit. This Part also defines the effluent limits that must be met.
- *Comparison to MSGP 2000:* The requirement to develop control measures to achieve the limits in Part 2.1.2 and 2.1.3 was included in the MSGP 2000 as Part 4.2.7.2. That language was reorganized and rephrased for this permit to clarify the requirements for selecting, designing and implementing these controls. EPA is not requiring documentation of why certain control options provided were not selected, as was required in the 2000 permit. The requirement to document any deviation from the manufacturer's specifications for a pollutant control device is a new requirement in this permit, although the use of such manufactured devices is expected to be comparatively rare.
- *Changes from Proposed Permit:* Part 2.1 is a product of the reorganization of proposed Parts 2 and 3, intended to clarify the permittee's obligations with respect to controlling stormwater runoff. Part 2 of the proposed permit stated that the operator "must include Best Management Practices (BMPs), economically reasonable and appropriate in light of current industry practices that are selected, designed, implemented and maintained in accordance with good engineering practices to eliminate or reduce all pollutants." EPA considers this language to be the equivalent of this permit's Parts 2 and 2.1.

As stated in Section II.C above in the discussion of the "distinction between effluent limits and SWPPP requirements," EPA reorganized this permit to clarify for the permittee and the public what constitutes limits versus what constitutes other permit conditions (e.g., planning and documentation requirements). EPA made this change so that permittees and the public recognize the difference between "control measures", which are used to meet the effluent limits, but do not constitute the limits, and the effluent limits themselves.

It was clear from several comments received on the proposed permit that confusion existed as to what constitutes "effluent limits" and what constitutes "other

permit conditions.” As defined in this permit, control measures include best management practices (BMPs), which are used to meet a permit limit but which are not, themselves, limits. In some permits BMPs are the effluent limits, while in other permits BMPs are measures implemented to meet effluent limits (EPA’s Permit Writers Manual, defines a BMP as a “Permit condition used in place of or conjunction with effluent limitations . . .”). In this version of the MSGP, effluent limits are defined in Parts 2.1.2, 2.1.3, and 2.2. Parts 2.1 and 2.1.1 contain the requirements for selecting control measures (including BMPs) to meet the effluent limits in Part 2.

The approach to control measures in the permit is consistent with the CWA as well as its implementing regulations at 40 CFR 122.44(k)(4). Section 402(a)(2) of the CWA states: “The administrator shall prescribe conditions for such permits to assure compliance with the requirements in paragraph (1) . . . including conditions on data and information collection, reporting and such other requirements as he deems appropriate.” (Section 402(a)(1) includes effluent limitation requirements.) This statutory provision is reflected in the CWA implementing regulations, which state that control measures can be included in permits when, “[t]he practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA.” 40 CFR 122.44(k)(4). In this permit, and as contemplated by the statute and regulations, requirements that pertain to the selection, design and implementation of control measures are practices necessary to meet limits, but are not limits themselves.

VI.B.1. Control Measure Selection and Design Considerations (Part 2.1.1)

In Part 2.1.1 operators are required to consider certain factors when selecting control measures, including:

- preventing stormwater from coming into contact with polluting materials is generally more effective and less costly than trying to remove pollutants from stormwater;
- using combinations of control measures is more effective than using control measures in isolation for minimizing pollutants;
- assessing the type and quantity of pollutants, including their potential to impact receiving water quality, is critical to determining which control measures will achieve the limits in this permit;
- minimizing impervious areas at your facility and infiltrating runoff onsite (via bioretention cells, green roofs, pervious pavement, etc.) can reduce runoff, and improve groundwater recharge and stream base flows in local streams (although care must be taken to avoid groundwater contamination);
- attenuating flow using open vegetated swales and natural depressions to reduce in-stream impacts of erosive flows;
- conserving and restoring riparian buffers will help protect streams from stormwater runoff and improve water quality; and
- using treatment interceptors (e.g., swirl separators, oil-water separators, sand filters) may be appropriate in some instances to minimize the discharge of pollutants.

- *Purpose:* Part 2.1.1 provides permittees with important considerations for the selection of control measures.
- *Comparison to MSGP 2000:* This permit expands upon the general considerations for selecting and designing control measures included in the MSGP 2000 (see Parts 4.2.7.1.1-4.2.7.1.3). Additional considerations were added to reflect the advances and expectations of stormwater programs nationwide. In addition, EPA has modified this provision to make the consideration of these factors mandatory to better emphasize the importance of proper selection and design of control measures for the particular site.
- *Changes from Proposed Permit:* EPA clarified that operators must consider the new factors and document how such factors were taken into account in the selection and design of their control measures (the latter requirement is included in Part 5.1.5). EPA recognizes that not all of these considerations will be applicable to every site nor will they always affect the choice of control measures. However, operators must still document that these factors were considered when developing their control measures.

VI.B.2 Technology-Based Effluent Limits (BPT/BAT/BCT): Non-Numeric Effluent Limits (Part 2.1.2).

This permit requires permittees to comply with non-numeric technology-based effluent limits (found in Parts 2.1.2 and 8 of the permit) by implementing control measures. The achievement of these non-numeric limits will result in the reduction or elimination of pollutants from the operator's stormwater discharge. Such limits constitute this permit's technology-based limits, expressed narratively per 40 CFR 122.44(k), and are developed using best professional judgment (BPJ).

EPA notes that this permit uses the term "control measures" more often than "best management practices" and "BMPs". This change was adopted to better describe the range of pollutant reduction practices that may be employed, whether they are structural, non-structural or procedural. In addition, the definition of "control measures" in Appendix A of this permit includes both BMPs and "other methods" used to prevent or reduce the discharge of pollutants to receiving waters. The greater breadth of meaning for control measures vis-à-vis BMPs is why EPA uses this term in Part 2.1, and throughout the permit.

The permit requires the operator to achieve all of the non-numeric effluent limits delineated in Part 2.1.2. The following is a summary of the permit's non-numeric technology-based effluent limits:

Minimize Exposure to Stormwater (Part 2.1.2.1). To the extent technologically available and economically practicable and achievable, locate industrial materials and activities inside or protect them with storm-resistant coverings. This is one of the most important control options. Minimizing exposure prevents pollutants from coming into contact with precipitation and can reduce the need for control measures to treat or otherwise reduce pollutants in stormwater runoff. Examples include covering materials or activities with temporary structures (e.g., tarps) when wet weather is expected or moving materials or activities to existing or new permanent structures (e.g., buildings, silos, sheds). Even the simple practice of keeping a dumpster lid closed can be very effective. While the permit requires consideration of exposure minimization, EPA does not recommend significantly increasing impervious surfaces to achieve it.

In minimizing exposure, the permittee should pay particular attention to manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, and cleaning, maintenance, and fueling operations).

Good Housekeeping (Part 2.1.2.2). Keep all exposed areas that are potential pollutant sources clean. Good housekeeping is an inexpensive way to maintain a clean and orderly facility and keep contaminants out of stormwater discharges. Often the most effective first step towards preventing pollution in stormwater from industrial sites simply involves using common sense to improve the facility's basic housekeeping methods. Poor housekeeping can result in more stormwater running off a site than necessary and an increased potential for stormwater contamination. A clean and orderly work area reduces the possibility of accidental spills caused by mishandling of chemicals and equipment. Well-maintained material and chemical storage areas will reduce the possibility of stormwater mixing with pollutants.

There are some simple procedures a facility can use to meet the good housekeeping effluent limit, including improved operation and maintenance of industrial machinery and processes, improved materials storage practices, better materials inventory controls, more frequent and regular clean-up schedules, maintaining well organized work areas, and education programs for employees about all of these practices.

Examples of control measures that a permittee may implement to meet the good housekeeping effluent limit include containerizing materials appropriately, storing chemicals neatly and orderly; maintaining packaging in good condition; promptly cleaning up spilled liquids; sweeping, vacuuming or other cleanup of dry chemicals and wastes to prevent them from reaching receiving waters, and using designated storage areas for containers or drums to keep them from protruding where they can be ruptured or spilled. Proper storage techniques can include:

- Providing adequate aisle space to facilitate material transfer and easy access for inspections;
- Storing containers, drums, and bags away from direct traffic routes to prevent accidental spills;
- Stacking containers according to manufacturers' instructions to avoid damaging the containers from improper weight distribution;
- Storing containers on pallets or similar devices to prevent corrosion of the containers, which can result when containers come in contact with moisture on the ground; and
- Assigning the responsibility of hazardous material inventory to a limited number of people who are trained to handle hazardous materials.

Maintenance (Part 2.1.2.3). Regularly inspect, test, maintain and repair or replace all industrial equipment and systems to prevent releases of pollutants to stormwater. Maintain all control measures in effective operating condition. Nonstructural control measures must also be diligently maintained (e.g., spill response supplies available, personnel trained).

Most facilities will already have preventive maintenance programs (PMPs) that provide some environmental protection. Preventive maintenance involves regular inspection and testing of equipment and operational systems to uncover conditions such as cracks or slow leaks that

could cause breakdowns or failures that result in discharges of pollutants to storm sewers and surface water. To prevent breakdowns and failures operators should adjust, repair or replace equipment.

As part of a typical PMP, operators must include regular inspection and maintenance of stormwater management devices and other equipment and systems. Operators should identify the devices, equipment and systems that will be inspected; provide a schedule for inspections and tests; and address appropriate adjustment, cleaning, repair or replacement of devices, equipment and systems. For stormwater management devices such as catch basins and oil-water separators, PMPs should include the periodic removal of debris to ensure that the devices are operating efficiently. For other equipment and systems, there should be procedures to reveal and correct conditions that could cause breakdowns or failures that may result in the release of pollutants.

The PMP should include a suitable records system for scheduling tests and inspections, recording test results and facilitating corrective action. The program should be developed by qualified plant personnel who evaluate the existing plant and recommend changes as necessary to protect water quality.

Spill Prevention and Response Procedures (Part 2.1.2.4). Minimize the potential for leaks, spills and other releases, which are major sources of stormwater pollution, to be exposed to stormwater. The purpose of this effluent limit is not only to prevent spills and leaks but, in the event one does occur, to limit environmental damage via development of spill prevention and response procedures. Operators should identify potential spill areas and keep an inventory of materials handled, used and disposed of. Based on an assessment of possible spill scenarios, permittees must specify appropriate material handling procedures, storage requirements, containment or diversion equipment, and spill cleanup procedures that will minimize the potential for spills and, in the event of a spill, ensure proper and timely response.

Areas and activities that typically pose a high risk for spills include loading and unloading areas, storage areas, process activities, and waste disposal activities. These activities and areas, and their accompanying drainage points, must be addressed in the procedures. For a spill prevention and response program to be effective, employees should clearly understand the proper procedures and requirements and have the equipment necessary to respond to spills.

The following are suggestions to incorporate into spill prevention and response procedures:

- Install leak detection devices, overflow controls and diversion berms;
- Perform visual inspections and identify signs of wear;
- Perform preventive maintenance on storage tanks, valves, pumps, pipes and other equipment;
- Use filling procedures for tanks and other equipment that minimize spills;
- Use material transfer procedures that reduce the chance of leaks or spills;
- Substitute less toxic materials;
- Ensure that clean-up materials are available where and when needed;
- Ensure appropriate security;

- Notify emergency response agencies where necessary (as specified in Part 2.1.2.4).

In the event of a spill, it is important that the facility have clear, concise, step-by-step instructions for responding to spills. The approach will depend on the specific conditions at the facility such as size, number of employees and the spill potential of the site.

Erosion and Sediment Controls (Part 2.1.2.5). Stabilize and contain runoff from exposed areas to minimize onsite erosion and sediment creation, and the accompanying discharge of pollutants (other pollutants can bind to soil and other particles and be discharged along with the sediment).

There may be exposed areas of industrial sites that, due to construction activities, steep slopes, sandy soils or other factors, are prone to soil erosion. Construction activities typically remove grass and other protective ground covers resulting in the exposure of underlying soil to wind and rain. Similarly, steep slopes or sandy soils may not be able to hold plant life so that soils are exposed. Because the soil surface is unprotected, dirt and sand particles are easily picked up by wind or washed away by rain. This erosion process can be controlled or prevented through the use of certain control measures.

To meet this limit, operators must select, design, install and implement controls to address the on-site exposed areas prone to soil erosion. Erosion control practices such as seeding, mulching and sodding prevent soil from becoming dislodged and should be considered first. Sediment control practices such as silt fences, sediment ponds, and stabilized entrances trap sediment after it has eroded. Sediment control practices, such as flow velocity dissipaters and sediment catchers, should be used to back-up erosion control practices.

Management of Runoff (Part 2.1.2.6). Operators must divert, infiltrate, reuse, contain or otherwise reduce stormwater runoff to minimize pollutants in the discharge. Employ practices that direct the flow of stormwater away from areas of exposed materials or pollutant sources. Such practices can also be used to divert runoff that contains pollutants to natural areas or other types of treatment locations.

To meet this effluent limit, operators may consider vegetative swales, collection and reuse of stormwater, inlet controls, snow management, infiltration devices, and wet detention/retention basins. If infiltration is a selected control, permittees should pay special attention to the discussion at the end of this section of the fact sheet entitled: *Stormwater infiltration control measures that meet the definition of a Class V Injection Well could be subject to the Underground Injection Control (UIC) Regulations.*

Salt Storage Piles or Pile Containing Salt (Part 2.1.2.7). Enclose or cover piles of salt or piles containing salt used for deicing or other industrial purposes. Implement appropriate measures to minimize the exposure of the piles during the adding to or removing from processes.

Options for meeting the salt pile effluent limit include covering the piles or eliminating the discharge from such areas of the facility. Preventing exposure of piles to stormwater or runoff also eliminates the economic loss from materials being dissolved and washed away. A permanent under-roof storage facility is the best way to protect chemicals from precipitation and runoff, but where this is not possible, salt piles can be located on impermeable bituminous pads and covered with a waterproof cover.

Sector-Specific Effluent Limits (Part 2.1.2.8). Achieve any additional non-numeric limits stipulated in the relevant sector-specific controls in Part 8.

Employee Training (Part 2.1.2.9). Operators must train all employees who work in areas where industrial materials or activities are exposed to stormwater, or who are responsible for implementing activities necessary to meet the conditions of this permit.

Employee training programs should thoroughly educate members of the Stormwater Pollution Prevention Team (see Part 5.1.1) on their roles in implementing the control measures employed to meet the limits in the permit. Training should address the processes and materials on the plant site, good housekeeping practices for preventing discharges, and procedures for responding properly and rapidly to spills or other incidents. The training program should also address other requirements in the permit such as inspections and record-keeping.

Training sessions should be conducted at least annually to assure adequate understanding of the objectives of the control measures and the individual responsibilities of each employee. More frequent training may be necessary at facilities with high employee turnover or where stormwater programs are involved or multi-faceted. Often, training could be a part of routine employee meetings for safety or fire protection. Where appropriate, contractor personnel also must be trained in relevant aspects of stormwater pollution prevention.

Training sessions should review all aspects of the control measures and associated procedures. Facilities should conduct spill or incidence drills on a regular basis which can serve to evaluate the employee's knowledge of the control measures and spill procedures and are a fundamental part of employee training. Such meetings should highlight previous spill events or failures, malfunctioning equipment and new or modified control measures.

Non-Stormwater Discharges (Part 2.1.2.10). Eliminate non-stormwater discharges that are not authorized by an NPDES permit. This limit is intended to reinforce the fact that, with the exception of the allowable non-stormwater discharges listed in Part 1.2.3, non-stormwater discharges are ineligible for coverage, pursuant to Part 1.2.4.1. Operators needing help in finding and eliminating unauthorized discharges may find the following guidance helpful: *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments*, Chapters 7, 8, 9 at: http://www.epa.gov/npdes/pubs/idde_manualwithappendices.pdf

Waste, Garbage, and Floatable Debris (Part 2.1.2.11). Operators must ensure that waste, garbage and floatable debris are not discharged to receiving waters.

Trash and floating debris in waterways have become significant pollutants, especially near areas where a large volume of trash can be generated in a concentrated area. Trash can cause physical impairments in waterbodies to aquatic species and birds and is also visual pollution and detracts from the aesthetic qualities of receiving waters.

This effluent limit can be met through the implementation of a variety of control measures. For instance, to prevent garbage from being carried in runoff to receiving waters, there are essentially two methods of control: source control and structural control. Source control includes personnel education, improved infrastructure and cleanup campaigns. Education, such as informing employees about options for recycling and waste disposal and

about the consequences of littering, is one of the best ways. Another topic that should be emphasized is proper trash storage and disposal. Improved infrastructure can include optimizing the location, number, and size of trash receptacles, recycling bins, and cigarette butt receptacles based on expected need. Clean-up campaigns are an effective way to reduce trash. Facilities should determine whether the number and placement of receptacles are adequate and if regular maintenance activities (e.g., sweeping, receptacle servicing) are preventing litter from entering receiving waters. Structural controls include physical filtering structures and continuous deflection separation. Filtering structures concentrate diffuse, floating debris and prevent it from traveling downstream. Some examples are trash racks, mesh nets, bar screens and trash booms. Continuous deflection separation targets trash from storm flows during and after heavy precipitation.

Dust Generation and Vehicle Tracking of Industrial Materials (Part 2.1.2.12). Operators must minimize generation of dust and off-site tracking of raw, final or waste materials.

Dust control practices can reduce the activities and air movement that cause dust to be generated. Airborne particles pose a dual threat to the environment and human health. Dust carried off-site increases the likelihood of water pollution. Control measures to minimize the generation of dust include:

- *Vegetative Cover.* In areas not expected to handle vehicle traffic, vegetative stabilization of disturbed soil is often desirable. By establishing a vegetative cover, exposed soil is stabilized and wind velocity at ground level can be reduced, thus reducing the potential for dust to become airborne.
- *Mulch.* Mulching can be a quick and effective means of dust control for a recently disturbed area.
- *Wind Breaks.* Wind breaks are barriers (either natural or constructed) that reduce wind velocity through a site which then reduces the possibility of suspended particles. Wind breaks can be trees or shrubs left in place during site clearing or constructed barriers such as a wind fence, snow fence, tarp curtain, hay bale, crate wall or sediment wall.
- *Stone.* Stone can be an effective dust deterrent in areas where vegetation cannot be established.
- *Spray-on Chemical Soil Treatments (Palliatives).* Examples of chemical adhesives include anionic asphalt emulsion, latex emulsion, resin-water emulsions and calcium chloride. Chemical palliatives should be used only on mineral soils. When considering chemical application to suppress dust, determine whether the chemical is biodegradable or water-soluble and what effect its application could have on the surrounding environment, including waterbodies and wildlife.

To reduce vehicle tracking of materials, the operator should keep stored or spilled materials away from all roads within the site. Specific measures such as setting up a wash site or separate pad to clean vehicles prior to their leaving the site may be effective as well.

- *Purpose:* Part 2.1.2 requires all operators to meet certain technology-based effluent limits through the implementation of control measures that minimize pollutants from the discharge.

- *Comparison to MSGP 2000:* The MSGP 2000 provided less specificity regarding the limits that had to be met, whereas this version provides more detailed explanations of specific non-numeric effluent limits. EPA believes this greater specificity will facilitate operator understanding of and compliance with the limits. The final permit also requires operators to evaluate the impact of run-on to the facility's site that commingles with industrial stormwater discharges. This requirement was not included in the MSGP 2000 or the proposed permit. The recommendation to keep abreast of new BMPs in the MSGP 2000 was kept in the proposed permit, but was removed in the final permit. Upon further consideration, EPA considers this language to be less of a permit condition, and more of a guideline or recommendation for permittees to explore new and better ways to meet applicable limits. The essence is, operators must meet the effluent limits; what technologies or practices they use is a matter of discretion for the particular operator. EPA does encourage permittees to consider new control measures or new applications of existing practices at times during permit coverage when adjustments to their selection, design and implementation are being considered (e.g., when corrective action is triggered). This will help ensure that control measures continue to reflect best industry practice.

Most of the limits in this part were addressed in one form or another in the MSGP 2000 permit and/or fact sheet, but were organized and presented differently.

- *Changes from Proposed Permit:* EPA reorganized the permit to address in separate parts the requirements regarding selection, design and implementation of control measures (Part 2.1 and 2.1.1) complying with non-numeric effluent limits (Part 2.1.2), and development of the SWPPP (Part 5). Some language in Part 2.1.1 was re-located to the section dealing with the description in the SWPPP of the control measures that would be used to meet the effluent limit. (Part 5.1.5). In addition, non-substantive changes were made to certain effluent limits to clarify the required action on the operator's part. EPA made these organizational and clarification changes due, in part, to confusion over what are the applicable effluent limits in the permit. These changes and others are discussed below:

Minimize Exposure: EPA removed the language reminding operators that they may obtain a "no exposure" exclusion if they are able to eliminate exposure. This language is unnecessary in light of the provision regarding this exclusion in Part 1.5. EPA consolidated language from several sectors relating to minimizing exposure for loading and unloading areas; material storage areas; vehicle and equipment storage, cleaning, and maintenance areas; and fueling areas. EPA also included new language clarifying that industrial materials do not need to be enclosed or covered if stormwater runoff from these areas will not be discharged to receiving waters or if these discharges are authorized under another NPDES permit.

Good Housekeeping: Language requiring documentation of a schedule for regular pickup and disposal of waste materials was re-located to Part 5.1.5 consistent with the reorganization of the effluent limits and SWPPP sections. One other minor change was made to include sweeping at regular intervals as an example of good housekeeping.

Maintenance: Documentation requirements for the preventive maintenance program being implemented at the site was re-located to Part 5.1.5 consistent with the delineation of the effluent limit and SWPPP sections. In addition, the proposed permit's

maintenance provision (Part 2.2), relating to the requirement to have all measures in effective operating condition, was incorporated into the preventive maintenance provision, and given a new title of “maintenance.” The requirement to document this program was moved from Part 2.2 to Part 5.1.5, and the requirements relating to corrective actions and deadlines for modifying control measures were consolidated into Part 3 of this permit. New language was added requiring the permittee to repair or replace control measures as expeditiously as practicable after finding that they are not working properly.

Spill Prevention and Response Procedures: The requirement to document the procedures to be taken at the facility for spill prevention and response was re-located to Part 5.1.5 consistent with the reorganization of the effluent limit and SWPPP sections. Another requirement, moved from a sector-specific requirement to this Part, is for the operator to have procedures for plainly labeling containers that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid cleanup in the event of a leak or spill.

Erosion and Sedimentation Controls: This effluent limit has been rewritten to emphasize the need to control onsite erosion and sedimentation. These revisions do not change the meaning of what was proposed. Language relating to the use of flow dissipation devices was moved from the proposed Part 2.1.5.11 to Part 2.1.2.5. Language was also inserted to encourage permittees to access and use several of EPA’s internet-based resources relating to BMPs for erosion and sedimentation control.

Management of Runoff: Language requiring the operator to describe the stormwater runoff management practices to be used at the facility has been re-located to Part 5.1.5 consistent with the reorganization of the effluent limit and SWPPP sections. This effluent limit has been rewritten to emphasize the need to manage runoff. These changes do not change the meaning of what was proposed. Language noting that a separate CWA Section 404 permit may be required was removed as unnecessary. And, as with the limit for erosion and sedimentation control, language was inserted to encourage permittees to access and use several of EPA’s internet-based resources relating to BMPs for the management of runoff.

Employee Training: Language requiring the operator to describe the employee training program, to document the schedule for facilitating training, and to document all training sessions has been re-located to Part 5.4 consistent with the delineation of the effluent limit and SWPPP sections. Otherwise, there were no significant changes to this section.

Unauthorized Discharges: The Agency clarified that permittees need to eliminate any unauthorized discharges prior to submission of an NOI rather than allowing these determinations to be made after submitting an NOI or enabling permittees to notify EPA 180 days after submitting an NOI that they were unable to provide certification that unauthorized discharges had been eliminated (as had been provided for in MSGP 2000). As described above, the initial allowance for eliminating unauthorized discharges is no longer appropriate in that existing operators should have already eliminated these discharges and new operators should either obtain permit coverage for those discharges or eliminate those planned discharges.

Waste, Garbage, and Floatable Debris: This limit is similar to that of Part 2.1.5.11 of the proposed permit. That provision contained a group of miscellaneous requirements that were better expressed as stand-alone limits. No other noteworthy changes were made.

Dust Generation and Vehicle Tracking of Industrial Materials: This limit was consolidated from two measures listed in Part 2.1.5.11 of the proposed permit. As described above, that provision contained a group of miscellaneous requirements that were better expressed as stand-alone limits. No other noteworthy changes were made.

Stormwater infiltration control measures that meet the definition of a Class V Injection Well could be subject to the Underground Injection Control (UIC) Regulations

Infiltration of stormwater is generally highly recommended because of its pollutant mitigation and hydrological benefits, but care must be taken when using such control measures at industrial sites so as to not degrade underground sources of drinking water. The Safe Drinking Water Act (SDWA) was established to protect drinking water supplies of the U.S. It requires EPA to regulate underground injection of fluids through subsurface disposal systems that discharge wastes or other fluids that may endanger sources of drinking water (see 40 CFR Part 144). These regulations (often referred to as UIC regulations) may apply to industrial operators if their stormwater is treated by an infiltration control measure that can be classified as a Class V Injection Well (eg, a stormwater drainage well).

By definition an *Injection Well* is any bored, drilled or driven shaft, or dug hole that is deeper than wide at its widest surface dimension; an improved sinkhole; or a subsurface fluid distribution system. *Subsurface fluid distribution system* means an assemblage of perforated pipes, drain tiles or other similar mechanisms intended to distribute fluids below the surface of the ground. *Improved sinkhole* means a naturally occurring karst depression or other natural crevice found in volcanic terrain and other geologic settings that has been modified by man for the purpose of directing and emplacing fluids into the subsurface. For example, surface grading to direct stormwater to a naturally occurring sinkhole results in an improved sinkhole. Therefore, a control measure designed to place rain water or snowmelt below the land surface that has been engineered or constructed in any of the ways listed above is a UIC Class V Injection Well.

If an infiltration control measure can be classified as a Class V Injection Well, the operator is required to register it with the proper authority. If an underground source of drinking water is present, a Federal or State subsurface discharge permit may also be required. To avoid possible impacts on underground sources of drinking water, EPA recommends not implementing an infiltration control measure if it meets the definition of a Class V Injection Well. Alternatively, an operator could revise the design of the infiltration control measure to avoid impacts to underground sources of drinking water.

Many States have UIC primary responsibility (or primacy), and thus would perform the registering and permitting of Class V Injection Wells. Some States share responsibility with EPA, and some States' and territories' (and all Indian lands) programs are completely administered by EPA. Operators can find out the status of their State's UIC program at www.epa.gov/safewater/uic/primacy.html.

On June 13, 2008, EPA issued a policy memo that clarified which stormwater infiltration practices have the potential to be regulated as Class V wells by the UIC program and which would likely not be considered Class V wells. A copy of this memo is available on EPA's website at: www.epa.gov/npdes/greeninfrastructure (a copy is also provided in the record for this permit).

VI.B.3. Effluent Limitations Based on Effluent Limitations Guidelines (Part 2.1.3)

This requirement holds permittees responsible for complying with any applicable Federal effluent limitations guidelines eligible and authorized for coverage under this permit. The following describes where these limits can be found in the permit.

Regulated Activity	40 CFR Part/Subpart	Effluent Limit
Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas	Part 429, Subpart I	See Part 8.A.7
Runoff from phosphate fertilizer manufacturing facilities	Part 418, Subpart A	See Part 8.C.4
Runoff from asphalt emulsion facilities	Part 443, Subpart A	See Part 8.D.4
Runoff from material storage piles at cement manufacturing facilities	Part 411, Subpart C	See Part 8.E.5
Mine dewatering discharges at crushed stone, construction sand and gravel, or industrial sand mining facilities	Part 436, Subparts B, C, or D	See Part 8.J.9
Runoff from hazardous waste landfills	Part 445, Subpart A	See Part 8.K.6
Runoff from non-hazardous waste landfills	Part 445, Subpart B	See Part 8.L.10
Runoff from coal storage piles at steam electric generating facilities	Part 423	See Part 8.O.8

- *Purpose:* Define for the operator the technology-based limits based on Federal effluent limitations guidelines applicable to specific sectors.
- *Comparison to MSGP 2000:* Although all of these limits were part of the MSGP 2000, the provision has been modified to clarify that these limits are enforceable technology-based numeric effluent limits.

The applicability of the 40 CFR Part 423 limits was revised so that the limits no longer apply to coal storage piles at facilities in all sectors. Instead, consistent with the intended scope of this effluent guideline limitation, the Part 423 limits now only apply to steam electric generating facilities (other than for power generation, coal is used primarily by facilities covered under Sector F, Primary Metals). The detailed analysis that formed the basis of these limits was specific to that sector and was not intended to determine BAT for coal pile runoff from other industrial sectors, including those facilities that generate power only as an ancillary or co-located activity. EPA believes that facilities in other sectors with coal storage piles will be adequately regulated under several different technology-based limits in Part 2.1.2, especially Part 2.1.2.1, 2.1.2.2, 2.1.2.5, and 2.1.2.6.

- *Changes from Proposed Permit:* The proposed permit also required compliance with all of these limits. The final permit only clarifies that these limits are, if applicable, part of the discharger's technology-based limits. The table in Part 2.1.3 has been modified from the table in proposed Part 1.2.2.5 to provide updated references to the applicable effluent limitations guidelines and the sector-specific sections of the permit.

VI.C. Water quality-based effluent limitations (Part 2.2)

This permit includes water quality-based effluent limits (WQBELs) to control discharges as necessary to meet applicable water quality standards. The provisions of Part 2.2 constitute the WQBELs of this permit, and supplement the permit's technology-based effluent limits in Part 2.1. The following is a list of the permit's WQBELs:

- Control the discharge as necessary to meet applicable water quality standards in the receiving waterbody (See Part 2.2.1);
- Comply with any additional, more stringent requirements that EPA determines are necessary to meet an applicable wasteload allocation or to further control discharges to impaired waters that do not yet have an EPA approved or established TMDL (See Part 2.2.2); and
- Comply with any additional, more stringent requirements that EPA determines are necessary to comply with applicable antidegradation conditions for discharges to Tier 2 waters (see Part 2.2.3).

Prior to or after initial discharge authorization, EPA may require additional WQBELs on a site-specific basis, or require the permittee to obtain coverage under an individual permit, if information in the NOI, required reports, or from other sources indicates that, after meeting the technology-based limits in Part 2.1 and the WQBELs in Part 2.2, the facility is causing or contributing to an exceedance of water quality standards.

- *Purpose:* Part 2.2 includes limits that are as stringent as necessary to achieve water quality standards, consistent with 40 CFR 122.44(d)(1). EPA expects that facilities that achieve the permit's technology-based limits through the careful selection, design, installation, and implementation of effective control measures are likely to already be controlling their stormwater discharges to a degree that would make additional water quality-based controls unnecessary. However, to ensure that this is the case, the permit contains additional conditions, which, in combination with the BAT/BPT/BCT limits in this permit, EPA expects to be as stringent as necessary to achieve water quality standards.

EPA notes that the WQBELs included in this permit are initially non-numeric. EPA relies on a narrative expression of the need to control discharges as necessary to meet applicable water quality standards, and to employ additional controls where necessary to be consistent with applicable WLAs in an approved or established TMDL or to comply with a State or Tribe's antidegradation policies. This is a reasonable approach for this permit, based on the following considerations:

- *Limited waterbody information available about individual dischargers prior to authorization:* EPA will not know prior to receiving NOIs from individual dischargers intending to be covered by this permit where these facilities are located and where they discharge. Facility operators must provide information in their NOIs identifying the receiving water into which they discharge. This was not part of the MSGP 2000. These questions are designed to help EPA determine what, if any, special protections apply to that water. As part of these new NOI questions, EPA is making the *Water Locator* tool available to operators, which is intended to help facilities and EPA more accurately locate the waterbodies that are affected by

stormwater discharges. See Section II.C of the fact sheet, under the section titled “Electronic Systems for Submittal of NOIs, Location of Receiving Waters, and Reporting Monitoring Data.” EPA’s receipt of the NOI will then trigger a more detailed screening process within the Agency geared at determining if any waterbody-specific requirements are appropriate. Prior to this time though it is simply impracticable to anticipate these specific requirements, and include as specific detailed requirements in the general permit, without knowing more about where the facility is discharging.

- *Review of the NOI and applicable watershed documents is the appropriate forum for deriving facility-specific WQBELs:* Once EPA receives the NOI, the Agency will then be in a position to assess whether any more stringent requirements are necessary. For instance, if a particular NOI indicates that the facility will discharge to an impaired waterbody that has an approved or established TMDL, EPA will be able to review the applicable documents to determine if any additional effluent limits are necessary. Among other things, EPA will be analyzing the TMDL for applicable WLAs that were meant to apply to industrial stormwater discharges. After that determination has been made, EPA will determine how those allocations would translate into permit requirements and whether and to what extent the existing effluent limits are already controlling the discharge consistent with the WLA. If more stringent controls are necessary, EPA will notify the effected facility of the need to comply with stricter limits. EPA anticipates that similar assessments will occur if facilities indicate that they are discharging to a waterbody designated as Tier 2 or 2.5 for antidegradation purposes.
- *EPA may modify an operator’s receiving water information based on further information:* EPA acknowledges that sole reliance by the operator on the *Water Locator* tool may lead to some inaccuracies, since the tool determines the closest waterbody to the facility, and is not based on the actual flow direction of runoff as determined by topographic conditions. EPA suggests that operators double-check the information generated by the *Water Locator* tool against local mapping resources (e.g., USGS quadrangle maps, or other topographic maps) or knowledge of the property and landscape. In addition, even where the operator correctly identifies its receiving water, and properly indicates that the discharge is not to an impaired segment, EPA may determine on further analysis that the discharge does in fact contribute to a downstream impairment. For instance, notwithstanding an operator’s correct determination that its discharge is to an unimpaired stream segment, EPA may find, using available TMDL information, or other data, that discharges to the unimpaired segment are considered to contribute to a downstream impairment. In such an instance, EPA will inform the operator of this determination, and of any additional requirements that may result from the discharge to a downstream waterbody that is impaired. In conducting these analyses, EPA will consider looking at guidelines established by other NPDES permit authorities to determine what constitutes a contribution to a downstream impairment. For example, the Agency is aware of the State of Georgia’s use of a one-mile radius to define discharges to impaired waters. The Agency believes such criteria may be helpful to the permittee because it establishes an objective criterion from which to define contributions to impaired waters and may use this as a guideline to help determine if particular discharges are contributing to downstream impairments.

- *Comparison to MSGP 2000:* This permit, like the MSGP 2000, includes provisions (now included in Part 2.2.1) requiring that discharges are controlled as necessary to meet water quality standards. For clarity, the permit also groups the WQBELs together in Part 2.2. EPA has reworded the water quality-based effluent limitation to use the phrase “control[led] as necessary to meet applicable water quality standards,” rather than the phrase do not “cause or contribute to a violation of water quality standards.” This change was made because the “cause or contribute” phrase derives from EPA’s regulation specifying how the permit authority should determine whether there should be a water quality based effluent limitation, 40 CFR 122.4(d)(1)(i) and (ii). This decision is often referred to as the “reasonable potential” determination. Once the permit authority determines that a water quality-based effluent limitation is warranted (the discharge causes, has the “reasonable potential” to cause, or contributes to non-attainment of applicable water quality standards), then CWA section 301(b)(1)(C) and the implementing regulations at 40 CFR 122.4(d), 122.44(d)(1) and 122.44(d)(1)(vii)(A) require the effluent limitation be included in the permit as necessary to meet applicable water quality standards.
- *Changes from Proposed Permit:* This permit differs from the proposal in that it separates into a distinct section those requirements that constitute the WQBELs of the permit required under 40 CFR 122.44(d). Additional changes that were made in the subparts of Part 2.2 are discussed below.

Water Quality Standards (Part 2.2.1). Each permittee is required to control its discharge as necessary to meet applicable water quality standards. EPA expects that compliance with the other conditions in this permit (e.g., the technology-based limits, corrective actions, etc.) will result in discharges that are controlled as necessary to meet applicable water quality standards. If the permittee becomes aware, or EPA determines, that the discharge causes or contributes to a water quality standards exceedance, corrective actions and EPA notification are required. In addition, at any time EPA may impose additional, more stringent WQBELs on a site-specific basis, or require an individual permit, if information suggests that the discharge is not controlled as necessary to meet applicable water quality standards.

- *Purpose:* The language in Part 2.2.1 affirms the permittee’s requirement to control its discharges as necessary to meet applicable water quality standards. EPA reserves the authority to require more stringent requirements where necessary to meet applicable standards, or, alternatively, to require the permittee to apply for an individual permit.

In general, EPA believes that the effluent limits contained in this permit, combined with the other requirements concerning corrective actions, inspections, and monitoring, will control discharges as necessary to meet applicable water quality standards. For example, in waters that are not listed as “impaired,” it is reasonable to conclude that permittee discharges are not causing or contributing to an exceedance of water quality standards because no exceedance of water quality standards has been identified. Based on a review of the 4,100 facilities covered under MSGP 2000, the majority discharge to waters that are not impaired. In the case of impaired waters with an EPA approved or established TMDL, the permit must be consistent with the assumptions and requirements of any WLAs in the TMDL as required by 40 CFR 122.44(d)(1)(vii)(B). In impaired waters without an EPA approved or established TMDL, the permit requires additional monitoring for the pollutants for which the water is impaired. See Part 6.2.4. Additionally, regardless of whether a TMDL has been

approved or established by EPA, if a discharge is found to cause or contribute to an excursion above water quality standards, the permittee is required to revise the selection, design, installation, and implementation of the facility's control measures to ensure that the conditions causing the problem are eliminated and will not be repeated. See Part 3.1. EPA may require the discharger to get an individual permit in this situation.

Furthermore, prior to receiving authorization for a new discharge to an impaired waterbody, the permit requires the new discharger to meet additional eligibility requirements. See Part 1.1.4.7. Only by certifying to compliance with one of the following eligibility criterion will the new discharger be considered for authorization:

- prevent all exposure to stormwater of the pollutants for which the waterbody is impaired; **or**
- show that the discharger does not have the pollutant for which the waterbody is impaired present at its facility; **or**
- provide to EPA prior to authorization, information and data showing that the discharge will meet applicable criteria; **or**
- provide to EPA prior to authorization, information showing that there are sufficient remaining wasteload allocations in an EPA approved or established TMDL and that existing dischargers to the waterbody are subject to compliance schedules designed to bring the waterbody into attainment with water quality standards.

By certifying its compliance with one of the Part 1.1.4.7 eligibility criterion, the new discharger will thus be demonstrating that its discharge will not cause or contribute to an excursion above applicable water quality standards

The permit contains additional protections to ensure compliance with water quality standards in its corrective action requirements. For instance, a particularly intense storm event may overwhelm one or more of the control measures employed at the site, leading to a short-term violation of the effluent limits. Alternatively, the operator may discover that a control measure installed in good faith to meet a particular purpose is not functioning as anticipated (e.g., because it is incorrectly sized for the site). The MSGP requires that permittees adjust their control measures during the permit term to respond to any such unanticipated event or deficiency. In this way, the operator may improve upon the initial selection, design, installation, or implementation of control measures to further ensure that its discharges are controlled as necessary to meet applicable water quality standards. Activities that may trigger a need for corrective action include:

- Routine facility inspections (Part 4.1);
- Quarterly visual assessments (Part 4.2);
- Comprehensive site inspections (Part 4.3), including annual reports summarizing such inspections submitted pursuant to Part 7.2;
- Required monitoring for benchmarks, effluent limitations guidelines, specific State or Tribal requirements, or impaired waters; or
- Information provided to EPA or the operator by the public (including State or local authorities) suggestive that the control measures are not stringent enough meet the water quality standards.

- *Comparison to MSGP 2000:* The following provisions of the MSGP 2000 have been modified by the language in Part 2.2.1:
 1. “You are not authorized for stormwater discharges that the Director determines will cause, or have reasonable potential to cause or contribute to, violations of water quality standards” (Part 1.2.3.5); and
 2. “Your discharge must not be causing or have the reasonable potential to cause or contribute to a violation of a water quality standards” (Part 3.3).

While the underlying thrust of Part 2.2.1 is similar to these previous permit requirements, this new language clarifies EPA’s intentions by indicating that it is the Agency’s expectation that the other conditions in this permit will result in discharges being controlled as necessary to meet applicable standards. However, if through monitoring, inspections, reports, etc., EPA determines that stormwater discharges are not being controlled as necessary to meet water quality standards, the Agency may impose additional requirements or require the permittee to apply for an individual permit.

- *Changes from Proposed Permit:* The provision in the proposed permit corresponding to what is now Part 2.2.1 (Part 1.4.3) has been modified in the following ways: (1) Much of the procedural discussion from proposed Part 1.4.3 relating to the permittee’s responsibility for controlling discharges as necessary to meet water quality standards has been moved to the corrective action section, Part 3. Only slight modifications were made in adopting this language in the final permit. (2) EPA also included language requiring discharges to be controlled as necessary to meet applicable water quality standards. This language is similar to the provision discussed in Section 3.5 of the proposed fact sheet, in the quoted settlement agreement, that required facilities to “include BMPs that are selected, installed, implemented, and maintained in accordance with good engineering practices to minimize pollutants in the discharge so that the discharge will not cause or contribute to an excursion above any applicable water quality standards.” The permit also includes EPA’s expectation that at the outset of permit coverage discharges should be controlled as necessary to meet applicable water quality standards based on the strict effluent limits and other requirements that apply to all dischargers regardless of where they are discharging. The rationale for this expectation is discussed in the “purpose” section above.

Discharges to Water Quality Impaired Waters (Part 2.2.2). This provision defines “impaired waters” as those which have been identified by a State or EPA pursuant to Section 303(d) of the CWA as not meeting applicable State water quality standards. This may include both waters with EPA approved or established TMDLs, and those for which a TMDL has not yet been approved or established.

- *Purpose:* To include consistent determination of additional requirements for discharges to “impaired waters” so that the scope of the requirements in Part 2.2.2 can be more readily understood by permittees.
- *Comparison to MSGP 2000:* A determination was not included in the MSGP 2000; however, the permit did contain language referencing impaired waters as those including “any water for which a TMDL has been established.” Language on impaired waters was also included in the fact sheet for the MSGP 2000 (refer to Section V.D). Only minimal changes were made to the impaired water definition in the final permit.

- *Changes from Proposed Permit:* The definition from the proposed permit (Part 1.4.4 and Appendix A) has been modified slightly in this permit. The changes were minimal and intended to more clearly define the scope of impaired waters.

Existing Discharge to an Impaired Water with an EPA Approved or Established TMDL (Part 2.2.2.1). EPA plans to implement a new review process for discharges to impaired waters with an approved or established TMDL. Where an operator indicates on its NOI that the discharge is to one of these waters, EPA will review the applicable TMDL to determine as a threshold matter whether the TMDL includes requirements that apply to the individual discharger or its industrial sector. EPA will determine whether any more stringent requirements are necessary to comply with the WLA, whether compliance with the existing permit limits is sufficient, or, alternatively, whether an individual permit application is necessary. If EPA determines that additional requirements are necessary, the Agency will solicit public comment on the proposed more stringent limits and incorporate the final limits as site-specific terms in this general permit.

- *Purpose:* The purpose of Part 2.2.2.1 is to require compliance with applicable requirements in a TMDL and to clarify for the permittee how they will know when such requirements apply. These provisions are intended to implement the requirements of 40 CFR 122.44(d)(1)(vii)(B), which requires that water quality based effluent limits “are consistent with the assumptions and requirements of any available wasteload allocation for the discharge” Because WLAs for stormwater discharges may be specified in many different formats, EPA believes that it has not always been clear to permittees in the past what they need to do to comply with applicable WLAs. EPA has thus established a new process to ensure that these requirements are properly interpreted and communicated to the permittee in way that can be implemented.
- *Comparison to MSGP 2000:* The MSGP 2000 included a general requirement to comply with applicable requirements in a TMDL, but did not specify a process for ensuring that permittees understood these requirements and what was necessary to comply with them.
- *Changes from Proposed Permit:* The requirements in the current Part 2.2.1 are a consolidation of what was proposed as Parts 1.4.4.1 and 2.1.3.2. These sections of the permit were somewhat duplicative. EPA added language in Part 2.2.2.1 to explain how EPA will inform operators of any additional requirements that are necessary because of a specifically applicable WLA. EPA made this change to reduce the burden on permittees, and to respond to what has been the feedback from commenters that TMDL documents are often difficult to translate into meaningful requirements for permittees. The language was also modified to reiterate that all dischargers to impaired waters, regardless of whether a WLA is specifically applicable to them, must comply with the minimization standard in Part 2.2.1. Where there is no specifically applicable WLA, the WQBEL requirements are specified in Part 2.2.1.

EPA has found in implementing the section 303(d) program that a waterbody included in the list may be impaired from tributaries that are upstream of it. While the 303(d) list may not include upstream tributaries, other documents, such as the approved or established TMDL, may identify such streams as causing or contributing to the impairment. EPA will determine if the discharge is to one of these unlisted, upstream tributaries, and if necessary, inform the discharger of any additional requirements that are necessary to be consistent with the assumptions of any available wasteload allocation.

Existing Discharge to an Impaired Water without an EPA Approved or Established TMDL

(Part 2.2.2.2). If the discharge is to an impaired water without a TMDL, the permit reiterates the requirement for permittees to comply with the Part 2.2.1 requirement to control its discharge as necessary to meet applicable water quality standards and with the monitoring requirements of Part 6.2.4.

- *Purpose:* The purpose of Part 2.2.2.2 is to clarify that dischargers to impaired waters without an EPA approved or established TMDL are expected to meet water quality standards if they comply with the other WQBELs in this permit.
- *Comparison to MSGP 2000:* The MSGP 2000 did not include similar language specifically addressing dischargers to impaired waters without TMDLs.
- *Changes from Proposed Permit:* The requirements in the current Part 2.2.2.2 are a consolidation of what was proposed as Parts 1.4.4.2 and 2.1.3.2. No significant changes were made to these provisions. Part 2.2.2.2 contains a clarification regarding the discharger's obligation to control discharges to unlisted, upstream tributaries where EPA determines that these discharges cause or contribute to a downstream impairment.

New Discharge to an Impaired Water (Part 2.2.2.3). This provision requires new dischargers to impaired waters that have become eligible through compliance with Part 1.2.4.7 to implement and maintain any control measures or conditions on the site that enabled the operator to become eligible under that condition, and to modify such measures or conditions as necessary pursuant to Part 3 corrective actions.

- *Purpose:* The purpose of Part 2.2.2.3 is to require the permittee to maintain any control measures in good working order that are necessary to meet the eligibility requirements for new dischargers to impaired waters during the permit term.
- *Comparison to MSGP 2000:* The MSGP 2000 did not include similar language.
- *Changes from Proposed Permit:* EPA proposed a similar eligibility provision to that of the final permit's Part 1.1.4.7. EPA believes that if a permittee must implement certain controls to meet the eligibility requirement, then those controls must be maintained to continue to be eligible under the permit. Therefore, although the proposed permit was silent as to whether such control measures or conditions must continue to be implemented and maintained, any other interpretation would have made no sense given EPA's strict requirements for eligibility to discharge to impaired waters. Hence, for clarification purposes, EPA includes specific language in Part 2.2.2.3 to address the continued maintenance and implementation of any control measures or conditions that made the discharger eligible under Part 1.1.4.7.

Tier 2 Antidegradation Requirements for New or Increased Discharges (Part 2.2.3). This provision requires that any new permittee with a discharge, or any existing permittee determined to have an increased discharge⁷, directly to waters designated by a State or Tribe as Tier 2 (or 2.5) as defined in Appendix B of the permit, for antidegradation purposes must comply with any additional requirements and procedures that EPA determines are necessary to comply with the applicable State or Federal antidegradation requirements. EPA may also notify the permittee that

⁷ In general, any existing discharger required to notify EPA of an increased discharge consistent with Part 7.4 (i.e., a "planned changes" report) will be considered to have an increased discharge.

they cannot be covered under the MSGP due to the unique characteristics of the discharge or the receiving waters, in light of the applicable antidegradation policy, and that they must apply for an individual permit. Conversely, if EPA does not notify the permittee that additional antidegradation requirements must be met, the permittee is authorized to discharge under the permit. New or increased discharges to waters designated as Tier 3, outstanding national resource waters, as defined in 40 CFR 131.12(a)(3), are not eligible for coverage under this permit (see Part 1.2.4.8).

- *Purpose:* This provision implements applicable antidegradation requirements. For background, State and Tribal water quality standards are required to contain an antidegradation policy pursuant to 40 CFR 131.12. In addition, each State and Tribe is required to identify implementation methods that, at a minimum, provide a level of protection that is consistent with the Federal antidegradation provisions. Waters designated as “Tier 2” by States and Tribes can generally be described as follows:

Tier 2 protects "high quality" waters -- water bodies where existing conditions are better than necessary to support CWA § 101(a)(2) "fishable/swimmable" uses. (Note that some States have designated waters using criteria that EPA considers to be more stringent than the Federal Tier 2 designation, but less stringent than the Federal Tier 3 designation. EPA uses the term “Tier 2.5” to describe such waters.) Water quality may be lowered in such Tier 2 or Tier 2.5 waters where “allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located.” 40 CFR 131.12(a)(2). The process for making this determination is what is commonly known as “Tier 2 review.” The essence of a Tier 2 review is an analysis of alternatives to the discharge. 63 Fed. Reg. 36,742, 36,784 (col. 1)(July 8, 1998). In no case may water quality be lowered to a level that would interfere with existing or designated uses. 40 CFR 131.12(a)(1), 122.44(d). States have broad discretion in identifying Tier 2 waters. 63 Fed. Reg. at 36,782-83. In addition, States and Tribes may adopt what is known as a “significance threshold.” A “significance threshold” is a *de minimis* level of lowering of water quality below which the effects on water quality do not require Tier 2 review. *Id.* at 36,783.
- *Comparison to MSGP 2000:* Unlike the MSGP 2000, this permit establishes a process for EPA to determine and specify further actions for new or increased discharges to Tier 2 and 2.5 waters rather than leaving it to the discharger to interpret the general eligibility condition that they comply with applicable antidegradation requirements (as included in Part 1.2.3.9 of the MSGP 2000). EPA determined that facilities have often not understood these requirements and as such, EPA believes that it is appropriate for the Agency, as the permitting authority, to assume responsibility for identifying any specific, more stringent requirements for these discharges, including the possibility of denying coverage under this permit.

In Part 2.2.3, if a new or increased discharge is directly to a waterbody designated as Tier 2 (or 2.5), EPA may still authorize the discharge under the MSGP without necessarily going through Tier 2 review. Such authorization is permissible if EPA determines that a new or increased discharger’s compliance with the stringent limits and conditions of this permit will minimize the level of pollutants in the stormwater discharge to such a degree that the effects on water quality will be *de minimis*, and thus would not require Tier 2 review. After the new discharger’s NOI form is submitted, or after an existing discharger’s notification that it plans to increase its discharge pursuant to Part 7.4

of the permit, EPA will assess whether any additional procedures and requirements are necessary to comply with the applicable antidegradation requirements. As a result of this assessment, EPA may determine that it is necessary for the permittee to submit an individual permit application if, for instance, it is found that there is or will be a lowering of water quality such that a Tier 2 review is necessary.

Even if the effects are more than *de minimis*, the increased discharge may be allowable because the stringent control requirements in this permit are sufficient to justify a finding that the discharge is necessary to accommodate important social and economic development in the areas where the waters are located. See 40 CFR 131.12(a)(2). This is because the controls already required by this permit, in general, represent the feasible level of control in light of best industry practice.

- *Changes from Proposed Permit:* Proposed Part 1.2.4.10 was deleted, and replaced with the current Part 2.2.3. As indicated above, EPA added a process to require additional antidegradation review of such dischargers, and, where necessary, to require additional controls on such discharges, or to require the permittee to file an individual permit application. If EPA finds it appropriate to impose additional requirements on the permittee to ensure the maintenance and protection of Tier 2 (or 2.5) water quality, the Agency will solicit public comment on the proposed more stringent requirements and incorporate any final, site-specific conditions into this permit.

The Tier 2 approach used in this permit relies on an expectation that the effluent limits and permit conditions in the MSGP will be sufficient to protect the quality of Tier 2 and 2.5 waters. Thus EPA has determined that compliance with the MSGP generally will be sufficient to satisfy Tier 2 (or 2.5) antidegradation requirements because the controls will not result in a lowering of water quality, making individualized Tier 2 review unnecessary, assuming of course that the discharger is in compliance with any other applicable State or Tribal antidegradation conditions that are included in Part 8 of the permit. Alternatively, the controls in the permit are sufficiently stringent that they satisfy the requirement at the heart of Tier 2 review, that the discharge is necessary to accommodate important economic and social development in the area where the discharge is located. However, in cases where information submitted with the NOI, or available from other sources, indicates that further Tier 2 review and/or conditions are necessary, EPA will conduct this review and require any appropriate additional controls.

The conclusion that compliance with the MSGP will generally meet the Tier 2 antidegradation requirements depends on several key aspects of the permit. First, all dischargers subject to this permit are required to meet the stringent technology-based effluent limits set out in Parts 2.1. These effluent limits, which dischargers must comply with through the implementation of stormwater best management practices (BMPs) chosen in light of best industry practice, are equivalent to the best available control technology economically achievable (BAT), best conventional control technology (BCT), and best practicable control technology (BPT) limits for discharges from the type of industrial activities covered by the MSGP. All permittees are required to comply with these non-numeric effluent limits, set out in Part 2.1.1.

Through compliance with these limits alone, EPA expects that the discharge of pollutants will be reduced and/or eliminated so that there should not be a lowering of water quality. EPA bases this conclusion in part on the standard by which permittees are

required to select, design, install, and implement the control measures to be used to meet these non-numeric effluent limits. Parts 2 and 2.1 of the permit require the selection, design, installation, and implementation of control measures that are technologically available and economically practicable and achievable in light of best industry practice to reduce and/or eliminate pollutants in the stormwater discharge. Furthermore, once installed and implemented, the permittee is obligated to maintain control measures regularly and to correct deficiencies where sampling or inspection determines that deficiencies exist. Lastly, where EPA determines through its oversight activities (e.g., onsite inspection) that a discharger is not meeting its Part 2.1.1 limits, such a deficiency will constitute a violation of the permit and will require follow-up corrective action pursuant to Part 3.1.

Additionally, where the implementation of the technology-based requirements in this permit are not sufficient to protect the applicable receiving water's water quality standards, the permittee is subject to further water quality-based effluent limits (WQBELs). See generally Part 2.2. Also, EPA may inform the permittee that an individual permit is necessary. Both the technology-based effluent limitation guidelines-based limits and the WQBELs serve as additional layers of protection.

Third, there may very well be individual cases where EPA determines that further controls are necessary or that coverage under the MSGP is no longer appropriate to protect the Tier 2 or Tier 2.5 status of the receiving water. For this reason, EPA has included the following language in Part 2.2.3: "EPA may notify you that additional analyses, control measures, or other permit conditions are necessary to comply with the applicable antidegradation requirements, or notify you that an individual permit application is necessary in accordance with Part 1.6.1." It is anticipated that if EPA decides to either change the terms of coverage or terminate MSGP coverage for a particular new or increased discharger, that facility may be required to undergo Tier 2 review.

Note about alternate antidegradation designations used by some States: Some States have adopted alternative approaches to designating Tier 2 or Tier 3 waters. These are collectively referred to as "Tier 2.5" waters since they fall between Tiers 2 and 3 in terms of characteristics and regulations supporting them. Tier 2.5 waters are commonly described as providing protection more stringent than Tier 2 but allowing some added flexibility that a Tier 3-designated water (Outstanding Natural Resource Water) would not. Refer to *Memorandum from William Diamond* (Former Director, Standards and Applied Science Division) to *Victoria Binetti* (Chief, Region III, Program and Support Branch), June 13, 1991. Examples of Tier 2.5 waters exist in Massachusetts, which designates "outstanding resource waters" (ORWs). These waters have exceptional sociologic, recreational, ecological and/or aesthetic values and are subject to more stringent requirements under both the Massachusetts Water Quality Standards and the Massachusetts Stormwater Management Standards. ORWs include vernal pools certified by the Natural Heritage Program of the Massachusetts Department of Fisheries and Wildlife and Environmental Law Enforcement, all Class A designated public water supplies with their bordering vegetated wetlands, and other waters specifically designated. All of the provisions in the MSGP pertaining to Tier 2 waters apply equally to Tier 2.5 waters. And, where there is a reference in this fact sheet to Tier 2 waters, the reader should infer that EPA intends to include Tier 2.5 waters as well.

VI.D. Requirements Relating to Endangered Species and Historic Properties (Part 2.3)

This requirement holds permittees responsible during the permit term for complying with any agreed-upon requirements that were considered necessary as a condition or prerequisite for becoming eligible under Parts 1.2.4.5 or 1.2.4.6.

- *Purpose:* The purpose of Part 2.3 is to clarify that permittees must continue to meet conditions or prerequisites considered necessary to satisfy eligibility requirements related to protection of endangered species and/or critical habitat, or historic properties.
- *Comparison to MSGP 2000:* This provision was not included in the MSGP 2000 as such. However, the inclusion of Part 2.3 is a clarification of the requirement to follow through on whatever actions the discharger committed to taking as a condition or prerequisite of becoming eligible to discharge under either Part 1.2.4.5 or Part 1.2.4.6.
- *Changes from Proposed Permit:* Part 2.3 was articulated in a similar requirement in the proposed Appendix E stating, “if you adopt measures to avoid or eliminate adverse effects, per the Service’s requirements or recommendations, you must abide by those measures for the duration of your coverage under the MSGP.” This Part has been expanded to include any requirements for eligibility under Part 1.2.4.5 (historic preservation).

VI.E. Requirements Relating to the National Environmental Policy Act (NEPA) Review

This requirement holds permittees responsible during the permit term for complying with any agreed-upon requirements that were considered necessary as a condition or prerequisite for becoming eligible under Part 1.1.2.5.

- *Purpose:* The purpose of Part 2.4 is to clarify that permittees must continue to meet conditions or prerequisites considered necessary to satisfy eligibility requirements related to obtaining coverage under this permit for any NSPS provisions.
- *Comparison to MSGP 2000:* Part 1.2.4 of MSGP 2000 required that for facilities to maintain eligibility, new sources had to “implement any mitigation required of the facility as a result of the NEPA review process.” The inclusion of Part 2.4 is a clarification of this requirement to follow through on whatever actions the discharger committed to taking as a condition or prerequisite of becoming eligible to discharge under the NEPA review process described in Part 1.1.2.5.
- *Changes from Proposed Permit:* EPA omitted the specific requirement to implement any provisions which were identified as part of the new source review process. Rather, EPA envisioned that this would be implemented through a strict reading of Part 2.1.5 of the proposed permit which required permittees to implement controls as necessary to control pollutants in stormwater. EPA now believes it is clearer to include this specific requirement in Part 2 of the permit to clarify that permittees are expected to implement during the life of the permit any mitigation required as a result of the NEPA review process. Section 2.4 is intended to provide this clarification.

VII. Corrective Actions (Part 3)

Conditions Requiring Review and Revision to Eliminate Problem (Part 3.1). Permittees are required to review and revise the selection, design, installation, and implementation of their control measures in response to any of the following conditions:

- an unauthorized release or discharge occurs at the facility;
- a discharge violates a numeric effluent limit;
- the permittee becomes aware, or EPA determines, that control measures are not stringent enough for the discharge to meet applicable water quality standards;
- an inspection or evaluation of your facility by an EPA official, or local, state, or Tribal entity, determines that modifications are necessary to meet the non-numeric effluent limits in Part 2.1.1; or
- a routine facility inspection, quarterly visual assessment, or comprehensive site inspection finds that control measures are not being properly operated and maintained.

The corrective action must ensure that any of the above conditions are eliminated and will not be repeated in the future.

- *Purpose:* Part 3.1 specifies conditions that, should they occur, trigger the need to review and modify existing control measures to resolve any deficiencies.
- *Comparison to MSGP 2000:* The MSGP 2000 required certain “follow-up actions” (see Part 4.9.3 of MSGP 2000) to modify the SWPPP document or BMPs to correct problems identified in a comprehensive site compliance evaluation. EPA believes this permit greatly improves upon the MSGP 2000’s process for correcting deficiencies by providing greater specificity on the types of conditions that trigger the need for corrective actions and the required responses.
- *Changes from Proposed Permit:* The final permit consolidates in Part 3.1 what existed in several different provisions in the proposed permit. See Parts 2.3 and 3.3 of the proposed permit. In Part 3.3 of the proposed permit, operators would have been required to conduct corrective actions to “address deficiencies” found through inspections, monitoring, or unauthorized releases. After further consideration, EPA concluded that this endpoint was vague. The final permit replaces this objective with a requirement for the permittee to “review and revise the selection, design, installation, and implementation of [the permittee’s] control measures to ensure that the condition is eliminated and will not be repeated in the future.” EPA believes that by changing the action taken in the new Part 3.1 to that of a review and revision of the way the existing control measures were selected, designed, and installed, and are being implemented, the permit is clear that the permittee is expected to assess why one of the delineated problems occurred and eliminate the problem. It was always EPA’s expectation that operators make some determination as to why a particular problem was occurring and whether improvements could be made in the quality of the discharge. This modification merely clarifies that intention.

Conditions Requiring Review to Determine if Modifications Are Necessary (Part 3.2).

Permittees are required to review the selection, design, installation, and implementation of their

control measures to determine if modifications are necessary to meet the Part 2 effluent limits if any of the following conditions occur:

- construction or a change in design, operation or maintenance at the permittee's facility significantly changes the nature of pollutants discharged in stormwater from the facility, or increases the quantity of pollutants discharged; or
- the average of quarterly sampling results exceeds an applicable benchmark.

If less than four benchmark samples have been taken, but the results are such that an exceedence by the quarterly average is mathematically certain (i.e., if the sum of quarterly sample results to date is more than four times the benchmark level) this is considered a benchmark exceedence, triggering this review.

- *Purpose:* Part 3.2 specifies conditions that, should they occur, require further review to determine whether revision of control measures is necessary.
- *Comparison to MSGP 2000:* See discussion above associated with Part 3.2.
- *Changes from Proposed Permit:* See discussion above associated with Part 3.2. EPA believes that a distinction is necessary between the type of follow-up required for the conditions in Part 3.1 and Part 3.2. In Part 3.1, the conditions are all clearly indicative of a problem at the site which must be corrected, whereas if a Part 3.2 condition exists at a facility, further analysis must be performed to determine if revision to the site's control measures is necessary. For instance, if an unauthorized release has occurred at the site, this is a condition that requires attention by the permittee to ensure that it is not repeated. If, on the other hand, the average of the permittee's four quarterly benchmark sampling results exceeds a benchmark, further analysis is necessary to decide whether the discharge of the pollutant can be further minimized using control measures that are technologically available and economically practicable and achievable in light of best industry practice.

The proposal required a similar assessment if the average of the four first year benchmark samples exceeded the benchmark. EPA determined that it would not be appropriate to require corrective action after a single benchmark exceedence because of the high variability in stormwater monitoring results, which could lead to individual exceedences even in cases where the facility's discharge was generally below benchmark levels. However, after further reflection, EPA has determined that it is also not appropriate for the facility to wait a full year to address benchmark exceedence in cases where it becomes clear that the average of the four quarterly samples will ultimately exceed the benchmark. Thus, the final permit requires corrective action if after less than four samples are taken, the results are such that an exceedence by the four-quarter average is mathematically certain. For instance, if a first quarter benchmark sampling result for a Sector O facility shows a concentration that is more than four times the benchmark concentration for Total Iron (e.g., the result shows concentrations of 5.0 mg/l as compared to the benchmark of 1.0 mg/l), then corrective actions would be required at that time. EPA believes that waiting a full year before conducting a corrective action assessment might miss an important opportunity to address sources of pollution immediately. The corrective action assessment for benchmark exceedences may lead to an immediate revision of control measures, to a determination that the exceedence is a result of natural background, to a determination that the discharge, though not solely a

result of natural background, cannot be further minimized using control measures that are technologically and economically practicable in light of best industry practice, or to a conclusion that further data are needed to identify the cause of the discharge and/or potential solutions. In each of these cases, the assessment and its conclusions must be documented in the operator's compliance documentation (see Part 5.4) and summarized in the facility's next annual report (see Part 7.2).

Corrective Action Deadlines (Part 3.3). The permit includes specific deadlines for permittees to take corrective actions. Part 3.3 requires that within 24 hours following identification or discovery of any of the conditions listed in Parts 3.1 or 3.2, the permittee must document such discovery. Subsequently, within 14 days of the discovery, the permittee must document corrective actions taken or to be taken to eliminate the condition and any additional review necessary to further investigate the condition. If the permittee determines that changes are necessary following the review, any modifications to the control measures must be made before the next storm event if possible, or as soon as practicable following that storm event.

- *Purpose:* This provision stipulates time limits for implementing corrective actions to remedy the Part 3.1 and 3.2 conditions. The time limits are those that EPA considers reasonable for documenting that a problem has been identified and then conducting the required analysis and making any necessary repairs or modifications. These timeframes are included to ensure that deficiencies are corrected expeditiously. Failure to take the required corrective action within the stipulated time limit constitutes an independent permit violation.
- *Comparison to MSGP 2000:* Except for the requirement to document any problem within 24 hours, Part 3.3 of this permit is similar to MSGP 2000 in that both permits require revisions to the SWPPP within 14 calendar days, while modifications to existing BMPs were required by the next anticipated storm event, or as soon as practicable. While changes to control measures are still required by the next anticipated storm event, where feasible, this permit does not cap the amount of time to complete corrective action at 12 weeks as was done in MSGP 2000. This permit adopts the more flexible deadline of "as soon as practicable following" the next anticipated storm event. This change was made in response to comments raising the concern that the 12-week timeframe (as well as the proposed 60-day timeframe) did not account for the time it might take to complete the necessary evaluations and select, design, and install new or modified control measures. The new standard still requires actions to be taken by the next anticipated storm event where feasible, but allows for some flexibility where the need exists. EPA recognizes that in rare cases a corrective action review may identify the need for a substantial improvement to the facility's control measures (for example, construction of a stormwater detention basin), and does not want to limit the selection and implementation of such controls with an inflexible deadline. Another possibility is that the operator may determine that further monitoring is needed to pinpoint the source of the problem, and this monitoring may need to be conducted during future storm events. However, EPA believes that in the vast majority of cases, corrective action reviews will identify responses that can be taken quickly, either before the next storm event or shortly thereafter. EPA expects operators to document and justify any schedules for selecting, designing, and installing new or modified control measures.

EPA added new language clarifying that permittees must document deficiencies immediately (i.e., within 24 hours) as a way to more clearly provide a starting point on

which corrective actions are to be based. EPA does not expect this initial documentation to be detailed but merely to acknowledge the date of the finding and a general discussion of the findings of the review that necessitates corrective action. More detailed documentation, as described below, continues to be required within 14 days of the discovery.

- *Changes from Proposed Permit:* In the proposed permit, implementation of new or modified BMPs was required to be initiated before the next storm event if possible, but not later than 60 days after discovery. See Part 2.3 of the proposed permit. In response to numerous comments raising concerns about the problems associated with the 60-day timeframe, EPA revised the corrective action deadlines to reflect the fact that modifying control measures may occasionally take longer than 60 days. Part 3.3 adopts a more flexible approach that requires modification prior to the next storm event if possible, or, if that is not possible, as soon as practicable after the next storm event. As described above, EPA is requiring that permittees provide some minimal documentation within 24 hours after discovery of a deficiency requiring corrective action.

Corrective Action Report (Part 3.4). For any event described in Parts 3.1 or 3.2 of the permit, permittees must document basic information describing the event and the permittees' response to that event. As described above, the permit establishes conditions for both 24-hour and 14-day response periods. EPA developed a Corrective Action Form for use by permittees to clarify expectations for documentation of conditions triggering a response and the details of the response taken. For triggering events in Part 3.2, where the permittee determines that revision to control measures is not necessary, the permittee must still document the review and the basis for this determination. As described elsewhere in the permit, permittees are required to maintain a copy of this documentation with their SWPPP as well as submit this information in an annual report.

- *Purpose:* The purpose of Part 3.4 is to ensure compliance with corrective action requirements through increased accountability and oversight. EPA views ongoing assessment of control measure effectiveness and corrective actions as integral to an effective stormwater management program. As required in Part 7.2 of the permit, EPA will receive reports identifying corrective actions taken by permittees over the course of the previous year. EPA expects that this information will help the Agency determine how well operators are responding to potential deficiencies on the ground and where a facility may require further Agency oversight.
- *Comparison to MSGP 2000:* The MSGP 2000 included a requirement to document findings from a comprehensive site compliance evaluation, including identifying any deficiencies and actions taken in response. This permit expands that requirement to identify any deficiencies and corresponding corrective actions whether that is done as part of a comprehensive evaluation or any other instance when such a deficiency is identified.
- *Changes from Proposed Permit:* The corrective action provision (proposed as Part 3.3) in the proposed permit required the permittee to document and retain records of corrective actions taken. The final permit provides additional detail on the information that must be included in this documentation. As described in Section VIII of this fact sheet, EPA created a Corrective Action Form, included in Appendix I, which is a subpart

of the Annual Reporting Form and should facilitate concise documentation and reporting of corrective actions.

Effect of Corrective Action (Part 3.5). The permit clarifies that if the condition triggering the corrective action review is a permit violation (e.g., exceedance of an effluent limit), correcting it does not remove the original violation. Additionally, failure to take corrective action in accordance with Part 3 is a separate, additional permit violation. EPA will consider the appropriateness and promptness of corrective action in determining enforcement responses to permit violations.

- *Purpose:* Part 3.5 clarifies EPA's intention with regard to the effects of taking appropriate corrective actions on the underlying violation.
- *Comparison to MSGP 2000:* The MSGP 2000 did not contain the provision in Part 3.5.
- *Changes from Proposed Permit:* EPA proposed a similar clarification in what was proposed Part 1.3 to what is now contain in Part 3.5 of the final permit. Proposed Part 1.3, indicated that not only is the underlying BMP deficiency considered a permit violation, but failure to take subsequent corrective actions as required is another separate and distinct permit violation. Although minor revisions have been made to the wording for Part 3.5, the intent and meaning of both proposed Part 1.3 and Part 3.5 of the final permit are the same. EPA has also clarified in the final permit that not all conditions triggering corrective action are permit violations (e.g., a benchmark exceedance). However, failure to conduct (and document) corrective action review and revise control measures as necessary in such cases does constitute a permit violation.

Substantially Identical Outfalls (Part 3.6). If the event triggering corrective action is linked to an outfall that represents other substantially identical outfalls, the permittee's review must assess the need for corrective action for each outfall represented by the outfall that triggered the review. Any necessary changes to control measures that affect these other outfalls must also be made before the next storm event if possible, or as soon as practicable following that storm event.

- *Purpose:* Part 3.6 clarifies EPA's intention with regard to corrective actions for triggering conditions found at outfalls representing substantially identical outfalls.
- *Comparison to MSGP 2000:* Part 3.6 is new permit language but is consistent with EPA's intent in the previous permit.
- *Changes from Proposed Permit:* EPA proposed that permittees take corrective action in response to deficiencies found as a result of inspection, evaluation, or monitoring. Commenters recommended that where there is an event at an outfall that represents other substantially identical outfalls, EPA require the operator to conduct monitoring or inspections of the substantially identical outfalls to ensure that appropriate controls are adopted for all outfalls. EPA agrees with the commenters that this is a reasonable approach. If the representative outfall has a need for corrective action then it is reasonable to investigate whether these triggering conditions exist at any substantially identical outfalls as well, and to require corrective action at those outfalls as well.

VIII. Inspections (Part 4)

This permit requires permittees to conduct three types of inspections: routine facility inspections, quarterly visual assessments, and comprehensive site inspections. Each is described in more detail below.

VIII.A. Routine Facility Inspections (Part 4.1)

The proposed permit included routine facility inspections as a component of the SWPPP. However, to clarify inspection requirements for permittees, EPA moved the routine facility inspections to Part 4 along with the other types of site inspections required under this permit (i.e., quarterly visual assessments and comprehensive site inspections).

Permittees are required to conduct routine inspections, at least quarterly, of all areas of the facility where industrial materials or activities are exposed to stormwater, and of all stormwater control measures used to comply with the effluent limits required by the MSGP. Qualified personnel must conduct the routine facility inspections with at least one member of the Pollution Prevention Team participating. Because some equipment, processes, and procedures may require more frequent inspections, the relevant inspection schedules must be documented in the SWPPP. For example, inspection of outdoor areas associated with regular industrial activity may require more frequent inspections to ensure that the site is swept, garbage picked up, drips and spills cleaned, etc. on a regular basis.

Part 4.1 of the final MSGP elaborates on the specific information to be documented for each routine inspection. Most importantly, this documentation must include when the inspection took place, who conducted the inspection, and any indication that controls may not be adequate or are not functioning properly. The findings of these routine inspections must be maintained on-site with the SWPPP.

Some industry sectors have more specific routine inspection requirements, which are described in more detail in Part 8 of the permit for the relevant sectors.

At least once each calendar year, the routine facility inspection must be conducted during a period when a stormwater discharge is occurring. As permittees are already required to perform visual monitoring, benchmark monitoring, and effluent limitations monitoring during storm events, EPA does not believe this imposes significant additional burden on permittees. However, EPA does see this as a potentially important tool for the permittee to be able to better identify sources of pollutants discharged in stormwater runoff from the facility and to actively observe the effectiveness of control measures.

- *Purpose:* Routine inspections help ensure that stormwater control measures are adequate and are operated and maintained properly.
- *Comparison to MSGP 2000:* EPA made a number of changes to the routine inspection requirements in comparison to the MSGP 2000, including:
 - Specifying a minimum frequency of quarterly inspections – MSGP 2000 did not specify a generally-applicable frequency for routine inspections although frequency requirements for some sectors were included. The final permit also includes alternate frequency requirements for some sectors;

- Adding the requirement to conduct at least one routine facility inspection each year during a period when stormwater is discharging;
- Adding details on the minimum elements of a routine facility inspection report; and
- Adding a requirement that at least one member of the Stormwater Pollution Prevention Team must participate in the inspection. EPA notes that there is no limit on who may be included on the Pollution Prevention Team. The intent of this new requirement is not to require any particular plant officer to participate in inspections. Rather the intent is to ensure that inspections are carried out by qualified personnel. EPA believes that requiring inspectors to be formally identified as part of the Stormwater Pollution Prevention Team will help ensure that they are properly trained to carry out effective inspections.

The routine inspection requirements in the MSGP 2000 also included a requirement to modify the SWPPP within 14 days of the inspection if deficiencies in the SWPPP were identified. EPA has moved this requirement to Part 3, which addresses corrective actions. See Section VII of this fact sheet for additional discussion of corrective action in response to inspection findings.

- *Changes from Proposed Permit:* EPA revised the routine inspection frequency from “at least monthly unless you document ... another inspection frequency is adequate ...” to a more clearly defined minimum threshold of “at least quarterly (i.e., once each calendar quarter)” This change was made to address public comments on the proposed permit. EPA received several comments that addressed this issue with specific concern that the proposed permit may not provide the public with confidence that a minimum inspection frequency is being achieved and that monthly inspections are too burdensome and unnecessary in many instances. Two commenters suggested that a minimum frequency of quarterly would be appropriate. In response to these comments, the final permit reflects a minimum inspection frequency of quarterly for all permittees, but suggests that more frequent inspection may be appropriate in certain instances. More frequent inspections are also required for some activities in certain sectors and are discussed in the fact sheet for those specific sectors.

As described above, EPA also modified the inspection requirement to specify that at least once each calendar year, the routine facility inspection must be conducted during a period when a stormwater discharge is occurring.

Finally, EPA added clarifying language to Part 4.1 of the permit describing the situation with mining activities (i.e., Sectors G, H, and J) whereby the “no exposure” standard for inactive and unstaffed sites is unrealistic for such significant land disturbing activities. However, to be clear, this does not exempt these facilities from having to minimize the discharge of pollutants during these inactive and unstaffed periods.

VIII.B. Quarterly Visual Assessment of Stormwater Discharges (Part 4.2)

This permit retains the requirement from the two previous MSGPs to conduct quarterly visual examinations of stormwater discharges. All industrial sectors covered by this permit are required to conduct these examinations. To ensure that all inspection and assessment requirements were described in the same part of the permit, EPA moved the requirement to

conduct quarterly visual assessments from the monitoring section of the permit to a new Part 4.2 addressing inspections.

This permit requires that grab samples of stormwater discharges be taken and examined visually for the presence of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution. No analytical tests are required to be performed on these samples. The grab samples must be taken within the first 30 minutes or as soon as practicable after the occurrence of an actual discharge from your site (including documentation of why sampling was not practicable within the first 30 minutes). The permit no longer requires a storm event of at least one inch or that this discharge occurs during daylight hours; rather, the trigger for visual monitoring is now simply that the precipitation event causes an actual discharge to occur. The final permit includes new conditions specific to the monitoring of snowmelt. Specifically, in areas subject to snow, the MSGP now requires that at least one of the quarterly samples be collected from snowmelt. For practical purposes, the permit does not require that these snowmelt samples be collected within the first 30 minutes of discharge as is the case for samples collected during rain events.

Permittees must document the results of their visual assessments in a report that includes the sample location, date and time, personnel collecting the sample and performing visual assessments, results of the observations, and probable sources of any observed stormwater contamination. The visual examination reports must be maintained onsite with the SWPPP.

When conducting a stormwater visual examination, the pollution prevention team, or individual team member, should attempt to relate the results of the examination to potential sources of stormwater contamination on the site. For example, should an oil sheen be observed, facility personnel (preferably members of the pollution prevention team) should conduct an inspection of the area of the site draining to the examined discharge to look for obvious sources of spilled oil, leaks, etc. If a source can be located, then this information would allow the facility operator to immediately conduct a clean-up of the pollutant source, and/or to revise control measures to minimize the contaminant source.

The permit includes exceptions to these requirements in order to account for circumstances during which conducting quarterly visual assessments may not be infeasible, namely during adverse (e.g., dangerous) weather conditions, or in parts of the country subject to climates with irregular stormwater runoff or to large amounts of snowfall. Where these types of conditions prevent a facility from performing these assessments quarterly, permittees have the ability to modify their assessment schedule such that the four assessments are conducted over the course of the year during periods when discharges, be it from rain or snow, actually occur and can be safely observed.

Operators of inactive and unstaffed sites may invoke a visual monitoring exception if they eliminate all exposure of industrial activities and materials to stormwater, and document this in the SWPPP. This waiver is available to all sectors covered under this permit. In addition, inactive and unstaffed mines covered under Sectors G, H, and J are eligible for this waiver even if all exposure has not been eliminated, due to the unique issues affecting such facilities, such as the remoteness of many mining sites. Facilities that make use of this waiver must still implement any necessary control measures and comply with other applicable permit requirements. Inactive and unstaffed sites must still conduct annual inspections.

Operators with two or more essentially identical outfalls may also elect to conduct a visual assessment at just one of these outfalls each quarter, but must perform their quarterly assessments on a rotating basis to ensure that each substantially identical outfall is periodically observed throughout the period of permit coverage. If stormwater contamination is identified through visual monitoring performed at a substantially identical outfall, the operator must assess and modify his/her control measures as appropriate for each outfall represented by the monitored outfall. This approach ensures that operators will assess discharges from the entire site over the term of the permit, and will address any identified problems at all substantially identical outfalls where the problem may be occurring.

- *Purpose:* These assessments provide a useful and inexpensive means for permittees to evaluate the effectiveness of their control measures. Although the visual examination cannot assess the chemical properties of the stormwater discharged from the site, the examination will provide meaningful results upon which the permittee may act quickly.
- *Comparison to MSGP 2000:* EPA made a number of changes to the quarterly visual assessment requirements in comparison to the MSGP 2000, including:
 - Moved the “quarterly visual monitoring” requirements from the monitoring part of the permit to a new part of the permit, and renamed it “quarterly visual assessment of stormwater discharges;”
 - Deleted the requirement for permittees to have to conduct visual assessments during daylight hours;
 - Replaced the requirement to take samples no later than the first hour of a measurable storm event with language that allows for sampling “as soon as practicable after the first 30 minutes.” The provision also requires documentation with the SWPPP explaining why it was not possible to take samples within the first 30 minutes
 - Deleted the requirement that samples be collected from a discharge resulting from a storm event that is greater than 0.1 inches. Permittees are now required to collect samples from an actual discharge;
 - Clarified visual monitoring requirements for discharges of snowmelt;
 - Provided more flexibility for obtaining four samples a year in areas with adverse weather, arid or semi-arid areas, and areas subject to snow;
 - Deleted the language “where practicable, the same individual should carry out the collection and examination of discharges for the entire permit term;”
 - Modified the inactive and unstaffed sites exemption so that it is only applicable when “there are no industrial materials or activities exposed to stormwater;” with the exception of the three mining sectors (i.e., Sectors G, H, and J); and
 - Modified the substantially identical outfall exception to clarify that visual assessments of such outfalls must be made on a rotating basis so as to cover all outfalls over the course of the permit term.
- *Changes from Proposed Permit:* EPA made changes to the proposed permit based on commenters concern, mostly about the practicability of performing visual assessments. Commenters expressed concern about the complexity of trying to collect these quarterly visual samples because of the restrictions and conditions placed on this process (e.g.,

quarterly, within 30 minutes, but no later than 1 hour, of the commencement of a discharge of rain or snowmelt, during daylight hours, of a storm event at least 0.1 inch or greater). To address these concerns, EPA modified the visual assessment requirements to simplify implementation while still ensuring that the assessment is representative of stormwater discharges from the facility. Specifically, EPA (1) eliminated the requirement that samples be collected during daylight hours acknowledging that automatic samplers may be used to collect these samples (but did keep the requirement that these samples be inspected in well-lit areas), (2) eliminated the requirement that the sample be collected from a storm event measuring at least 0.1 inches of rain or greater (instead relying on whether the storm event causes a measurable discharge), (3) clarified that snowmelt discharges do not have to be collected in the first 30 minutes of the discharge, (4) provided that facilities can modify assessment schedules in cases where a quarterly schedule is not practicable or representative, and (5) replaced the requirement to collect samples within the first hour of a measurable storm event with language requiring them to be taken within the first 30 minutes or as soon as practicable thereafter (see “Comparison to MSGP 2000” for further details). EPA also removed the permit requirement that these assessments be conducted by the same person where possible, although the Agency does believe this is a good practice to ensure more consistent assessments and to more readily identify changes that may occur over time, but may not always be practicable.

EPA expects item (4) above to significantly improve the practicability of facilities conducting four assessments per year. In the past, many sites were unable to collect one or more samples each quarter because of the lack of a storm event during a quarter that met all the requirements of the permit. Now, facilities are able to schedule these assessments to coincide with times when discharges are expected to occur. For example, in arid and semi-arid areas, facilities may determine that it is appropriate to perform these activities during the two rainy seasons (i.e., two samples in each of these periods) rather than trying to stagger these events evenly over the course of the year.

EPA also received several comments expressing concern about the difficulty of trying to perform visual assessments of multiple outfalls. While EPA still believes it is appropriate to assess each unique outfall quarterly, EPA did modify the frequency of these assessments for substantially identical outfalls from at least annually for each outfall to “a rotating basis over the course of the permit.” EPA also clarified in the final permit that if stormwater contamination is identified through visual monitoring, the permittee must assess and modify control measures for each substantially identical outfall represented by the one assessed outfall.

Finally, EPA received numerous comments from the mining industry and others expressing concern with the implementation of the inactive and unstaffed site exemption as worded in the proposal, specifically with the proposed requirement that there be no exposure to stormwater. Representatives from the mining industry stated that meeting the no exposure requirement for inactive and unstaffed sites, many of which are very remote and quite large, is an unrealistic expectation and to be required to assess each outfall at these sites would impose a significant burden. After further reflection about the concerns raised by the mining industry, EPA has concluded that the requirement to conduct visual assessments for inactive and unstaffed sites is impracticable considering the burden that this would impose on such facilities to make staff available solely for this

purpose and transport them to the sites during precipitation events. Therefore, EPA modified the exemption in the final permit for inactive and unstaffed mining sites (Sectors G, H, and J) so that these sites are not required to document no exposure in order to qualify (although these sites are still required to implement control measures for stormwater discharges). Specifics of this exemption as it applies to mining activities are described in Section XII of this fact sheet. For sectors other than mining, EPA retained the approach in the proposed permit (documentation of no exposure is required for the visual assessment exemption), but expects that the added flexibility for when these assessments are to be performed will make this approach workable. EPA did not receive comments indicating concern with the no exposure requirement from other sectors.

VIII.C. Comprehensive Site Inspections (Part 4.3)

This permit requires that permittees conduct comprehensive site inspections at least once a year for the entire permit term. Since facilities will obtain coverage at different times over the course of the permit, EPA added clarifying language identifying the inspection periods for the duration of the permit, based on the issuance date of the permit, including language clarifying that should the permit be administratively extended (i.e., EPA fails to reissue the general permit on-time), these inspection requirements continue to apply. Also, the permit provides a one-time waiver for facilities that obtain permit coverage less than three months before the end of one of these inspection periods to allow new permittees more time to fully assess the adequacy of their stormwater control measures.

Comprehensive site inspections may be conducted simultaneously with other site inspections (such as with the routine facility inspection described in permit section 4.1), provided the scope is sufficient to address the minimum requirements of the comprehensive site inspection. Qualified personnel must conduct inspections, and the inspection team must include at least one member of the Pollution Prevention Team. Qualified personnel are those who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility, and who can also evaluate the effectiveness of controls selected. Permittees may hire outside contractors to perform these inspections; however, signature and certification of inspection reports must be by a duly authorized representative of the facility, as defined in Subsection 11 of Appendix B.

Note that the comprehensive site inspections are not the same as routine facility inspections. Routine facility inspections (Part 4.1) are required more frequently and are meant to be less formal evaluations of the facility's exposed industrial activities so that permittees have a mechanism for ensuring that problems are not developing. Comprehensive site inspections, as the term implies, include a much more in-depth review of the site and all operations, as they relate to stormwater management and the requirements of this permit.

The comprehensive site inspection must cover all areas of the facility affected by the requirements in the permit including areas where industrial materials or activities are exposed to stormwater, stormwater control measures used to comply with the effluent limits, and areas where any leaks, spills, or other accidental discharge may have occurred in the last 3 years. EPA developed an Annual Report Form, included as Appendix I, which is recommended for use when performing these inspections. Appendix I focuses on assessments at each outfall and the areas of the facility that may contribute stormwater discharges associated with industrial activity to that

outfall. The permit identifies the specific activities that may occur at the facility that are to be inspected. Also, the comprehensive site inspection must include observation of stormwater control measures used to meet permit requirements to assess the adequacy of these control measures, including any measures in need of maintenance, repair, or replacement or where additional controls are needed.

The results of each comprehensive site inspection must be documented in a report signed and certified by an authorized company official in accordance with Subsection 11 of Appendix B of the permit and submitted to EPA within 45 days of conducting the comprehensive inspection consistent with Part 7.2 of the permit. EPA considers 45 days to be a reasonable amount of time to prepare the report and have it signed and certified by an authorized representative and then submitted. In addition to documenting findings of the assessment and observations described above, the report must also include basic inspection information (e.g., inspectors, date, and NPDES permit number), must certify if the facility is in compliance with the permit, and must describe any corrective action initiated or completed during the reporting period or required as a result of the inspection.

- *Purpose:* This provision requires a permittee to conduct an on-site inspection to ensure its facility is in compliance with all relevant requirements in the MSGP. The comprehensive site inspection is intended to be more thorough and detailed than the routine inspections conducted at least quarterly.
- *Comparison to MSGP 2000:* The requirements in the final MSGP are substantially similar to the MSGP 2000, with one notable exception. EPA is now requiring submission of an annual report documenting the findings of these annual comprehensive site inspections. Under the MSGP 2000, EPA received nothing more than the NOI for the majority of permittees during the 5-year permit term. To increase accountability and oversight, EPA believes it is important that it receive periodic reports from permittees indicating that they are actively implementing their stormwater management programs, maintaining their control measures, and complying with the terms and limits in the permit. EPA considers the annual report submission to provide a level of oversight that was originally intended when the Agency proposed the requirement for all permittees to sample and submit those sampling results to the Agency. As described in Part X of the fact sheet, EPA no longer requires all permittees to sample. EPA did not change the specific requirements associated with conducting annual inspections but did provide further clarification in the permit on what is to be assessed during these inspections. To assist permittees with documenting the results of these inspections, EPA developed an Annual Report Form template, provided in Appendix I. EPA strongly recommends that permittees use this form to both conduct and report the results of their comprehensive site inspections.
- *Changes from Proposed Permit:* EPA made the following two revisions to the final permit. First, as described above, although the proposal included an annual comprehensive site inspection, the final permit also requires facilities to submit annual reports of the results of comprehensive site inspections to EPA. EPA added this requirement in order to improve the Agency's oversight role in ensuring compliance with the permit's inspection requirements.

Second, the proposed permit suggested that the comprehensive site inspections must be performed during a storm event. EPA received numerous comments suggesting

that this is an inappropriate and potentially unsafe time, to perform the comprehensive assessment. After considering these comments, EPA agrees. The final permit reflects this change. However, EPA does require that control measures be assessed during stormwater discharge for at least one of the routine inspections.

IX. Stormwater Pollution Prevention Plan (SWPPP) (Part 5)

Part 5 of the permit requires the discharger to develop a SWPPP to document the specific control measures dischargers will use to meet the limits contained in Part 2 of the permit, as well as documenting compliance with other permit requirements (e.g., monitoring, recordkeeping, reporting). The SWPPP itself does not contain effluent limits; rather it constitutes a tool to assist both the permittee and inspectors in ensuring and documenting that effluent limits are met. This documentation must be kept up-to-date. Where control measures are modified or replaced, for instance in response to a Part 3.1 triggering condition, such changes must be documented in the SWPPP. See Part 5.4. If permittees fail to develop and maintain an up-to-date SWPPP, they will have violated the permit. This recordkeeping violation is separate and distinct from a violation of any of the other substantive requirements in the permit (e.g., effluent limits, corrective action, inspections, monitoring, reporting, and sector- or state-specific requirements).

To be covered under this permit, the initial SWPPP must be completed prior to submitting an NOI for permit coverage. Doing so helps to ensure that permittees have (1) taken steps to identify all sources of pollutant discharges in stormwater and (2) implemented appropriate control measures to control these discharges in advance of permit coverage. Part 5.1 of the permit contains most of the required elements to be documented in the SWPPP; however, sector-specific requirements are also included in Part 8 of this permit.

Generally, permittees must document the following: (1) the establishment of a stormwater pollution prevention team; (2) a description of the site; (3) summary of potential pollutant sources; (4) description of control measures; and (5) monitoring and inspection procedures (including schedules).

For permittees covered under a previous MSGP, their existing SWPPP must be reviewed and modified, as necessary, to comply with the permit.

IX.A. Contents of Your SWPPP (Part 5.1)

The SWPPP prepared under this permit must address specific requirements. As described in section II.C of this fact sheet, this permit is modified from both the proposed permit and MSGP 2000 to clarify the distinction between SWPPP requirements and effluent limitations. In the MSGP 2000 and the proposed permit, EPA combined the SWPPP documentation requirements and effluent limitations into one section leading to confusion over what was a documentation requirement and what was an effluent limitation. EPA believes separating the effluent limitations (Part 2) and the SWPPP requirements (Part 5) clarifies the distinction between them.

Permittees may choose to reference other documents in the SWPPP rather than recreating the same text in the SWPPP; however, when referencing other documents, the permittees are responsible for ensuring their SWPPP and the other documents together contain all the necessary

elements for a complete SWPPP, as specified in Part 5.1. In addition, permittees must ensure that a copy of the referenced document is located on-site consistent with the requirement in Part 5.3 of the permit.

For example, if a facility is a member of EPA's National Environmental Performance Track (<http://www.epa.gov/performance-track>), it does not need to include in a separate SWPPP document components that are already included in its Environmental Management System (EMS) document. See Part 5.1 of the permit. Any EMS activity that fully meets the documentation requirements for a SWPPP (e.g., facility inspections that incorporate and document stormwater inspection requirements) will fulfill the relevant provision of this permit. EPA encourages such a facility to incorporate all required SWPPP components into its EMS, and work from a single plan. Similar allowances apply to other program documents such as Spill Prevention, Control and Countermeasure (SPCC) Plans. EPA strongly recommends that, regardless of whether all required SWPPP components are combined into one document, an index be kept which identifies where individual SWPPP components are addressed.

IX.A.1. Pollution Prevention Team (Part 5.1.1)

Developing a SWPPP requires that a qualified individual or team of individuals be identified as responsible for developing and revising the facility's SWPPP. Additionally, this team is responsible for implementing and maintaining the control measures to meet effluent limits, and taking corrective action where necessary. Team members should be chosen for their expertise in the relevant departments at the facility to ensure that all aspects of facility operations are considered in developing the plan. The SWPPP must clearly describe the responsibilities of each team member to ensure that each aspect of the plan is addressed. EPA expects most permittees will have more than one individual on the team, except for small facilities with relatively simple plans and/or staff limitations. The permit requires that team members have ready access to any applicable portions of the SWPPP and the permit.

- *Purpose:* Identification of a stormwater pollution prevention team ensures that appropriate persons (or positions) are identified as necessary for developing and implementing the plan. Inclusion of the team in the plan provides notice to facility staff and management (i.e., those responsible for signing and certifying the plan) of the responsibilities of certain key staff for following through on compliance with the permit's conditions and limits.
- *Comparison to MSGP 2000:* This requirement generally is consistent with MSGP 2000. This permit clarifies that team members must have ready access to applicable portions of the permit and the SWPPP.
- *Changes from Proposed Permit:* This requirement is consistent with the proposed permit.

IX.A.2. Site Description (Part 5.1.2)

The SWPPP must describe activities, materials, and physical features of the facility that may contribute significant amounts of pollutants to stormwater runoff or, during periods of dry weather, result in pollutant discharges through the municipal separate storm sewers or stormwater drainage systems that drain the facility. The SWPPP must also contain both a

general location map of the site that shows the location of the facility in relationship to receiving waters and other geographical features, and a more detailed site map that contains information on facility/site characteristics that affect stormwater runoff quality and quantity. For areas of the facility that generate stormwater discharges with a reasonable potential to contain significant amounts of pollutants, the map must indicate the probable direction of stormwater flow and the pollutants likely to be in the discharge. Flows with a significant potential to cause soil erosion also must be identified. The site map must also include locations of: existing structural control measures; receiving waters; stormwater conveyances, inlets and outfalls; potential pollutant sources; past significant spills or leaks; stormwater monitoring points; municipal separate storm sewer systems; and locations and sources of run-on to the operator's site (see permit language for complete list of required items). To improve readability of the map, some detailed information may be kept as an attachment to the site map and pictures may be included as deemed appropriate.

- *Purpose:* A detailed site description assists permittees in subsequent efforts to identify and set priorities for the selection, design, and implementation of measures taken to meet effluent limits and in identifying necessary changes in materials, materials management practices, or site features.
- *Comparison to MSGP 2000:* This permit requires permittees to provide a more detailed description of site activities that may impact stormwater runoff and water quality than was required in MSGP 2000. In addition, consistent with requirements for individual NPDES permits, permittees are required to provide a general location map showing the location of the facility/site in relationship to characteristics of the land and receiving waters as well as identifying the size of the site (in acres), to focus runoff controls on the entire site to protect nearby water quality.
- *Changes from Proposed Permit:* To be consistent with federal regulations in 40 CFR 122.26(b)(14), this permit is modified to specify that "immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility" should be identified on the site map. Previously, the permit specified simply that the map should include "access roads, rail cars, and tracks." EPA included a requirement to specify locations of all stormwater monitoring points on the site map. This is helpful to the pollution prevention team so that there is a mutual understanding of where to conduct stormwater monitoring, and it will be of assistance to EPA as it conducts potential follow-up monitoring and inspections at the site.

IX.A.3. Summary of Potential Pollutant Sources (Part 5.1.3)

This permit requires permittees to identify potential sources of pollutants in stormwater resulting from exposure of industrial activities to stormwater. In addition, permittees must document in their SWPPP any allowable non-stormwater discharges that are released. The permit and the NPDES regulations at 122.26(b)(14) define "stormwater discharges associated with industrial activities" to include, but not be limited to: stormwater discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at part 401 of this chapter); sites used for the storage and maintenance of material

handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to stormwater. The term “stormwater discharges associated with industrial activity” excludes areas located on plant lands separate from the plant’s industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with stormwater drained from the above described areas.

Additionally, the term “material handling activities” is defined in the permit to include storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, by-product or waste product.

Part 5.1.3 is only applicable to those parts of the site for which the permittee is covered under this permit. For example, a site that discharges stormwater to an area of the site covered by a different NPDES permit, is not required to identify the specific activities occurring in that area. EPA does expect permittees to clearly identify those areas of the site and describe why they need not be covered under this permit.

When identifying potential pollutant sources at the site, permittees must consider industrial stormwater from the following sources:

Activities in the Area (Part 5.1.3.1)

This description must include a list of the industrial activities at the facility, including any co-located industrial activities that may be exposed to stormwater.

Pollutants (Part 5.1.3.2)

For each of the industrial activities described above, operators must document the associated pollutants or pollutant constituents (e.g., biochemical oxygen demand, suspended solids). The pollutant list must include all significant materials that have been handled, treated, stored or disposed, and that have been exposed to stormwater in the 3 years prior to the date the permittee prepares or amends its SWPPP as well as any additional significant materials that the permittee plans to use during the life of the permit.

EPA defines “significant materials” at 122.26(b)(12) as including but not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the permittee is required to report pursuant to section 313 of title III or SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with stormwater discharges.

CERCLA section 101(14) defines “hazardous substance” to include: (A) any substance designated pursuant to section 311(b)(2)(A) of the Federal Water Pollution Control Act (also known as the Clean Water Act (CWA)); (B) any element, compound, mixture, solution, or substance designated pursuant to section 102 of CERCLA; (C) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act

(also known as the Resource Conservation and Recovery Act or RCRA); (D) any toxic pollutant listed under CWA section 307(a); (E) any hazardous air pollutant listed under section 112 of the Clean Air Act; and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator has taken action pursuant to section 7 of the Toxic Substances Control Act. The list of CERCLA hazardous substances is provided in 40 CFR 302.4.

Spills and Leaks (Part 5.1.3.3)

The SWPPP must include a list of any significant spills and leaks of pollutants that occurred in the 3 years prior to the date the SWPPP was developed or amended. New owners of existing facilities should, to the extent practicable, identify any significant spills or leaks attributable to past owners. Significant spills include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under section 311 of the CWA (see 40 CFR 110.10 and 40 CFR 117.21) or section 102 of CERCLA (see 40 CFR 302.4). Significant spills may also include releases of materials that are not classified as oil or hazardous substances. The list of significant spills and leaks should include a description of the causes of each spill or leak, the actions taken to respond to each release, and the actions taken to prevent similar spills or leaks in the future. This effort will aid operators in developing spill prevention and response procedures and any additional procedures necessary to fulfill the requirements set forth in Part 2.1.2.4 of this permit.

As required in Part 5.4 of this permit, any spills or leaks that occur while covered under this permit must be documented.

Documenting spills does not relieve permittees of any reporting requirements established in 40 CFR 110, 40 CFR 117, and 40 CFR 302, or any other statutory requirements relating to spills or other releases of oils or hazardous substances.

Non-Stormwater Discharges (Part 5.1.3.4)

Each SWPPP must include documentation that all unauthorized discharges have been eliminated. The documentation must include the date of any evaluation, and describe any test or evaluation conducted to detect such discharges, the results of those evaluations. Acceptable test or evaluation techniques include dye testing, television surveillance, visual observation of outfalls or other appropriate locations during dry weather, water balance calculations, and analysis of piping and drainage schematics. A combination of these mechanisms may be necessary to complete a thorough evaluation. In general, smoke tests should not be used for evaluating the discharge of non-stormwater to a municipal separate storm sewer as many sources of non-stormwater typically pass through a trap that may limit the effectiveness of the test. When unauthorized discharges are discovered, the documentation must also include a description of how those discharges were eliminated.

Common unauthorized discharges and common resolutions include: re-routing sanitary wastes (e.g., sinks, drinking fountains, toilets) to sanitary sewer systems; obtaining an appropriate NPDES permit for cooling water or industrial process wastewater discharges; capping or plugging floor drains; and prohibiting practices such as paint brush washing or wash bucket dumping into storm drain inlets.

Where an allowable non-stormwater discharge has been identified, the permittee must document in the SWPPP the location of that discharge and the appropriate control measures implemented to meet limits. In many cases, the same types of controls for contaminated stormwater would suffice, but the nature and volume of potential pollutants in the non-stormwater discharges must be taken into consideration in selecting controls.

Salt Storage (Part 5.1.3.5)

The SWPPP must identify any storage piles containing salt, including piles that only contain salt as a portion of the mixture in the pile, used for deicing or other commercial or industrial purposes.

Sampling Data (Part 5.1.3.6)

A summary of all existing data on the quality or quantity of stormwater discharges collected from the facility during the previous permit term must be described in the SWPPP. New dischargers must provide a summary of any available stormwater discharge sampling data they may have, including the methods used to collect the data and the sample collection location. These data may be useful for locating sources and causes of stormwater pollutants.

- *Purpose:* Identification of sources of pollutants in stormwater is critical for selecting source control practices at the site necessary for meeting permit limits. Information provided in this section of the SWPPP will help facility operators identify potential pollutants of concern on-site through a comprehensive assessment of existing conditions and available information.
- *Comparison to MSGP 2000:* This permit includes a number of changes designed to clarify the information necessary to adequately characterize the potential pollutant sources. Changes from MSGP 2000 include Parts 5.1.3.1 (Activities in the Area), 5.1.3.2 (Pollutants), 5.1.3.3 (Spills and Leaks), 5.1.3.4 (Allowable Non-Stormwater Discharges), and 5.1.3.5 (Salt Storage). Parts 5.1.3.3 (Spills and Leaks) and 5.1.3.6 (Sampling Data) contain essentially identical requirements to those in MSGP 2000.

Part 5.1.3.2 (Pollutants) includes the additional requirement for permittees to identify any additional significant materials that the permittee plans to use during the life of the permit. EPA sees this identification as critical for planning purposes when selecting and installing control measures. In lieu of having to update the SWPPP to reflect these changes, permittees can incorporate these future plans into the existing SWPPP document as part of the initial SWPPP development.

Part 5.1.3.4 (Non-Stormwater Discharges) reflects the modification discussed above in Part 2.1.1.10 of the permit to require elimination of unauthorized discharges prior to being authorized to discharge. This SWPPP provision is simply the documentation requirement for the evaluation and elimination of unauthorized non-stormwater discharges, thus demonstrating that the effluent limit is being met. These provisions were also modified to clarify that while non-stormwater discharges are subject to all of the provisions of this permit, monitoring of non-stormwater discharges in accordance with Part 6 is not required, unless those non-stormwater discharges are commingled with stormwater discharges associated with industrial activity prior to

discharge from the facility. Several commenters questioned how monitoring would be conducted for such discharges when the monitoring provisions require sampling to occur within the first 30-60 minutes after a qualifying storm event. Commenters suggested that EPA either remove this language or clarify that monitoring for non-stormwater discharges would simply be addressed during the required benchmark monitoring of the stormwater itself, and to the extent the non-stormwater is a component of the stormwater discharge. EPA agreed with these commenters and modified the permit to reflect this approach.

Part 5.1.3.5 (Salt Storage) requires permittees to document the location in the SWPPP of any salt storage piles onsite. EPA added this documentation requirement to track the Part 2 requirement to implement stormwater control procedures for onsite salt storage.

- *Changes from Proposed Permit:* The changes from the MSGP 2000 described above are also changes from the proposed permit.

IX.A.4. Description of Measures Implemented to Meet Effluent Limits (Part 5.1.4)

Control Measures to Meet Technology-Based and Water Quality-Based Effluent Limits (Part 5.1.4.1). A permittee must describe in its SWPPP the control measures it has implemented at its site to achieve each of the effluent limits in Parts 2.1, 2.2, 2.3, and 2.4, and to address any stormwater run-on that commingles with discharges covered under this permit. The description of the control measures implemented to meet the effluent limits must include a brief explanation of the measures implemented at the site, including how the Part 2.1.1 selection and design considerations were followed.

- *Purpose:* To demonstrate how the operator specifically plans to meet the applicable technology-based or water quality-based effluent limits.
- *Comparison to MSGP 2000:* The MSGP 2000 similarly required operators to describe in their SWPPPs any control measures being used to control discharges from areas where industrial materials or activities are exposed to stormwater. See Part 4.2.7.1 of the MSGP 2000. EPA clarified what was always intended to be the scope of this part of the permit, that the operator describe how the effluent limits in Part 2.1 are met.
- *Changes from Proposed Permit:* The proposed permit also would have required operators to describe in their SWPPPs the control measures being implemented at the site. See Part 2.5. EPA clarified what was always intended to be the scope of this part of the permit, that the operator describe how the effluent limits in Part 2.1 are met.

IX.A.5. Schedules and Procedures – Pertaining to Control Measures Used to Comply with the Effluent Limits in Part 2 (Part 5.1.5.1)

The permit identifies specific information that must be documented in the SWPPP. EPA emphasizes that ALL control measures implemented to meet the Part 2 limits must be documented in the SWPPP.

In addition to the description to the on-the-ground control measures implemented to meet the effluent limits, the permit requires certain schedules and procedures to be documented in the SWPPP. The following items are specifically identified in the Part 5.1.4 permit language:

Good Housekeeping (see also Part 2.1.2.2). Include a schedule for pickup and disposal of waste materials, along with the frequency of inspections for leaks and conditions of drums, tanks and containers.

Maintenance (see also Part 2.1.2.3). Describe the preventive maintenance program, including how the following will be addressed: regular inspections, testing, maintenance, repair of all industrial equipment and systems to avoid situations that may result in leaks, spills, and other releases, and back-up practices in place should a runoff event occur while a control measure is off-line.

Spill Prevention and Response Procedures (see also Part 2.1.2.4). Describe areas and activities that typically pose a high risk for spills including loading and unloading areas, storage areas, process areas, and waste disposal activities and identify corresponding outfalls. Also, describe appropriate material handling procedures, storage requirements, containment or diversion equipment, and spill cleanup procedures that will minimize the potential for spills, or in the event of a spill, enable proper and timely response. Describe which employees are to be trained on proper procedures and requirements and which are responsible for ensuring that appropriate equipment is available to respond to spills.

Erosion and Sediment Control (see also Part 2.1.2.5). Describe areas that, due to topography, activities, soils, cover materials, or other factors have a high potential for significant soil erosion. The SWPPP must describe measures that are implemented to limit erosion in these areas.

Management of Runoff (see also Part 2.1.2.6). Describe the stormwater management practices that divert, infiltrate, reuse, or otherwise manage stormwater runoff that reduce the discharge of pollutants.

Employee Training (see also Part 2.1.2.9). Describe how personnel are to be trained and their responsibilities. The SWPPP must include a schedule for conducting this training.

IX.A.6. Schedules and Procedures – Pertaining to Monitoring and Inspection Procedures (Part 5.1.5.2)

This permit requires permittees to document in the SWPPP monitoring and inspection procedures that will be followed. For monitoring activities, the permittee must document in the SWPPP information such as locations where samples are to be collected, person(s) or position(s) responsible for collecting those samples, the frequency of sampling and the parameters to be sampled, applicable control values at each sample location, and procedures that will be followed to gather storm event data.

If an operator chooses to use the substantially identical outfall exception in Part 4.2 for quarterly visual assessments or Part 6.2 for benchmark monitoring, he/she is required to describe in the SWPPP the locations of each of these outfalls, the general industrial activities conducted in the drainage area of each outfall, the control measures being implemented for each outfall, the

exposed materials that are likely to be a significant contributor of pollutants to the stormwater discharge, an estimate of the runoff coefficient of the drainage area, and why the outfalls are expected to discharge substantially identical effluents.

For inspection activities, permittees must document procedures for performing the three types of inspections specified in the permit, namely, routine facility inspections (Part 4.1), quarterly visual assessments (Part 4.2), and Comprehensive Site Inspections (Part 4.3). For each of these types of inspections, the SWPPP must include information such as person(s) or position(s) performing inspections, the inspection schedule, and specific items to be covered by the inspection.

- *Purpose:* The Agency is requiring these documentation provisions to help ensure that appropriate monitoring and inspection procedures consistent with permit requirements are implemented. EPA believes documenting these activities will help to improve facility compliance with the requirements.
- *Comparison to MSGP 2000:* EPA believes the addition of this provision is a clarification of what was already required as part of the MSGP 2000. EPA revised these permit conditions to ensure that permittees plan and document monitoring and inspection activities in advance of when they are required to be conducted.
- *Changes from Proposed Permit:* This provision provides greater clarification to the discharger so that monitoring procedures are clearly stated and understood by the SWPPP team and, if necessary, EPA.

IX.A.7. Documentation to Support Eligibility Considerations Under Other Federal Laws (Part 5.1.6)

Documentation Regarding Endangered Species (Part 5.1.6.1). This permit requires documentation regarding listed species to be included in the facility's SWPPP. The SWPPP must include information supporting the permittee's determination with regard to Part 1.2.4.5, including whether listed endangered or threatened species are found in proximity to the facility, a description of any communication between the permittee and the U.S. Fish & Wildlife Service and the National Marine Fisheries Service (i.e., "the Services"), results of endangered species screening determinations, and, if applicable, a description of the measures the operator implemented to protect the endangered or threatened species. This information must be documented and kept with the SWPPP, and measures must be implemented to be eligible for coverage under this permit.

- *Purpose:* This provision ensures that the permittee properly documents his/her eligibility under Part 1.2.4.5.
- *Comparison to MSGP 2000:* A similar provision (Part 4.5) was included in the MSGP 2000.
- *Changes from Proposed Permit:* Only minor wording changes were made to Part 5.1.6.1, which did not affect the intent or meaning of the provision.

Documentation Regarding Historic Properties (Part 5.1.6.2). This permit requires documentation regarding historic properties to be included in the facility's SWPPP. The SWPPP must include information supporting the permittee's determination with regard to Part 1.2.4.6,

which includes whether stormwater discharges would have an effect on a property listed or eligible for listing on the National Register of Historic Properties (NRHP), summary of any consultation with the State or Tribal Historic Preservation Officer (SHPO or THPO), results of Appendix F historic property screening investigations, and if applicable, a description of the measures the operator will implement to avoid or minimize adverse impacts on historic properties. This information must be documented and kept with the SWPPP.

- *Purpose:* This provision ensures that the permittee properly documents his/her eligibility under Part 1.2.4.6.
- *Comparison to MSGP 2000:* A similar provision (Part 4.6) was included in the MSGP 2000.
- *Changes from Proposed Permit:* Only minor wording changes were made to Part 5.1.6.1, which did not affect the intent or meaning of the provision.

Documentation Regarding National Environmental Policy Act Review (Part 5.1.6.3). This permit requires documentation in support the operator's certification of eligibility under Part 1.1.2.5, for discharges subject to any new source performance standards.

- *Purpose:* This provision ensures that the permittee properly documents and retains any (1) determination of "no significant impact" under the National Environmental Policy Act (NEPA), or (2) completed Environmental Impact Statement in accordance with an environmental review conducted by EPA pursuant to 40 CFR 6.102(a)(6).
- *Comparison to MSGP 2000:* Permittees were similarly required to retain this same information on their sites. See Part 1.2.4.1 of the MSGP 2000.
- *Changes from Proposed Permit:* EPA made only minor changes to clarify that documentation referred to in Part 1.1.2.5 is incorporated as part of the SWPPP.

IX.A.8. Signature Requirements (Part 5.1.7)

This permit requires the permittee to sign and date the SWPPP consistent with procedures detailed in Appendix B, Subsection 11 (standard permit condition for signatory requirements).

- *Purpose:* This requirement is consistent with standard NPDES permit conditions described in 40 CFR 122.22 and is intended to ensure that the permittee understands its responsibility to create and maintain a complete and accurate SWPPP. Permittees are allowed to appoint an authorized representative consistent with the regulations. Therefore, if a facility feels it is more appropriate for a member of the stormwater pollution prevention plan team to sign the documentation, that option is available under the permit. The signature requirement includes an acknowledgment that there are significant penalties for submitting false information.
- *Comparison to MSGP 2000:* This requirement is consistent with MSGP 2000 in that the SWPPP is required to be signed by an authorized representative.
- *Changes from Proposed Permit:* This requirement is consistent with the proposed permit, which also required SWPPP signature. However, language regarding signature for updates to the SWPPP was moved to Part 5.2 as part of the requirements associated with SWPPP updates. EPA believes this more clearly presents requirements for updating SWPPPs.

IX.B. Required Modifications (Part 5.2)

This permit requires that the SWPPP be updated whenever any of the triggering conditions for corrective action in Part 3.1 occur, or when a review following the triggering conditions in Part 3.2 indicates that changes to the permittee's control measures are necessary to meet the effluent limits in this permit. The permit requires that the SWPPP be signed and dated by an authorized representative each time it is modified. Changes to the SWPPP must be made in accordance with Parts 3.3 and 3.4.

It is important to note that failure to update the SWPPP in accordance with Part 5.2 is a recordkeeping violation, not a violation of an effluent limit. For example, if the permittee changes its maintenance procedures, but fails to update its SWPPP to reflect these changes, a recordkeeping violation will result. The permittee must revise its SWPPP to reflect the new maintenance procedures and include documentation of the corrective action (in accordance with Part 4) to return to full compliance.

- *Purpose:* Part 5.2 requires that the SWPPP document be modified, and signed and dated by the operator, whenever any of the listed scenarios occur. This requirement ensures that the SWPPP document will be kept up to date.
- *Comparison to MSGP 2000:* EPA consolidated similar requirements from Parts 4.9.3 (Follow-Up Actions), 4.10 (Maintaining Updated SWPPP), and 4.11 (Signature, Plan Review and Making Plans Available – 4.11.3). This consolidation is intended to clarify and uniformly address situations that require modifications to the SWPPP and the timeframe for doing so.
- *Changes from Proposed Permit:* Part 5.2 is consistent with the language from proposed Parts 2.3 and 2.5. Commenters indicated that this provision would require regular SWPPP review and modification, including signature by an authorized representative for each revision. EPA believes this is appropriate and necessary for the triggering conditions in Part 3.1. However, for the triggering conditions in Part 3.2, the requirement in Part 5.2 is slightly different from that which was proposed as Part 2.3. For example, a SWPPP modification is not necessarily required, as it was in the proposed permit, where a construction, design, operation, or maintenance change at the facility has the potential to result in a significant impact on the discharge. Instead, the permit now requires that a corrective action (see Part 3.2) review be performed, and, based on the results of the initial review, modifications may need to be made to the selection, design, installation, and implementation of the control measures. EPA requires that a SWPPP modification under Part 5.2 be made only where the initial review results in changes to the control measures.

In addition, EPA received several comments noting that the proposed 14-day timeframe was inadequate for modifying the SWPPP. Reasons cited included difficulty in: identifying appropriate control measure revisions, getting appropriate personnel access to remote sites, navigating through multiple layers of management necessary to sign off on SWPPP changes, and addressing the large number of sites with co-located activities. For example, one commenter indicated that while “it may not take long to identify the need to modify the SWPPP, developing a clear modification strategy and obtaining necessary internal approval often will take longer than 14 calendar days. This is particularly true if the modification calls for capital investment in structural control

measures or other infrastructure.” Commenters suggested 30, 60, and 90 days as more appropriate. EPA addressed these concerns by modifying the corrective action deadlines (Part 3.3) to distinguish between activities that are primarily paperwork in nature (i.e., documenting the date and initial findings of the corrective action review) and those that involve on-the-ground changes to the control measures (e.g., building new infiltration devices to better handle stormwater runoff from exposed industrial activities). For this reason, EPA deleted the proposed timeframes from the relevant provisions of the proposal, and replaced them in Part 5.2 with a reference to the corrective action deadlines in Part 3.3.

IX.C. SWPPP Availability (Part 5.3)

This permit requires that a copy of the SWPPP be kept at the facility and be immediately available to representatives of EPA, a State, a Tribe, or a local stormwater agency (e.g., MS4 operator), as well as representatives of the Services at the time of an on-site inspection or upon request. Part 5.3 indicates that EPA may provide access to portions of your SWPPP to a member of the public upon request. Confidential Business Information (CBI) may be withheld from the public, but may not be withheld from EPA or the Services.

- *Purpose:* The purpose of Part 5.3 is to require permittees to retain copies of their SWPPP on site, and to make the document available to EPA or the Services immediately upon request. If a member of the public wishes to have access to the non-CBI portions of the permittee’s SWPPP, they must first contact EPA. EPA may require that a copy be sent to the Agency so that it can be provided to the requestor.

The mechanism for providing EPA with a copy of the SWPPP is at the discretion of the operator (e.g., web-based, hard copy), though EPA strongly encourages that SWPPPs be provided electronically. In fact, as described in Section V.C of this fact sheet, certain dischargers can more quickly obtain authorization to discharge by posting SWPPPs on the Internet.

- *Comparison to MSGP 2000:* Part 4.11.2 of the MSGP 2000 required permittees to provide a copy of their SWPPPs to the public if requested in writing. Several commenters raised concerns regarding EPA’s authority to require permittees to provide information to third parties, and suggested various alternatives. To address these concerns, while being sensitive to and supportive of the public’s interest in viewing the SWPPPs, EPA modified the language to have public requests routed through the Agency. In addition, EPA added language clarifying that CBI may not be disclosed to the public.
- *Changes from Proposed Permit:* See “Comparison to MSGP 2000” section.

IX.D. Additional Documentation Requirements (Part 5.4)

Part 5.4 includes a list of documents, findings, activities, and information that must be kept with the permittee’s SWPPP. See permit language for details.

- *Purpose:* EPA requires documentation of various implementation activities, such as reports of routine facility inspections and descriptions of corrective actions, after facilities are authorized to discharge. This documentation is useful both for facility personnel and EPA (and other agencies) inspectors to assess overall performance of the control

measures selected to meet the technology-based and water quality-based effluent limits in the permit.

- *Comparison to MSGP 2000:* The MSGP 2000 did not include a specific section detailing additional documentation requirements; rather, the Agency identified general documentation requirements in the permit in the sections that described SWPPP development procedures. As a result, the specific documentation requirements were included in numerous locations throughout the permit. The Agency believes that consolidating all additional documentation requirements into one section will clarify those requirements for permittees.
- *Changes from Proposed Permit:* Several commenters expressed concern that the proposed permit required each change to the SWPPP to be signed and certified by an authorized representative, a procedure that commenters argued is unworkable when one considers that each inspection, each maintenance activity, each training, etc. would potentially trigger the requirement to obtain this certification by an authorized representative. EPA agrees with commenters that this is not the appropriate level of oversight for this type of documentation. Similarly, the Agency believes the SWPPP itself should describe the site, the control measures, and the site activities to be performed, but activities undertaken to comply with the provisions of the permit are more appropriately compiled separately. As such, EPA separated additional documentation requirements into a new part (Part 5.4) of the permit to clarify that these records are separate from the SWPPP documentation requirements. Rather, these records, kept with the SWPPP document, provide documentation of the permittee's compliance with the permit. In general, this documentation requires the signature of the person performing the activity (e.g., inspection, sampling), not an authorized facility representative as specified in Appendix B, Subsection 11.

IX.E. Notification by EPA of Inadequacy (Proposed Part 2.5)

The final permit does not include proposed language that enabled EPA to notify permittees of changes that must be made to remedy permit violations. EPA determined that this language was unnecessary given EPA's existing enforcement remedies and permit modification authorities, and was deleted. EPA retains all of the options specified in this proposed provision, including the ability to require violations to be eliminated, to impose additional requirements, or to revoke coverage under the general permit.

X. Monitoring (Part 6)

EPA modified the organization of this permit to separate monitoring (Part 6) from reporting and recordkeeping requirements (Part 7). Also, inspections have been relocated to Part 4 (Inspections). Also, corrective actions taken in response to certain monitoring situations (e.g., benchmark monitoring exceedances) have been moved to Part 3 (Corrective Actions) with the exception of follow-up monitoring requirements resulting from any exceedance of an effluent limitation contained in the permit.

X.A. Monitoring Procedures (Part 6.1)

This permit requires certain permittees to sample and analyze their stormwater discharges as a way to assess the effectiveness of control measures in meeting the effluent limitations. Analytical monitoring is a means by which to measure the concentration of a pollutant in a stormwater discharge. Analytical results are quantitative and therefore can be used to compare discharge results and to quantify the effectiveness of stormwater control measures, including identifying pollutants that are not being successfully controlled.

Part 6.1 of the permit identifies procedures for collecting samples and identifies where to sample, when to sample, and what to sample. These requirements are similar to those in the MSGP 2000, but the Agency believes consolidating these requirements in one part of the permit helps to clarify the monitoring requirements. These requirements are in addition to the standard permit conditions described in Appendix B, Subsection B.10.

X.A.1. Monitored Outfalls (Part 6.1.1).

The monitoring requirements in the permit apply to each outfall discharging stormwater associated with industrial activity, unless the permittee qualifies for the substantially identical outfalls exemption as described in this section. To be considered substantially identical, outfalls must have generally similar industrial activities, control measures, exposed materials that may significantly contribute pollutants to stormwater, and runoff coefficients of their drainage areas. When a permittee believes its facility has two or more outfalls that qualify as substantially identical, the permittee may monitor one of these outfalls and report that the quantitative data also apply to the other substantially identical outfalls. The permittee must also document the location of each of the outfalls and explain why the outfalls are expected to discharge substantially identical effluent, addressing each of the factors to be considered in this determination (industrial activities, control measures, exposed materials and runoff coefficients). Operators do not need advance EPA approval for this determination, however, EPA may subsequently determine that outfalls are not substantially identical and require sampling of additional outfalls. EPA clarifies in Part 6.1.1 that the allowance for monitoring only one of the substantially identical outfalls is not applicable to any outfalls with the numeric effluent limitations. The permittee is required to monitor each outfall covered by a numeric effluent limit as identified in Part 6.2.2.

- *Purpose:* This substantially identical outfall provision provides facilities that have multiple stormwater outfalls with a means to reduce the number of outfalls that must be sampled and analyzed while still providing monitoring data that are indicative of discharges from each outfall. This may result in a substantial reduction of the resources required for a facility to comply with analytical monitoring requirements.
- *Comparison to MSGP 2000:* No significant changes were made to this provision from the previous permit (see Part 5.2.4 in MSGP 2000) other than minor clarifications of the factors to be considered in determining that outfalls are substantially identical. As described in MSGP 2000, the substantially identical outfall factors were specified to include similarities of the industrial activities, significant materials and stormwater management practices within the outfalls' drainage areas. For this permit, the factors were revised slightly to more closely track with past Agency guidance on substantially identical outfalls. The factors for determining whether outfalls are substantially identical

emphasize similarities of the general industrial activities and control measures, exposed materials that may significantly contribute pollutants to stormwater, and runoff coefficients of their drainage areas. The purpose of the revised description of these factors is to clarify that the outfalls can be substantially similar, but do not have to be identical to be eligible for the use of this option. EPA also included a clarification that the flexibility afforded to substantially identical outfalls to monitor for one representative outfall does not apply to outfalls subject to a numeric effluent limit.

- *Changes from Proposed Permit:* No significant changes were made to this provision (see Parts 3.2.1 and 3.2.2.5 of proposed permit); however, EPA clarified that a benchmark exceedance at a substantially identical outfall is indicative of an exceedance at each other substantially identical outfall and any necessary corrective actions must be performed at each of these outfalls (in Part 3.6 of the permit, Corrective Actions).

EPA did receive one comment suggesting that where the substantially identical outfall option is employed, permittees should be required to alternate outfalls such that all outfalls are monitored during the reporting period. EPA is not incorporating this proposed change because the Agency does not believe that it will provide more meaningful data or improve the quality of the information received. In some instances, such as when the permittee has to construct a sampling station or when the permittee uses an automatic sampler, establishing multiple sampling locations may significantly increase burden. As described in section VIII.B, permittees are required to alternate monitoring locations for visual monitoring as a way to check the accuracy of this substantially identical outfall determination.

X.A.2. Commingled Discharges (Part 6.1.2).

If stormwater discharges associated with industrial activity commingle with discharges not authorized by this permit (e.g., unregulated stormwater or other permitted wastewater), then permittees must sample the stormwater discharge before it mixes with the other discharges when practicable.

- *Purpose:* The commingled discharge provision is intended to ensure that monitoring results are representative of discharges covered under this permit and not indicative of other discharges from the site. EPA acknowledges that in certain instances, such as when authorized discharges are commingled with other waste streams prior to on-site treatment, sampling only authorized waste streams may be inappropriate or infeasible.
- *Comparison to MSGP 2000:* No significant changes were made to this provision from the previous permit (see Part 5.2.2.1 in MSGP 2000) other than to separate this provision as a stand-alone condition of the permit.
- *Changes from Proposed Permit:* No significant changes were made to this provision from the proposed permit other than to separate this provision as a stand-alone condition of the permit.

X.A.3. Measurable Storm Events (Part 6.1.3).

This permit specifies the characteristics of a measurable storm event as an event that results in a discharge from the permitted facility. This permit retains the same requirements as

the MSGP 1995 and the MSGP 2000 regarding the interval between qualified rain events, but it no longer includes the requirement for a specific storm magnitude (i.e., 0.1 inches or greater). Samples must be collected from the discharge resulting from a storm event that occurs at least 72 hours (3 days) after a previous measurable storm event. The 72-hour (3-day) requirement may be waived by the permittee where the permittee documents that less than a 72-hour (3-day) interval is representative for local storm events during the season when sampling is being conducted. This permit adds a provision that allows for sampling of snowmelt in addition to stormwater runoff. The 72-hour (3-day) requirement does not apply to snowmelt as the actual discharge is not clearly tied to a specific snow event (i.e., may be the accumulation from multiple events). The permit also specifies the type of documentation required to show consistency with this requirement.

- *Purpose:* The measurable storm event provision in the permit requires only that a storm event **results in a discharge** from the permitted facility, and that it follows a period of greater than or equal to 72-hours (3-days) when no stormwater discharge occurred. The 72-hour (3-day) period is included in an attempt to eliminate monitoring discharges soon after a previous storm event washed away residual pollutants. By defining a storm event as one that *results in discharge*, rather than prescribing a minimum magnitude as the permit did in prior versions, it affords the permittee flexibility to sample during any storm event that produces a discharge, rather than having to ensure that minimum magnitude is reached. The purpose of redefining the measurable event is to capture and characterize actual stormwater discharge. The provision also provides flexibility to address snowmelt discharges when they occur, rather than based on when the storm producing the snowfall occurred.
- *Comparison to MSGP 2000:* The MSGP 2000 required that a storm event have at least a 0.1 inch magnitude and be at least 72 hours (3 days) after the last measurable event. EPA established that requirement in previous permits based on data suggesting that storm events greater than 0.1 inch generally resulted in a discharge. However, one commenter noted that in some instances, facilities collected samples within the first 30 minutes of discharge only to find out later that the storm event was less than 0.1 inches, thus making the sample invalid. Since the purpose of this permit condition is to select a storm event with a discharge, EPA is modifying the requirement to simply base the permit condition on an actual discharge, regardless of whether the storm event is 0.1 inches or greater (which was based on EPA's original analysis that a 0.1 inch storm event generally produced a discharge). EPA expects this will reduce burden on permittees from having to resample after smaller storm events, without adversely impacting the usefulness of monitoring.

EPA also added a provision for monitoring snowmelt since many facilities covered under this permit are located in colder climates and may have extended periods of freezing temperatures and snow events that do not meet EPA's definition of measurable storm events. EPA defines a measurable storm event for snowmelt to be an event which at some point in time produces a measurable discharge at the site, though not necessarily during the storm event itself. The permit also clarifies that monitoring such discharges is acceptable.

Documentation requirements are similar to those in MSGP 2000, with language added for snowmelt requiring only that the permittee record the date the sample was collected.

- *Changes from Proposed Permit:* The proposed permit included language similar to that in MSGP 2000. However, several commenters raised concerns with how to monitor, including visual examinations, when the runoff is in the form of snowmelt. EPA modified the permit language to define measurable storm events from snowmelt, to clarify that monitoring of snowmelt is acceptable and to establish procedures to do so, particularly in light of the fact that snowmelt does not necessarily occur during or immediately after the precipitation event. EPA also removed the requirement in the proposal (as noted above) that the storm event measure at least 0.1 inch of precipitation.

X.A.4. Sample Type (Part 6.1.4).

The permit specifies that a minimum of one grab sample must be taken from the measurable storm event being monitored. The grab sample must be taken during the first 30 minutes of the discharge, except for snowmelt monitoring which has no 30 minute requirement. If more than one grab sample or a composite sample is collected, only those samples collected during the first 30 minutes of discharge are to be used for performing any necessary analyses. If the collection of a grab sample during the first 30 minutes is impractical, a grab sample can be taken during the first hour of the discharge, but the permittee must document and keep with the SWPPP an explanation of why a grab sample during the first 30 minutes was impractical.

EPA is requiring a sample during the first 30 minutes to account for any first flush effects that may result from a precipitation event. The highest pollutant concentrations generally occur during these first flush events. The first 30 minutes of the discharge is also the time when receiving stream flows are the lowest during wet weather events and thereby presents the greatest potential pollutant impacts to aquatic species.

- *Purpose:* This permit identifies the type of samples and when these samples are to be collected. This will allow facilities to make accurate comparisons of monitoring results to the corresponding benchmark or effluent limitations to determine whether additional action may be needed to reduce concentrations of pollutants detected in stormwater discharges. Grab samples of discharges resulting from snowmelt that have been exposed to industrial activities, materials storage, or materials handling areas are to be collected from each outfall for characterization, but they do not have to be collected within 30 minutes of discharge since (1) runoff typically does not occur during a snow event (2) collecting a snowmelt sample within 30 minutes of commencement of discharge is impractical, and (3) the “first flush” effects of snowmelt are not as well defined.
- *Comparison to MSGP 2000:* The grab sample requirements in this permit are similar to those of the MSGP 2000 except for the additional language clarifying the requirements for sampling snowmelt as described above.
- *Changes from Proposed Permit:* The grab sample requirement in this permit is similar to that proposed with the exception of new language added to address snowmelt. EPA modified the provision for snowmelt based on several commenters’ concerns with the difficulty in trying to collect a sample of snowmelt during the first 30 minutes of discharge since the time of discharge is not directly linked to the time of the precipitation event.

X.A.5. Adverse Weather Conditions (Part 6.1.5).

When adverse weather conditions make sampling dangerous, storm event monitoring may be postponed until the next runoff event. This provision applies to serious weather conditions such as: lightning, flash flooding, and high winds. This provision should not be used as an excuse for not conducting sampling under conditions associated with more typical storm events. Adverse weather conditions do not exempt the permittee from having to file a benchmark monitoring report in accordance with the corresponding reporting period. In many cases, sampling during a subsequent non-hazardous storm event may still be possible during the reporting period. Where this is not possible, operators are still required to report the inability to monitor indicating the basis for not sampling during the reporting period. This provision applies to all monitoring requirements of this permit.

- *Purpose:* As with the MSGP 2000, the final permit allows the permittee to postpone sampling under conditions immediately hazardous to the life and health of monitoring staff, and offers examples of adverse conditions. If postponement is required, the permittee is afforded the flexibility to collect samples during the next qualifying storm event to ensure the safety of facility personnel.
- *Comparison to MSGP 2000:* The provisions allowing postponement of monitoring for adverse weather are consistent with the requirements in MSGP 2000 (i.e., annual monitoring).
- *Changes from Proposed Permit:* No significant changes were made to this provision.

X.A.6. Climates with Irregular Stormwater Runoff (Part 6.1.6).

This permit provides for development of alternative monitoring schedules for facilities located in arid and semi-arid climates, or in areas subject to snow or prolonged freezing. Incumbent with this flexibility is the operator's responsibility to identify those periods during which discharges are most likely to occur and establish a schedule distributing the required monitoring events during those periods.

- *Purpose:* Alternate monitoring schedules allow facilities the flexibility to allocate their resources effectively to capture the required number of stormwater discharge events during the permit term. This flexibility will provide a more accurate characterization of pollutant concentrations in facility stormwater discharges during times of the year when precipitation is actually occurring, and during snowmelt discharges in areas subject to extended winter seasons and prolonged freezing. This special exception should reduce the number of times permittees report that there was no discharge due to lack of precipitation during a particular quarter during the dry or extremely cold weather season, which in turn will provide EPA with more data, which can be used to evaluate facility pollutant levels, than in previous permit terms. The flexibility in the monitoring periods for climatic conditions and the revised definition of a measurable event (Part 6.1.3) together are more readily adapted to capturing and characterizing stormwater discharges and snowmelt events.
- *Comparison to MSGP 2000:* The MSGP 2000 provided similar language allowing for revised monitoring periods in areas where adverse weather conditions exist. EPA added a new section to the permit, separating adverse weather conditions from areas with

irregular stormwater runoff, since these represent two very different scenarios. Adverse weather conditions may occur anywhere and are generally unpredictable events. The irregular stormwater runoff provision accounts for those parts of the country where precipitation or runoff patterns are such that quarterly sampling is not representative of when stormwater discharges are likely to occur. EPA added a new section on irregular stormwater runoff to offer flexibility to permittees to modify their monitoring periods to improve the likelihood of gathering the required number of samples.

- *Changes from Proposed Permit:* Final permit language is consistent with that in the proposed permit, although EPA separated this provision into a new section to highlight the availability of this monitoring option.

X.A.7. Monitoring Periods (Part 6.1.7).

Certain monitoring must be conducted quarterly (e.g., benchmark monitoring). For such monitoring, EPA is defining the calendar quarters during which monitoring must occur and also describing when the first monitoring quarter is to commence based on the date of permit coverage. This section specifies that the monitoring requirements commence during the first full calendar quarter following six months after the publication date of this permit (i.e., EPA has determined that six months following the publication date is April 1, 2009), or following the date of your authorization to discharge, whichever date comes later. Note that permittees in climates with irregular stormwater runoff may define alternate monitoring periods, as described above, provided documentation of the revised schedule is kept with the SWPPP and the new schedule is provided to EPA on the first monitoring report.

- *Purpose:* EPA is standardizing quarterly monitoring periods to clarify this requirement for permittees and to facilitate its tracking of monitoring reports. Also, EPA provided a six month delay for monitoring to: (1) provide time for permittees to fine-tune control measures, and (2) provide time for EPA to complete development of an electronic reporting system for permittees to submit monitoring data.
- *Comparison to MSGP 2000:* The MSGP 2000 did not include defined monitoring quarters, although it did require quarterly benchmark monitoring. No additional burden is associated with this permit change.
- *Changes from Proposed Permit:* This permit provisions are similar to those of the proposed permit except that EPA extended the start date for monitoring until the first full quarter following six months after publication of the permit (or the date of authorization if after that six month period) as described above.

X.A.8. Monitoring for Allowable Non-Stormwater Discharges (Part 6.1.8).

This provision clarifies that permittees are only required to monitor allowable non-stormwater discharges when they are commingled with stormwater discharges associated with industrial activity.

- *Purpose:* To clarify the intent of this permit to only impose monitoring for allowable non-stormwater discharges if they are commingled with other regulated discharges covered under this permit.

- *Comparison to MSGP 2000:* This clarification was included in Part 1.2.2.2, relating to the eligibility of allowable non-stormwater discharges.
- *Changes from Proposed Permit:* In the proposed permit, EPA stated that “allowable non-stormwater discharges are subject to all of the provisions of this permit, including numeric effluent limitations, benchmarks and monitoring requirements.” See Part 2.1.4.5 of the proposed permit. That language is replaced in part by Part 6.1.8, which clarifies EPA’s intent that only that portion of the allowable non-stormwater discharge that is commingled with discharges from the site’s industrial activity is required to be monitored.

X.B. Required Monitoring (Part 6.2)

The organization of the monitoring requirements in this permit is different from past permits. EPA consolidated monitoring requirements into one section as a way to more clearly and concisely present these monitoring requirements. The quarterly visual assessments, which had previously been included with monitoring requirements, have been moved to the part of the permit that addresses inspections (see Part 4).

This permit contains five general types of monitoring requirements:

1. Benchmark monitoring (Part 6.2.1);
2. Effluent limitations monitoring (Part 6.2.2);
3. State or Tribal provisions monitoring (Part 6.2.3),
4. Discharges to impaired waters monitoring (Part 6.2.4), and
5. Additional monitoring required by EPA (Part 6.2.5).

The frequency of monitoring is dependent on the applicability of these five types of monitoring to each permitted facility. The permit does provide that if any of these monitoring requirements overlap, permittees are authorized to use a single sample to comply with those overlapping requirements.

This section describes the monitoring requirements and the rationale for changes from the MSGP 2000 and the proposed permit.

X.B.1. Benchmark Monitoring (Part 6.2.1).

EPA is continuing to require benchmark monitoring as an indicator of the performance of the measures undertaken to meet the effluent limitations contained in the permit. Benchmark monitoring requirements described in Part 6.2.1 of this permit require permittees to collect stormwater samples for laboratory chemical analyses. EPA does not intend to change the basic framework for benchmark monitoring established in the 1995 and 2000 permits. EPA is dropping the proposed requirement for all permittees to perform benchmark monitoring for Total Suspended Solids (TSS). EPA’s rationale for dropping this proposed requirement, which would have significantly expanded the benchmark monitoring required in earlier MSGPs, is described below. EPA is finalizing other proposed changes to the benchmark monitoring requirements, such as downward adjustments to many of the benchmarks to enhance consistency with published water quality criteria. EPA is also adding new provisions for adjusting benchmarks

based on hardness for certain metals, to provide additional protection for sensitive aquatic species.

During development of MSGP 2000, EPA received substantial public comment on the value of benchmark monitoring. EPA responded to those comments, in part, by indicating that “considering the small number of samples required per monitoring year (four), and the vagaries of stormwater discharges, it may be difficult to determine or confirm the existence of a discharge problem” EPA acknowledged that “when viewed as an indicator, analytic levels considerably above benchmark values can serve as a flag to the operator” that his/her control measures “need to be reevaluated and that pollutant loads may need to be reduced.” Alternatively, the Agency indicated that analytic levels below or near benchmarks can confirm to the operator that his/her control measures are doing their intended job. EPA also stated that “there is presently no alternative that provides stakeholders with an equivalent indicator of program effectiveness.” (see 65 Fed. Reg. 64796, October 20, 2000) This response, from the MSGP 2000, continues to represent EPA’s thinking regarding the appropriate use of analytical monitoring. Furthermore, EPA has strengthened the benchmark monitoring requirements by requiring permittees to document any corrective action review of their control measures that is triggered by benchmark exceedances and to make modifications where these measures are inadequate.

In the MSGP 2000 Fact Sheet, EPA also committed to “. . .using data from the 1995 and 2000 permits to evaluate the effectiveness of management practices on an industry sector basis and to evaluate the need for changes in the monitoring protocols for the next permit.” EPA prepared an analysis of benchmark data for this permit, which is available in the docket (see memorandum entitled “Review of Discharge Monitoring Report Data From the 2000 NPDES Industrial Stormwater Permit Program”). EPA determined, based on that analysis, that available analytic monitoring data indicate that many facilities report exceedances of benchmark values. However, EPA has not yet been able to complete this analysis to determine whether these exceedances provide useful indicators of control measure inadequacies or potential water quality problems.

To further EPA’s understanding of the links between stormwater pollutant discharges and ambient water quality, and to assess the state of the science of stormwater management, the Agency commissioned a study with the National Research Council beginning in July 2006. The study will consider municipal, construction, and industrial stormwater, with special attention paid to those eight to ten industrial sectors felt to be of highest priority in terms of pollutant discharges. More specifically, the study will:

1. Clarify the mechanisms by which pollutants in stormwater discharges affect ambient water quality criteria and define the elements of a protocol to link pollutants in stormwater discharges to ambient water quality criteria;
2. Consider how useful monitoring is for both determining the potential of a discharge to contribute to an exceedance of applicable water quality standards and for determining the adequacy of stormwater control measures;
3. Assess and evaluate the relationship between different levels of stormwater control and in-stream water quality, considering a broad suite of control measures;

4. Make recommendations for how to best stipulate provisions in stormwater permits to ensure that discharges will not cause or contribute to exceedances of water quality standards. As a part of this task, the Council will consider currently available information on permit and program compliance; and
5. Assess the design of the stormwater permitting program implemented under the Clean Water Act.

The expected completion date for the study is September 2008.

X.B.1.a. Changes to Applicability of Benchmark Monitoring Requirements (Part 6.2.1.1)

As described above, EPA is continuing in this permit to require benchmark monitoring similar to that required in the MSGP 2000; however, the Agency did make numerous improvements to this framework to enhance its usefulness in identifying potential water quality concerns and opportunities to improve the effectiveness of the measures taken to meet the effluent limits.

Also, while some provisions may not have changed from the MSGP 2000, EPA did perform a more detailed analysis on the benchmark monitoring provisions generally. This analysis provided the basis for the following decisions regarding benchmark monitoring requirements:

- Not requiring TSS monitoring for all sectors
- Retaining TSS benchmark at 100 mg/L
- Application of benchmarks and numeric effluent limits for the same pollutant
- Lowering ammonia benchmark
- Revising turbidity benchmark
- Adopting hardness-dependent benchmarks for certain metals
- Updating certain other benchmarks, and
- Allowing for consideration of natural background pollutant levels.

A discussion of each of these areas follows.

X.B.1.a.i. Not Requiring TSS Monitoring for All Sectors.

- *Purpose:* As noted above, EPA has not completed its analysis of benchmark monitoring exceedances and how they relate to either water quality or the effectiveness of control measures. Many commenters expressed concern about the burden of additional TSS monitoring and questioned its value. Some asserted that it was either redundant with other benchmark parameters, or not applicable to particular facilities. As discussed above, EPA has charged the NRC with conducting a study of its stormwater program, with a special focus on benchmark monitoring, its effectiveness, and potential alternative approaches for identifying water quality concerns or verifying the effectiveness of stormwater control measures. EPA expects the results of this study to be available shortly and believes they will provide insight into many of the issues raised by commenters. EPA has thus concluded that it is appropriate to wait for the results of this

study before it significantly expands the amount of benchmark monitoring that must be conducted under this permit.

Therefore, EPA is choosing to not require all industrial sectors to monitor for TSS until results of the NRC study are made available, and EPA and the public have had an opportunity to interpret these results and identify appropriate steps to implement measures consistent with the findings of that report. In this permit, EPA has instead chosen to continue the amount of benchmark monitoring that was required in earlier MSGPs, and to enhance its usefulness by adjusting benchmarks where appropriate, and requiring more accountability from facilities in using benchmark results to assess the effectiveness of their stormwater programs and make appropriate changes. EPA expects that implementation of these changes, along with the results of the NRC study, will inform its evaluation as to whether benchmark monitoring should be continued, expanded, or replaced by an alternate method of assessing control measure effectiveness.

- *Comparison to MSGP 2000:* The TSS monitoring requirements in the final permit are similar to those of the MSGP 2000.
- *Changes from Proposed Permit:* See above.

X.B.1.a.ii. Retaining TSS Benchmark at 100 mg/L.

EPA is retaining the TSS benchmark at the level of 100 mg/L consistent with previous permits and as proposed. This decision is based on a number of factors, including recent scientific literature supporting this benchmark concentration and EPA's best professional judgment. EPA notes generally that reduction in TSS loading improves aquatic habitat and water quality.

- *Purpose:* EPA has concluded that the 100 mg/l concentration is a reasonable benchmark. Alternative levels suggested by public comments ranged from 10 mg/L to 546 mg/L. In EPA's opinion, a benchmark of 10 mg/L, applied broadly across all the areas covered by this permit, is too burdensome for permittees to meet. Established effluent limits for TSS associated with industrial stormwater have been set at between 20 and 88 mg/L. These limits are generally established on an industry or site-specific basis, in contrast to the TSS benchmark in this permit, which should be set so as to be achievable by a range of facilities over a wide range of industries.

As described above, proper selection, design, installation, and implementation of control measures can reduce TSS concentrations in many cases. For example, good housekeeping practices, such as sweeping or diverting stormwater flows, can reduce TSS concentrations in stormwater. In other cases, TSS can be reduced by control measures such as bioretention, settling mechanisms, and other types of treatment devices. Most facilities have been able to meet the 100 mg/L benchmark in MSGP 2000. In many cases, reported TSS concentrations in industrial stormwater runoff did not exceed the MSGP 2000 benchmark for TSS of 100 mg/L. In an analysis of discharge monitoring

report (DMR) data from more than 775 facilities covered by the MSGP 2000, approximately 63 percent of the TSS samples met the benchmark (Tetra Tech, 2006⁸).

Some State monitoring programs have shown that many industrial stormwater permittees are able to meet the TSS benchmark requirements. For example, the San Francisco Bay region requires TSS sampling for all facilities. Approximately 74% of samples met the 100 mg/l Benchmark between 2001, and 2002 and 86% of samples met the 100 mg/L Benchmark between 2003 and 2004.

In the cases where facilities exceed the 100 mg/L TSS benchmark, the final permit allows the permittee to document whether the exceedance is attributable to natural background contamination or if further reductions are not technologically available and economically practicable and achievable in light of best industry practice. However, except in these cases, the operator must undertake corrective action to reduce the pollutant concentration in its discharge.

- *Comparison to MSGP 2000:* The TSS benchmark of 100 mg/L is unchanged from MSGP 2000.
- *Changes from Proposed Permit:* The TSS benchmark of 100 mg/L is unchanged from the proposed permit although the permit has been modified to address commenters' concerns that benchmark exceedances, including TSS, may be attributable to natural background levels rather than industrial activity.

X.B.1.a.iii. Application of Benchmarks and Numeric Effluent Limitations for the Same Pollutant.

Several sectors have both benchmarks and effluent limitations guidelines that apply to the same pollutant. This permit is modified to provide a clearer delineation of these two sets of requirements and their relationship to each other. Specifically, six sectors have both benchmarks and effluent limitations guidelines for a specific pollutant: TSS in Sectors D, E, J, L, and O and ammonia and arsenic in Sector K. The permit clarifies that benchmarks apply to the entire stormwater discharge associated with industrial activity from the facility while the effluent limitation guidelines only apply to the specific activity identified by the national effluent limitation guideline. For example, in Sector D, effluent limitations guidelines apply only to stormwater runoff from asphalt emulsion facilities while the benchmarks apply to all stormwater discharge associated with industrial activities at the site. EPA separated the benchmarks and effluent limitations guidelines into separate tables to clarify the difference between the applicability of these two sets of requirements.

- *Purpose:* Sector-specific requirements are clarified to highlight the fact that benchmarks and effluent limitations guidelines generally apply to different discharges at a facility.
- *Comparison to MSGP 2000:* The requirements are consistent with MSGP 2000 although this permit is modified to clarify the fact that benchmarks and effluent limitations guidelines generally apply to different discharges at a facility.

⁸ Tetra Tech, Inc. 2006. Review of Discharge Monitoring Report Data From the 2000 NPDES Industrial Stormwater Permit Program. Technical Memorandum to Jack Faulk, U.S. Environmental Protection Agency. Tetra Tech, Inc., Clemson, SC, and Fairfax, VA.

- *Changes from Proposed Permit:* The requirements are modified in the final permit as described above.

X.B.1.a.iv. Lowering Ammonia Benchmark.

In the final permit, EPA lowered the ammonia benchmark from 19 mg/L to 2.14 mg/L. This change affects two sectors: Sector K (Hazardous Waste Treatment Storage or Disposal Facilities) and Sector S (Air Transportation Facilities).

EPA believes that the majority of facilities will not exceed this revised benchmark based on past monitoring results. Ammonia discharge data from the MSGP 2000 DMR data for Sector K facilities revealed that only 4 in 47 data points exceeded the 2.14 mg/L. However, EPA expects that some Sector S facilities may have to implement additional measures to further minimize ammonia discharges, in response to (or to avoid) exceedances of this new benchmark value.

The MSGP 2000 requires Sector S facilities to monitor for ammonia if they use 100 tons or more of urea on an average annual basis. Urea is used by some airport facilities as a runway deicing agent. Under the MSGP 2000, EPA received ammonia data from only 12 of the more than 400 facilities covered under Sector S. As such, EPA does not believe that lowering this benchmark will affect the majority of facilities covered under Sector S (i.e., those situated in warm weather environments and those using chemicals other than urea as a deicing/anti-icing agent). For the 12 facilities submitting ammonia data for Sector S, 47 of the 114 samples exceeded 2.14 mg/L.

Sector S facilities that have high ammonia concentrations in their discharge have several viable options for reducing this concentration. One option is to alter control measures such as using vacuum trucks, increasing manual snow removal, using biological treatment, or transporting the discharge to Publicly Owned Treatment Works (POTWs) after proper approval (see U.S. EPA Office of Water EPA 816-F-02-018, August 2002 “Managing Aircraft and Airfield Deicing Operations to Prevent Contamination of Drinking Water,” available at <http://www.epa.gov/safewater/protect/pdfs/airportfs.pdf>). Another option may be to switch to an alternative anti-icing/de-icing chemical. Airports are required to obtain stormwater discharge permits under the NPDES program and ensure that wastes from deicing operations are properly collected and treated. EPA is in the process of collecting data on the engineering, economic, and environmental impact aspects of airport deicing operations and preparing a proposed effluent limitations guideline rule to be issued around November 2008.

- *Purpose:* EPA lowered the ammonia benchmark from the proposed permit based on comments received from the Fish and Wildlife Service and the National Marine Fisheries Service (the Services) during the Agency’s consultation process regarding the potential impacts of the MSGP on federally-listed endangered and threatened species and their critical habitat. Before and during consultation, the Services commented that the proposed 19 mg/L benchmark would not adequately protect certain endangered species.

Using existing water quality standards, EPA set an ammonia benchmark under the assumption that the majority of waters would have a pH of about 7.5 or less. EPA included the benchmark of 19 mg/L based on this fact in both the 1995 and 2000 permits. Under most existing water quality standards, the pH is expected to be between 6.0 and

9.0. Streams and reservoirs that have high levels of photosynthesis will likely have higher pH. Many of these productive areas may coincide with the habitat of endangered species. Additionally, new data indicate that freshwater mussels are more sensitive to ammonia than previously thought. Since greater than 70% of mussels are listed as endangered, threatened, or of special concern, the Services asserted that it was particularly important to protect freshwater mussels as a class. Due to the wide geographic range of these species, EPA found it impracticable to determine which streams may or may not have the presence of freshwater mussels. Therefore, to protect these species, EPA, based on recommendations from the Services, made the decision to lower the ammonia benchmark.

In calculating a revised benchmark, EPA assumed a maximum pH of 8.5 in the receiving stream, which yielded an acute freshwater criterion for ammonia of 2.14 mg/L. The Services recommended an ammonia benchmark of between 1.75 and 2.5 mg/L to be protective of freshwater mussels. EPA has therefore adopted a benchmark value for this permit of 2.14 mg/L.

- *Comparison to MSGP 2000:* As described above, the ammonia benchmark has been lowered from 19 mg/l to 2.14 mg/L to address the Services' concerns with impacts to freshwater mussels.
- *Changes from Proposed Permit:* The ammonia benchmark has been lowered from the proposed permit, for the reasons discussed above. EPA had not fully explored this issue with the Services in consultation prior to the time of permit proposal.

X.B.1.a.v. Revising Turbidity Benchmark

This permit requires permittees in one sector, Sector G, to monitor stormwater discharges using a turbidity benchmark value of 50 NTU.

- *Purpose:* The MSGP 2000 established a turbidity benchmark of 5 NTUs above background, requiring the permittee to monitor both the outfall and the receiving stream to compare discharges with benchmark values. To ease the monitoring burden for permittees, and to better address regional differences, the new benchmark of 50 NTUs for this permit requires the permittee to monitor only the outfall.
- *Comparison to MSGP 2000:* The turbidity Benchmark has been changed from 5 NTU above background to 50 NTU to allow the permittee to monitor only the outfall instead of being required to monitor both the outfall and the receiving stream.
- *Changes from Proposed Permit:* No significant changes were made to this provision.

X-B.1.a.vi Requiring Hardness Data for Certain Metals Benchmarks.

The benchmark values, based on water quality criteria of some metals, are dependent on water hardness. In this permit, EPA is requiring permittees to determine the hardness of their receiving water for these parameters. Once the site-specific hardness data have been collected, benchmark values are calculated using a conversion table based on 25 mg/L incremental hardness ranges.

- *Purpose:* During consultation prior to the issuance of this permit, the Services expressed concern that creating a benchmark value based on water quality standards with a hardness value of 100 mg/L would not be adequately protective of endangered species in receiving waters where the hardness is below 100 mg/L. Based on this concern, EPA opted to require permittees to collect hardness data to calculate the benchmark. Since many waters have hardness values of 100 mg/L or higher, EPA opted not to lower the hardness value for all dischargers as this would create unnecessarily stringent benchmarks for some dischargers. Rather, and for simplicity, EPA tabulated applicable hardness-dependent benchmarks using 25 mg/L hardness increments. For most metals, the benchmark level for a 0-25 mg/L hardness range is set at the water quality standard based on a hardness of 25 mg/L. (For silver, because of concerns with available analytical tests and detection limits, EPA used a low-end hardness level of 37.5 mg/L for calculating the applicable silver benchmark.) For every other hardness range, the benchmark is based on the mean hardness value (e.g., for a hardness range of 75-100 mg/L, benchmarks are based on a hardness of 87.5 mg/L). For calculating hardness-dependent benchmarks, EPA is limiting the maximum hardness to 250 mg/L to be protective of downstream receiving waters.

This approach addresses the Services' concerns with minimal additional burden on permittees. Gathering data for hardness in the receiving stream provides an appropriate way to obtain representative benchmark values that are representative of local conditions and that provide a more meaningful assessment of potential impacts on endangered species.

- *Comparison to MSGP 2000:* In the MSGP 2000, EPA used a baseline hardness of 100 mg/L to derive benchmark values for all parameters for which the water quality criteria are hardness dependent. This permit modifies that approach to use benchmarks that are adjusted to reflect site-specific hardness levels. This requires permittees to either sample the receiving stream or gather documentation of hardness in the receiving stream.
- *Changes from Proposed Permit:* For the proposed permit, EPA based the benchmark on a hardness of 100 mg/L but provided equations for determining hardness-dependent benchmark values for facilities that wanted to demonstrate higher benchmarks were appropriate because of elevated hardness levels in the receiving stream. Several commenters noted that it was inappropriate to allow for higher benchmarks for streams with higher hardness but not to do the same for streams with lower hardness values (where benchmarks should be lower). EPA agrees that this is an appropriate use of benchmarks, consistent with the Agency's intent to use them as indicators of potential water quality concerns. As such, the permit now reflects hardness ranges as low as 0-25 mg/L.

EPA also received comments indicating that the equations provided in the proposed permit were confusing and difficult to use to calculate actual hardness values. To simplify this approach, EPA tabulated benchmark values for hardness-dependent metals based on a range of hardness values varying from 25 to 250 mg/L (in 25 mg/L increments).

X.B.1.a.vii. Updating Benchmark Parameters for Certain Sectors

As part of the permit reissuance process, EPA evaluated existing benchmark data and benchmark parameters for each sector and subsector in the MSGP 2000 to assess the appropriateness of retaining these existing requirements. See above-referenced Tetra Tech, Inc. study. This analysis evaluated the effectiveness of existing controls on these discharges. In addition, the Agency sought additional data on which to assess whether additional benchmark monitoring requirements were necessary for any of the sectors or subsectors. EPA was prepared to drop any benchmark monitoring requirement where data indicated that a pollutant was not present in the discharge, or occurred consistently at such low levels that monitoring would provide no indicator value to the operator with respect to discharge quality.

- *Purpose:* Benchmark monitoring requirements are included for those pollutant parameters determined by EPA, from discharge data submitted by covered facilities, to be of potential concern in stormwater discharges on an individual sector basis. The benchmark concentrations are set at the “level of concern” for that pollutant. The level of concern is a concentration at which a stormwater discharge could potentially cause or contribute to an impairment of water quality standards. See corresponding discussion in MSGP 2000 fact sheet; 65 Fed. Reg. 64766 (October 30, 2000). The benchmarks are also viewed by EPA as being set at a level below which discharges have little potential to cause water quality concern. As such, the benchmarks are also intended to assist facilities in determining whether their control measures are adequate. Since benchmarks are usually set equal to ambient water quality criteria for the receiving waters, with no allowance for dilution during storm events, they are conservative. Exceedence of benchmarks does not necessarily indicate that a discharge is causing or contributing to a water quality standard, but does require an evaluation of control measure effectiveness by the facility, with follow-up corrective action where necessary. EPA’s rationale for selecting which benchmark parameters are appropriate for which sector is consistent with the approach developed first for the 1995 MSGP (60 FR 50804, September 29, 1995). As noted above, EPA has asked the NRC to review the usefulness of benchmarks as part of a larger evaluation of the stormwater program.
- *Comparison to MSGP 2000:* Benchmark monitoring parameters are consistent with those in the MSGP 2000 with one exception. Based upon review of TRI and MSGP 2000 monitoring data and other information, EPA identified one benchmark that could be eliminated. Specifically, EPA dropped the benchmark for manganese in Sector G because there were no EPA established criteria for this parameter. EPA may consider adding a manganese benchmark for specific facilities on a site-specific basis where manganese is a concern in the receiving water.
- *Changes from Proposed Permit:* EPA proposed adding new benchmark parameters for four sectors (Sectors A, I, Y, and AC) based on data from TRI. After further review, EPA is excluding these new benchmark parameters from the final permit because the Agency does not have sufficient information to confirm that the available TRI data provides a reliable indicator of elevated levels of pollutants for these sectors. Commenters noted that the data presented in TRI are for stormwater discharges covered under a national effluent limitation guideline or are for discharges covered under an existing individual NPDES permit, not a general permit. EPA believes that while TRI data can provide useful information for assessing the impacts from individual facilities,

as a general rule, it is not a good indicator of levels of pollutants in stormwater discharges because these discharges are not likely to trigger the reporting thresholds for the TRI program. Therefore, requiring benchmark monitoring for a pollutant solely based on TRI-reported releases may not be appropriate considering the fact that the release may not be indicative of stormwater discharges. Also, since none of the pollutants for which EPA had proposed including new benchmarks in the proposed rule were identified in more than 10 percent of the facilities reporting to TRI, EPA believes it is reasonable at this time to not increase benchmark monitoring for these sectors. EPA notes that facilities in these four sectors need to evaluate these pollutants as part of their site planning and control strategy, if such pollutants may be found in the discharge. As noted above, EPA has asked the NRC to review the usefulness of benchmarks as part of a larger evaluation of the stormwater program, and may revise the benchmark monitoring requirements during the next permit cycle as a result of this review.

X.B.1.a.viii. Updating Other Benchmark Values

For this permit, 10 benchmark values (ammonia, arsenic, cadmium, copper, cyanide, mercury, nickel, selenium, silver and turbidity) have been revised (e.g., switching from a method detection limit-based (MDL-based) to an ambient water quality criterion-based value, or updated to reflect a revised water quality criterion). In some cases, these revisions represent significant reductions in the benchmarks. The values for four additional benchmarks (antimony, lead, magnesium, and zinc) are slightly revised by rounding the values to two significant figures.

Based on DMR data reported under previous permits, EPA believes that most facilities with effective control measures can meet these targets. Monitoring data suggest that the proposed benchmarks are achievable in general for the industries to which they will apply, although some facilities may need to make improvements to their controls to meet these benchmarks. Facilities may also demonstrate that exceedances are due to natural background, or that discharges cannot be further minimized if they believe this is the case. A summary report of the MSGP 2000 DMR data are available in the docket for this permit (<http://www.regulations.gov>).

In the MSGP 1995 and 2000, where an applicable water quality criterion was below the minimum level (ML) of quantification for the most sensitive available analytic method, EPA instead used a value equal to 3.18 times the MDL for that pollutant in lieu of the water quality criterion. (For a full discussion of EPA's initial approach for the derivation of the benchmarks see the fact sheet for the 1995 MSGP (60 Fed. Reg. 50825, September 29, 1995).

For this permit, EPA identified methods for all but one pollutant parameter (total magnesium) that have a ML below the applicable water quality criterion. Where there are no established EPA water quality criteria, EPA used other sources of data to determine the appropriate benchmark value. The process that EPA followed in selecting the benchmark values for this permit is as follows: Step 1: Use the promulgated acute criterion value; Step 2: If no EPA acute criterion exists, use the chronic criterion; Step 3: If neither acute nor chronic criteria exist, use data from runoff studies or technology-based standards to establish a benchmark.

For most parameters for which EPA changed the basis of the benchmark from the MDL method to the water quality basis described above, the freshwater acute water quality criteria

were selected. In general, the freshwater acute criteria are less restrictive than chronic water quality criteria. Because of the intermittent nature of wet weather discharges and the high ambient flows that generally result from precipitation events, EPA views acute criteria as generally more appropriate than chronic criteria. EPA notes that there are a few exceptions to this general approach, as will be discussed later in this fact sheet.

Table 2 presents a comparison of the MSGP 2000 to this final permit's benchmark values, and the source of those values. Changes from the MSGP 2000 benchmark values are highlighted in the table.

In most cases, EPA has not revised benchmarks since they were first published in the MSGP 1995. However, eight of the ten benchmarks that were assigned the acute water quality criterion value as differentiated from the MSGP 2000's value that was based on the MDL (i.e., arsenic, cadmium, copper, cyanide, mercury, nickel, selenium, and silver) now have lower values based on EPA water quality criteria. Excluding mercury and nickel, the benchmark values have been changed from 3.18 times the MDL to the ambient water quality criteria. Mercury and nickel benchmarks are revised based on EPA's updated acute aquatic life criteria. In each case, at least one EPA approved 40 CFR Part 136 analytical method exists with detection limits below these benchmark values. It should be noted that EPA afforded the exception of utilizing Method 200.8 in the proposed permit although that method had not yet been approved for use in 40 CFR Part 136. Subsequent to permit proposal, EPA approved Method 200.8 for use (72 FR 11200, March 12, 2007). As a result, this exception is no longer needed.

As discussed above, in some cases (i.e., arsenic and selenium) EPA is using chronic freshwater criteria for setting benchmarks. The arsenic acute criterion, 0.34 mg/L, is more than two times the MSGP 2000 benchmark value. In general, EPA prefers not to weaken a discharge requirement unless good scientific evidence exists that a pollutant is less toxic than previously believed. This is not the case with arsenic. Furthermore, arsenic toxicity increases substantially in saline waters (the saltwater acute criterion value is 0.069 mg/L). Since many permitted facilities are located in coastal states, and their discharge may reach saline waters quickly, EPA believes use of the chronic criteria for arsenic is warranted to protect these estuarine environments. Additionally, the revised benchmark for arsenic of 0.15 mg/L is not significantly different from the previous benchmark of 0.17 mg/L that had been based on 3.18 times the MDL. Currently there is not an acute freshwater criterion for selenium; although draft criteria are under consideration. Hence, EPA selected the chronic criterion, but may revisit this benchmark in future permits.

The changes in methods and MDLs for cadmium, copper, cyanide, selenium, and silver are provided in Table 3. (Note: The source of the cost for each method was based on laboratories that specialize in effluent monitoring analysis). Additional supporting data are available in the docket for this permit (see Previous and New Analytical Methods for MSGP).

Table 2. Comparison of MSGP 2000 and final 2008 MSGP Benchmark Values.

Comparing Benchmark Monitoring Pollutants Sources from the 2000 and final MSGP					
Pollutant	2000 MSGP Benchmark	2000 MSGP Source	Final MSGP Benchmark	Final MSGP Source	Different
Ammonia*	19 mg/L	14	2.14 mg/L	14	No
Biochemical Oxygen Demand (5 day)	30 mg/L	4	30 mg/L	4	No
Chemical Oxygen Demand	120 mg/L	5	120 mg/L	5	No
Total Suspended Solids	100 mg/L	7	100 mg/L	7	No
Turbidity	5 NTU above background	13	50 NTU	9	Yes
Nitrate + Nitrite Nitrogen	0.68 mg/L	7	0.68 mg/L	7	No
Total Phosphorus	2.0 mg/L	6	2.0 mg/L	6	No
pH	6.0 – 9.0 s.u.	4	6.0 – 9.0 s.u.	4	No
Aluminum (T) (pH 6.5 - 9)	0.75 mg/L	10	0.75 mg/L	1	No
Antimony (T)	0.636 mg/L	8	0.64 mg/L	12	No
Arsenic (T)	0.16854 mg/L	8	0.15 mg/L	3	Yes
Beryllium (T)	0.13 mg/L	2	0.13 mg/L	2	No
Cadmium (T) [†]	0.0159 mg/L	8	0.0021 mg/L	1	Yes
Copper (T) ^{*†}	0.0636 mg/L	8	0.014 mg/L	1	Yes
Cyanide	0.0636 mg/L	8	0.022 mg/L	1	Yes
Iron (T)	1.0 mg/L	11	1.0 mg/L	3	No
Lead (T) ^{*†}	0.0816 mg/L	10	0.082 mg/L	3	No
Magnesium (T)	0.0636 mg/L	8	0.064 mg/L	8	No
Mercury (T)	0.0024 mg/L	10	0.0014 mg/L	1	No; criteria updated [^]
Nickel (T) [†]	1.417 mg/L	10	0.47 mg/L	1	No; criteria updated [^]
Selenium (T)*	0.2385 mg/L	8	0.005 mg/L	3	Yes
Silver (T) ^{*†}	0.0318 mg/L	8	0.0038 mg/L	1	Yes
Zinc (T) [†]	0.117 mg/L	10	0.12 mg/L	1	No; criteria updated [^]

(T) Total recoverable

* New criteria are currently under development, but values are based on existing criteria.

† These pollutants are dependent on water hardness. The benchmark value listed is based on a hardness of 100 mg/L. When a facility analyzes water samples for hardness, the permittee must use the hardness ranges provided in Table 1 of this fact sheet and in the appropriate tables in Part 7 of this permit to determine the applicable benchmark value for that facility.

[^] The values for these pollutants do not have a new basis. They are still based on the water quality criteria, but the “National Recommended Water Quality Criteria” was updated in 2002.

Sources:

1. “National Recommended Water Quality Criteria.” Acute Aquatic Life Freshwater (EPA-822-F-04-010 2006-CMC)
2. “EPA Recommended Ambient Water Quality Criteria for Beryllium.” LOEL Acute Freshwater (EPA-440-5-80-024 October 1980)
3. “National Recommended Water Quality Criteria.” Chronic Aquatic Life Freshwater (EPA-822-F-04-010 2006-CCC)
4. Secondary Treatment Regulations (40 CFR 133)
5. Factor of 4 times BOD5 (5 day biochemical oxygen demand) concentration - North Carolina Benchmark
6. North Carolina stormwater Benchmark derived from NC Water Quality Standards
7. National Urban Runoff Program (NURP) median concentration
8. Minimum Level (ML) based upon highest Method Detection Limit (MDL) times a factor of 3.18
9. Combination of simplified variations on Stormwater Effects Handbook, Burton and Pitt, 2001 and water quality standards in Idaho, in conjunction with review of DMR data.
10. “National Ambient Water Quality Criteria.” Acute Aquatic Life Freshwater. This is an earlier version of the criteria document that has subsequently been updated. (See source #1)

Comparing Benchmark Monitoring Pollutants Sources from the 2000 and final MSGP					
Pollutant	2000 MSGP Benchmark	2000 MSGP Source	Final MSGP Benchmark	Final MSGP Source	Different

11. "National Ambient Water Quality Criteria." Chronic Aquatic Life Freshwater. This is an earlier version of the criteria document that has subsequently been updated. (See source #3)

12. "National Ambient Water Quality Criteria." Human Health For the Consumption of Organism Only (EPA-822-F-01-010 2006)

13. Consistent with many state numeric Water Quality Criteria. This Benchmark was agreed to in negotiations for the 1998 modification to the 1995 MSGP (63 FR 42534).

14. "Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses." USEPA Office of Water (PB85-227049 January 1985).

Table 3. Methods, MDL, and Cost Table¹

Pollutant	Previous Analytical Method			New Analytical Method		
	Method ID	MDL	Cost/sample	Method ID	MDL	Cost/Sample
Cadmium	200.7	4 ug/L	\$10	200.8	0.5 ug/L	\$12
Copper	220.1	20 ug/L	\$20	200.8	0.09 ug/L	\$12
Cyanide	335.2	20 ug/L	\$40	335.3	4 ug/L	\$40
Selenium	200.7	75 ug/L	\$10	270.2	2 ug/L	\$20
Silver	272.1	10 ug/L	\$20	200.8	0.11 ug/L	\$12

¹Depending on the number of parameters analyzed, the laboratory may require a sample handling or digestion fee.

- *Purpose:* EPA recognizes that use of the more sensitive methods involves somewhat higher analytical costs, and notes that the estimated cost increases are between \$2 (20 percent increase) and \$10 (100 percent increase) per sample. EPA believes these higher costs are justified because use of the more sensitive methods that have an ML below the applicable acute (or chronic) value will provide information to EPA that may be used to assess potential water quality problems. In the case of nickel, the acute water quality criterion that was the basis of the previous benchmark was revised downward in 1996, but the lower benchmark does not require use of a new analytical method.
- *Comparison to MSGP 2000:* In the MSGP 2000, arsenic, cadmium, copper, cyanide, selenium, and silver benchmark values were 3.18 times the MDL for a particular analytical method. Mercury and nickel benchmarks were based on a previous version of EPA's acute aquatic life criteria.
- *Changes from Proposed Permit:* No noteworthy changes were made to this provision.

X.B.1.a.ix. Addressing Natural Background Pollutant Levels.

EPA is including an option for permittees to justify benchmark exceedances based on local natural background concentrations. EPA 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 exceedances of a benchmark value. EPA 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 waterbody impairment.

Part 6.2.1.2 of the permit allows for an exception from evaluation of control measures and further benchmark monitoring when natural background levels are solely responsible for the exceedance 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 4 separate events minus the average natural concentration of the parameter for 4 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 four benchmark samples is equal to or lower than 200 mg/L. In this example, if the average of their four 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 exceedance, the facility will need to review its control measures and take further action where necessary as required in Part 2.2 of this permit. Facilities must use the same sample collection, preservation, and analysis methods for natural background monitoring as required for benchmark monitoring.

If a permittee experienced average benchmark exceedances for one or more pollutants during coverage under the MSGP 2000 or suspects that the facility might have benchmark exceedances under this permit caused entirely by natural background, he/she can begin monitoring the natural background pollutant concentrations from a non-human impacted reference site concurrently with required benchmark monitoring.

After monitoring for 4 quarters and adequately determining that exceedances are the result of pollutants present in the natural background, permittees must notify EPA 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 exceedances 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 EPA when submitting its monitoring data that it is claiming the exception for natural background pollutant levels 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 (see Part 5.4), and made available to EPA on request.

The following information, describing the rationale for claiming the natural background exception, must be documented and kept onsite with the facility's SWPPP⁹:

- Map showing the reference site location in relation to facility along with available land cover information

⁹ ADEC. 2006. *Guidance for the Implementation of Natural Condition-Based Water Quality Standards – July 17, 2006 Draft*. Alaska Department of Environmental Conservation, Division of Water.

- 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 occurred¹⁰.

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

- *Purpose:* Several commenters noted that natural background levels are the specific cause of their benchmark exceedances. In these instances, when industrial activity is not contributing to the pollutant concentrations causing these exceedances, EPA is providing permittees an option to discontinue benchmark monitoring. This waiver is not available for effluent limitation monitoring (Part 6.2.2) or impaired water monitoring (Part 6.2.4).
- *Comparison to MSGP 2000:* The MSGP 2000 did not include the ability to waive benchmark monitoring after the first year of permit coverage due to exceedances attributed to natural background levels.
- *Changes from Proposed Permit:* EPA received comments stating that where natural background sources of a pollutant already exceed the benchmark value, the monitoring data will be of limited use to the permittee and to EPA. EPA agrees, provided there is no net addition of the pollutant from the facility, and has added this provision to address this situation.

¹⁰ ADEC. 2006. *Guidance for the Implementation of Natural Condition-Based Water Quality Standards – July 17, 2006 Draft*. Alaska Department of Environmental Conservation, Division of Water.

X.B.1.b. Benchmark Monitoring Schedule (Part 6.2.1.2)

Facilities required to conduct benchmark monitoring must do so in each of the first 4 quarters of permit coverage (starting six months after the permit issuance date, or April 1, 2009, to provide time for the Agency to have its electronic monitoring system operational), unless a modified benchmark monitoring schedule is included in the SWPPP for areas with “Climates with Irregular Stormwater Runoff” (see permit Part 6.1.6). In this case, the modified schedule must be reported to EPA when the first benchmark monitoring report is submitted.

Following the first 12 months (4 quarterly or otherwise consecutive monitoring events) of monitoring, if the average of the 4 monitoring values for any parameter does not exceed the benchmark, the permittee has fulfilled the benchmark monitoring requirements for that parameter for the duration of the permit term for that pollutant.

However, if the average of the 4 quarters of monitoring values exceeds any benchmark for a parameter, the permittee must evaluate his/her control measures to determine if modifications are necessary to meet the effluent limits in the permit. If so, the facility must either:

1. Make the necessary modifications and monitor the pollutant for 4 additional quarters. Quarterly sampling must be continued until the discharger has completed 4 quarters of monitoring of that pollutant for which the average does not exceed the benchmark; or
2. Make a determination that no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice to meet the permit’s technology-based effluent limits, or necessary to meet the permit’s water quality-based effluent limits. If the permittee makes this determination, the accompanying rationale must be included in the post-SWPPP documentation. No further corrective action is required, but the permittee must monitor annually for the pollutant for the remainder of the permit term and notify EPA in the first monitoring report of the permittee’s determination.

If the permittee determines after 4 quarters of monitoring that a benchmark was exceeded solely as a result of natural background levels, the permittee may document this determination and discontinue further benchmark monitoring.

For averaging purposes, any parameter determined to be less than the method detection limit (MDL) can be assumed to be zero. For sample results that fall between the MDL and the quantitation level (i.e., detected but not quantifiable with certainty), use a value halfway between zero and the quantitation level. In any case, reports provided to EPA must provide either the detected value, notice that the concentration is below the method detection level, or notice that the pollutant is present but not quantifiable (and the quantitation level).

- *Purpose:* Consistent with the MSGP 2000, EPA is requiring quarterly monitoring over the course of a year, with the average of the 4 samples of any parameter to be compared with benchmark values for that pollutant. Based on an evaluation of discharge monitoring data collected under the MSGP 2000, EPA believes that it is most appropriate to commence monitoring soon after obtaining authorization to discharge, rather than in the second year of permit coverage, as was required in the MSGP 2000, to allow facilities to assess the effectiveness of control measures and identify potential problems sooner

(see memorandum located in the docket for this permit entitled “Review of Discharge Monitoring Report Data for the MSGP 2000” for more details).

Benchmarks are not effluent limits, and exceedances of benchmarks are not permit violations. Rather, exceedance of a benchmark is an indicator to the operator that there may be a problem with his/her control measures, or the discharge may be adversely affecting water quality. Dischargers are thus required to evaluate their control measures when benchmarks are exceeded to determine if further minimization of the pollutant of concern is possible. If so, corrective action must be undertaken, and additional monitoring of the benchmark parameter must be conducted to allow the facility to assess the effectiveness of the revised control measures. If the operator determines that no further minimization is possible, this must be documented and benchmark monitoring continued on an annual basis. This will provide EPA with additional data to support its re-evaluation of benchmarks for the next permit cycle. EPA may choose to inspect such facilities to assess the validity of the operator’s determination that no further pollutant minimization is possible.

- *Comparison to MSGP 2000:* Under the MSGP 2000, permittees did not begin monitoring until the second year of permit coverage. The MSGP 2000 required monitoring during year 2 and year 4 of the permit regardless of when permittees actually obtained authorization to discharge under the permit. A benchmark monitoring exception was provided to facilities whose average concentrations for discharges for all four quarters of the year 2 monitoring were below their corresponding benchmark values.
- *Changes from Proposed Permit:* The final permit clarifies that the first quarter for benchmark monitoring begins six months following the publication of this permit, or April 1, 2009. EPA’s reason for beginning benchmark monitoring at this time is to accommodate the Agency’s own need to ensure that the electronic system for permittees to submit monitoring data is fully functional and to provide permittees an opportunity to fine-tune the control measures required under this permit. The Agency believes electronic submission of these data will simplify and clarify applicable monitoring requirements for permittees and make it easier for EPA and the public to access these data.

EPA made several modifications to clarify what is expected of permittees whose average benchmark results exceed an applicable benchmark. EPA explained that if the permittee determines that modifications to its controls measures are necessary to meet the permit’s effluent limits, the permittee is required to make applicable modifications and continue monitoring quarterly until 4 additional quarters show an average that does not exceed the benchmark, or to make a finding that no further pollutant reductions are technologically available and economically practicable and achievable to meet the technology-based limits or necessary to meet the permit’s water quality-based limits. If this determination is made, the permittee must retain documentation to support this finding with the SWPPP, and may subsequently reduce monitoring to once per year. The permittee is also required to notify EPA of this determination in his/her next monitoring report. In the proposed permit, the corresponding provision included somewhat vaguer language, which required continued quarterly monitoring based on a determination of whether the SWPPP met the provisions of Part 2. In EPA’s opinion, this permit’s reference to whether further control measure modifications are necessary to meet the

effluent limits in the permit is put in more understandable terms to permittees than the proposed language.

EPA received several comments on this provision asking for clarification of whether benchmark monitoring needed to continue after the first year if a facility's activities change. EPA responded to these comments by clarifying that, consistent with the reporting requirements of 40 CFR 122.41, the permittee would be required to notify EPA whenever such a change would result in a "significant change" in the pollutants discharged in stormwater justifying the inclusion of additional monitoring requirements or other permit conditions. For instance, if the facility's changes would result in that site falling under a different SIC code and/or industrial sector or subsector, EPA would expect the applicable permittee to notify EPA of such a change. Based on this information, EPA may notify the permittee that it is required to monitor for the benchmarks associated with the new activities.

X.B.1.c. Exception for Inactive and Unstaffed Sites (Part 6.2.1.3)

Part 6.2.1.3 of the permit allows for an exception from benchmark monitoring for facilities that are both inactive and unstaffed, when the facility no longer has industrial activities or materials exposed to stormwater. These facilities could alternatively submit a No Exposure Certification terminating permit coverage. However, EPA realizes that some facilities plan to recommence industrial activity in the future and therefore may wish to keep active permit coverage. To qualify for this exception, permittees must maintain a signed certification with their additional documentation (Part 5.4 of the permit) that indicates that the site is inactive and unstaffed, and that there are no industrial activities or materials exposed to stormwater. Permittees are not required to obtain advance approval for this exception. This permit does include modified requirements for inactive and unstaffed sites in the mining industry (i.e., Sectors G, H, and J). Specifically, these facilities may qualify for this exception even where some industrial activities or materials are exposed to stormwater. This provision is being included for mining sites because of the large number of extremely remote sites in these sectors, and the impracticability/infeasibility of reaching these sites during qualifying storm events. However, these sites must still be identified in the operator's SWPPP, and must still adopt control measures to minimize pollutant discharges. See section XII for additional discussion.

The permit clarifies that if circumstances change and industrial materials or activities become exposed to stormwater or the facility becomes active and/or staffed, this exception no longer applies and the permittee must immediately begin complying with the applicable benchmark monitoring requirements under Part 6.2 as if he/she was in the first year of permit coverage, and notify EPA of the change in the first benchmark monitoring report. In the same way, if the permittee is not qualified for this exception at the time he/she is authorized under this permit, but during the permit term the facility becomes inactive and unstaffed, and there are no industrial materials or activities that are exposed to stormwater, then the permittee must notify EPA of this change in its next benchmark monitoring report, and may discontinue benchmark monitoring once he/she has done so, and prepared and signed the statement described above concerning the facility's qualification for this special exception.

- *Purpose:* EPA believes that a facility with no industrial activity and no exposed materials will not be contributing pollutants to stormwater discharges. While the MSGP 2000 provided a benchmark monitoring exception for inactive and unstaffed sites, the

provision did not require “no exposure” of industrial materials. Because discharge of pollutants does not cease when industrial materials remain exposed to stormwater, and because EPA has determined that maintaining permit coverage for inactive and unstaffed sites will be a rare event in most sectors, and monitoring of these sites will not be unduly burdensome if activities and materials remain exposed to stormwater, EPA believes that elimination of exposure is a reasonable prerequisite for this monitoring exception for most sectors. EPA has provided a broader exception for inactive and unstaffed mining sites in Sectors H and J for the reasons discussed above, while there is no monitoring for Sector G mining sites if they are not active sites.

- *Comparison to MSGP 2000:* The final permit modifies the exception that was included in the MSGP 2000 by adding the requirement that industrial materials or activities not be exposed to stormwater.
- *Changes from Proposed Permit:* EPA modified the proposed permit by providing the opportunity for Sectors H or J facilities to obtain a “conditional exemption” from the no exposure requirement providing certain conditions are met. This provision applies to Sectors H and J based on the numerous comments demonstrating the excessive burden and costs that would be incurred if the no exposure requirement was enforced for mining sites, many of which are extremely remote and inactive and unstaffed for prolonged periods of time. EPA agrees that these concerns were not adequately addressed in the proposed permit. EPA has concluded that it would be impracticable for mining facilities that are inactive and unstaffed to make staff and resources available for stormwater monitoring, considering that the outfall locations are often remote and the stormwater events occur at times that are unpredictable. EPA also notes that no monitoring exemption is needed for inactive and unstaffed mining sites in Sector G since only active facilities are required to monitor. See Part 8.G.8.

Additional discussion is provided in section XII of the fact sheet. EPA also modified the proposed permit by including language in Part 6.2.1.3 to ensure that permittees notify the Agency when they become qualified for the exception and when they are no longer qualified.

X.B.2. Effluent Limitations Monitoring (Parts 6.2.2.1 and 6.2.2.2).

Numeric effluent limitations have been included in previous versions of the MSGP, based on national effluent limitation guidelines for certain industry-specific discharges (see Part 6.2.2). Consistent with minimum monitoring requirements for NPDES permit limits established at 40 CFR 122.44(i), monitoring for these parameters must be conducted at least once each year for the duration of permit coverage. A facility’s effluent limitations are specified in the Part 8 requirements that correspond that that facility’s sector. Monitoring for all parameters must be conducted according to the procedures in Part 6.1 of this permit unless otherwise noted.

This permit also clarifies the requirement for corrective action whenever there is an exceedance of a numeric effluent limit. EPA also clarifies that, in contrast to benchmarks, an exceedance of an effluent limit constitutes a violation of the permit. Failure to conduct required corrective action and follow-up monitoring as required in Part 6.3 of this permit is an additional violation.

This permit includes one notable change regarding effluent limitations. In the MSGP 2000, EPA established a numeric effluent limitation for all coal pile runoff irrespective of the industrial activities conducted at that site. EPA used the effluent limitation guidelines applicable to the steam electric power generation industry, as detailed in 40 CFR Part 423, as the basis for these limits. Commenters questioned how this effluent limit correlates with the of these coal mining effluent limitation guidelines to other sectors, given that they were based on an assessment of discharges, control options, and economic achievability at steam electric generating facilities only. EPA agrees with these commenters and has limited the applicability of this effluent limit in this permit to Sector O (steam electric generating facilities). EPA notes that facilities that generate electric power from steam for sale to other customers would be covered by this effluent guideline even if this was not their primary business. Facilities that generate electricity for internal use only are not covered because their activities do not fall within the definition of Sector O.

Additionally, facilities that use coal simply for steam generation are also not subject to these numeric effluent limitations. Applicable control measures for these facilities must be selected, designed, installed, and implemented consistent with the stormwater control requirements established in Part 2 of the permit.

Part 6.2.2.2 clarifies that permittees subject to effluent limitation guidelines are required to monitor each outfall discharging runoff, and that the flexibility afforded for benchmark monitoring for substantially identical outfalls does not apply to effluent limitation guidelines monitoring.

- *Purpose:* Part 6.2.2 ensures that permittees monitor to determine compliance with any applicable numeric effluent limits.
- *Comparison to MSGP 2000:* The effluent limitation requirements are consistent with the requirements in MSGP 2000 (i.e., annual monitoring).
- *Changes from Proposed Permit:* No significant changes were made to this provision. Effluent limitations for coal pile runoff have been moved to Sector O (Steam Electric Generating Facilities) to clarify that these requirements only apply to facilities that engage in electric power generation from steam for sale to outside customers. EPA clarified in Part 6.2.2.2 that permittees subject to effluent limitation guidelines monitoring must conduct compliance monitoring at all outfalls, and are not given the ability to use the substantially identical outfall exception.

X.B.3. State or Tribal Provisions Monitoring (Part 6.2.3).

Where a State or Tribe has imposed a numeric effluent limitation, has established a wasteload allocation, or has stipulated specific monitoring requirement(s) as a condition for certification under CWA Section 401, a minimum monitoring frequency of once-per-year has been included in the final permit. This annual monitoring frequency applies only if a State or Tribe does not specify an alternative monitoring frequency.

- *Purpose:* As with the MSGP 2000, this permit requires facilities to monitor for a State or Tribe imposed numeric effluent limit at a minimum of once-per-year when the State or Tribe has not indicated a required monitoring frequency. This provision is intended to allow facilities to determine compliance with the numeric effluent limit. Exceedances of

State or Tribal numeric effluent limits are permit violations in the same way as exceedances of effluent limitation guidelines are violations. Both types of violations require the same corrective action and follow-up monitoring. The minimum frequency also applies to other monitoring required by a State or Tribe (even if not associated with a numeric effluent limit) where the State or Tribe has not specified a required frequency. Further discussion of state or tribal requirements is included in section XIII of this fact sheet.

- *Comparison to MSGP 2000:* No significant changes were made to this provision.
- *Changes from Proposed Permit:* No significant changes were made to this provision.

X.B.4. Discharges to Impaired Waters Monitoring (Part 6.2.4).

Part 6.2.4 of the permit clarifies provisions for discharges to water quality impaired receiving waters. The following is a step-by-step discussion on how permittees should determine appropriate monitoring requirements.

X.B.4.a. Determine Whether the Receiving Waterbody Is Impaired

Each operator is required to indicate in his/her NOI whether the facility's discharge is to an impaired water, and, if so, what are the pollutants identified as causing the impairment. Following the submittal of the NOI, EPA will assess each NOI to determine what, if any, monitoring requirements apply under Part 6.2.4. Based on this examination, EPA will notify each permittee of their impaired waters monitoring requirements.

The first step for the operator is to determine if his/her facility discharges to an impaired water. Several sources can be used to determine whether the waterbody (e.g., ditch, creek, intermittent stream, lake) into which a facility's stormwater is discharged directly is impaired. EPA identifies several sources of this information on its website at www.epa.gov/npdes/stormwater/msgp. For the purposes of this permit, a permittee discharges to an impaired water if the discharge is directly to the impaired water (See Part 1.4.3). If the discharge is to an impaired water, the monitoring requirements under Part 6.2.4 are triggered. However, if the discharge is not to an impaired water, the permittee has no obligations under Part 6.2.4 of the permit.

When developing TMDLs, EPA and the states evaluate contributions from upstream segments and contributing waterbodies. As such, in some instances, upstream sources may be identified as a contributor to an impairment. Where EPA has reason to believe that a permitted facility has the potential to cause or contribute to an impairment in a downstream water, notwithstanding the permittee's indication in his/her NOI that the facility does not discharge to an impaired water, EPA may require the permittee to perform additional monitoring and/or adopt additional control measures to address the potential contribution to the impairment. In these instances, EPA will notify the permittee, in writing, of the additional obligations, including any monitoring requirements.

X.B.4.b. Determine the Pollutant(s) of Concern

After determining that a discharge is to an impaired water, the permittee must identify the pollutant(s) identified as causing the impairment, and provide a list of such pollutants in the NOI.

This information should be readily accessible from the State or Tribal 303(d) list. The permit requires permittees to monitor for all of these pollutants, with a few noteworthy exceptions as discussed below. For impaired waters without a TMDL, monitoring is required only for those parameters for which a standard analytical test method in 40 CFR Part 136 exists. If a TMDL has been approved or established that applies to the discharge, EPA will determine whether there are any other monitoring specifications that are contained in the TMDL and that apply to the facility, and notify the permittee of any additional requirements. If the pollutant for which the waterbody is impaired is suspended solids, turbidity, or sediment/sedimentation, Total Suspended Solids (TSS) must be monitored. If the pollutant of concern is an indicator or surrogate pollutant, than the pollutant indicator (e.g., dissolved oxygen) must be monitored. No monitoring is required when a waterbody's biological communities are impaired but no pollutant is specified as causing the impairment, or when a waterbody's impairment is related to hydrologic modification, impaired hydrology, or temperature.

X.B.4.c. Determine Monitoring Frequency

Next, the appropriate frequency is determined based on whether the State has an approved or established a TMDL for the impaired water. EPA notes that frequencies will be

i. Discharges to impaired waters without a TMDL (Part 6.2.4.2). For those permittees discharging to impaired waters without an approved or established TMDL, monitoring is required for the pollutant(s) of concern annually. Following the first year, impaired waters monitoring is no longer required if the pollutant of concern is not detected above natural background levels, and the pollutant of concern is not expected to be present above natural background levels in the facility's discharge. If the permittee determines that the presence of the pollutant of concern is caused solely by the natural background levels of that pollutant, he/she must notify EPA of this finding and retain documentation of the basis for the determination with the SWPPP.

EPA notes that, as with all five types of monitoring in this permit, permittees can combine monitoring activities where requirements are duplicative (e.g., effluent limitation guideline and impaired water monitoring both require testing for the same parameter at the same outfall).

ii. Discharges to impaired waters with an EPA approved or established TMDL. If the permittee discharges to an impaired water with an approved or established TMDL, monitoring is not required for the pollutant causing the impairment unless EPA informs the permittee that it is subject to such a requirement consistent with the goals of the applicable TMDL and/or WLA. Where applicable, EPA's notice will include specifications on which pollutant to monitoring and the required monitoring frequency. The monitoring frequency can be changed depending on the results of sampling. If none of the samples in the first monitoring year indicate the presence of the TMDL pollutant(s), monitoring may be discontinued unless the TMDL indicates otherwise. Records of this monitoring must be retained with the SWPPP to indicate the pollutant(s) of concern are not present in the permittee's discharge, as required in Part 5.4, "Additional Documentation Requirements". However, if the pollutant of concern is detected in any samples during the first year, the permittee is required to continue monitoring at a minimum of once each permit year.

- *Purpose:* Part 6.2.4 is intended to provide the States and EPA with further information on the impacts permitted industrial facilities have on impaired waters, and to help ensure that the facilities are not causing or contributing to the impairment. For discharges to impaired waters that do not yet have TMDLs developed, these monitoring data are important when developing the TMDL in the future to identify potential sources of the pollutants causing the impairment as well as to identify sources that do not contribute the pollutant and thus should not be included in the TMDL. They are also important for assessing whether additional water-quality based effluent limits, either numeric or qualitative, are necessary on a site specific basis to ensure that the facility does not cause or contribute to a water quality standards violation. For discharges to waters for which a TMDL is applicable to the permittee, monitoring data provides a means of ensuring that the permittee is consistent with TMDL, as well as a useful tool to assess progress in meeting the goals of the TMDL.
- *Comparison to MSGP 2000:* No monitoring requirements specific to impaired receiving waters were included in MSGP 2000. That permit (in Part 1.2.3.8.2) only required discharges to be “consistent with” a TMDL.
- *Changes from Proposed Permit:* In response to comments received on the proposed permit, EPA made the following changes:
 1. EPA clarified that sampling must be conducted for surrogate or indicator pollutants if they were used in determining that the waterbody is impaired or if they have been specifically given a WLA in a TMDL.
 2. EPA clarified that sampling for pollutants of concern for impaired waters without a TMDL is only required where a standard analytical method exists for sampling that particular parameter.
 3. Permittees that discharge to impaired waters without a TMDL can now indicate in their monitoring report if the presence of a pollutant of concern in the first year’s sampling is due solely to the natural background levels of that pollutant, and, if so, discontinue monitoring.
 4. Permittees that discharge to impaired waters with approved or established TMDLs are only required to monitor for the pollutant(s) causing the impairment where EPA specifically notifies those permittees of their specific monitoring requirements.
 5. Where sampling is required for discharges to impaired waters with TMDLs, sampling may be discontinued if the first-year quarterly samples indicate that the pollutant of concern is not present, unless the TMDL specifically precludes this. Sampling should continue at a frequency of one time per year if the pollutant of concern is detected (or alternate frequency if specified in the TMDL, and notified of such by EPA).
 6. EPA clarified what pollutant should be monitored in several distinct situations, such as the requirement to monitor TSS if the waterbody is impaired for suspended solids, turbidity, or sediment.

X.B.5. Additional Monitoring Required by EPA (Part 6.2.5).

EPA may determine that additional discharge monitoring is required to ensure the protection of receiving water quality. In this case, EPA will provide the appropriate facility with

a brief description of why additional monitoring is needed, locations and parameters to be monitored, frequency and period of monitoring, sample types, and reporting requirements.

- *Purpose:* As with the MSGP 2000, this permit requires facilities to perform additional discharge monitoring in those instances when EPA determines it is necessary to ensure the protection of receiving water quality. Such monitoring serves as a tool for EPA and the permittee to evaluate whether additional control measures are needed to protect receiving water quality.
- *Comparison to MSGP 2000:* No significant changes were made to this provision.
- *Changes from Proposed Permit:* No significant changes were made to this provision.

X.C. Follow-up Actions if Discharge Exceeds Numeric Effluent Limit (Part 6.3)

This permit includes follow-up monitoring provisions for pollutants that exceed any effluent limit contained in the permit. EPA added this requirement to ensure that existing control measures are modified as necessary to bring the facility back into compliance with the effluent limitations contained in the permit. EPA emphasizes in the permit that failure to complete follow-up monitoring and reporting within the stipulated time frames constitutes an additional violation of the permit, in addition to the initial effluent limit violation.

Procedures and timeframes for responding to exceedances of effluent limitations are described in Section VII of the fact sheet. In addition to these requirements, permittees are required to continue to monitor at least quarterly until the discharge is in compliance with applicable limits or EPA waives the requirement to continue monitoring. Also, consistent with other types of effluent monitoring, the permit requires that these follow-up monitoring results be reported to EPA (see Part 7).

- *Purpose:* EPA is adding a requirement to conduct follow-up monitoring as a way to ensure that permittees come back into compliance with applicable effluent limitations as soon as possible. While the NPDES regulations require a minimum of annual monitoring to demonstrate compliance with applicable effluent limitations, the vast majority of NPDES permits for industrial wastewater discharges require more frequent monitoring (up to daily for certain pollutants in some instances). EPA believes that monitoring at the regulatory minimum of once per year is appropriate for stormwater discharges, provided the facility remains in compliance with the numeric effluent limits. However, the Agency believes it is appropriate to require more frequent monitoring once the effluent limitation is exceeded. Otherwise, both EPA and the permittee would have to wait an additional year to confirm that the facility has come back into compliance with the limitation. This is an unacceptably long period for the permittee to be potentially out of compliance with the limit. The final permit requires quarterly monitoring (as well as immediate corrective action with appropriate post-SWPPP documentation) when effluent limit exceedances occur, until the facility has come back into compliance.
- *Comparison to MSGP 2000:* This permit has been modified to require follow-up monitoring for effluent limitation exceedances. MSGP 2000 contained no similar provision.

- *Changes from Proposed Permit:* The final permit was modified from the proposed permit to reflect that follow-up monitoring is required only for exceedances of effluent limits contained in the permit. The proposed permit also included a requirement to conduct follow-up monitoring for discharges that exceed a specific wasteload allocation included in a TMDL; however, changes to the final permit regarding monitoring for pollutants for which there is an applicable TMDL make this requirement unnecessary. Specifically, where a discharge is to an impaired water with an applicable TMDL, the permit provides that EPA must notify the operator of its requirement to monitor for the pollutant(s) causing the impairment, otherwise no such monitoring is required.

XI. Reporting and Recordkeeping (Part 7)

XI.A. Reporting Monitoring Data to EPA (Part 7.1)

All monitoring data must be submitted to EPA using EPA's online eNOI system (www.epa.gov/npdes/stormwater/eNOI) or paper MSGP discharge monitoring report (MDMR) form no later than 30 days after a permittee has received their complete laboratory results for all monitored outfalls for the reporting period. The online eNOI system for monitoring data is currently under development but when complete, will allow permittees to easily submit monitoring results to EPA. The eNOI system is expected to be available by April 1, 2009, before the first monitoring reports are due to EPA.

- *Purpose:* Monitoring data must be submitted to document stormwater quality and identify potential water quality concerns to EPA, States, and others.
- *Comparison to MSGP 2000:* The MSGP 2000, in part 7.1, required the 4 benchmark monitoring samples for each year to be submitted in one package at the end of the monitoring year. Monitoring for numeric limitations was required to be reported to EPA by the 28th day of the month following the monitoring period. EPA has modified the reporting deadline to 30 days after laboratory results have been received, for both benchmark and numeric limitations. This change is made to address concerns that EPA often received monitoring data indicating pollutant levels of concern several months after the discharges had occurred. EPA is requiring these data sooner so that the Agency, states, or others can provide a more timely response in the event that elevated discharge levels indicate potential water quality or permit compliance concerns. Also, EPA is coordinating submission of benchmark and effluent limitations monitoring data to reduce burden on permittees with both types of monitoring requirements (i.e., both types of data must now be submitted on the same schedule).
- *Changes from Proposed Permit:* Substantially similar language was included in the proposed MSGP.

XI.B. Annual Report (Part 7.2)

The final permit requires all permittees to submit an annual report to EPA 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 EPA Headquarters within 45 days after

conducting the comprehensive site inspection. In addition to the information required in the corrective action report (Part 3.4) and comprehensive site inspection report (Part 4.3.2), the permittee is required to include the facility name, the NPDES permit tracking number, the facility physical address, and the contact person's name, title, and phone number. To simplify this reporting requirement, as well as to help clarify EPA's expectations for these inspections, EPA developed an annual report form, a copy of which is included as Appendix I in this permit. Permittees are strongly encouraged to use this form to conduct these inspections and report results of those inspections to EPA.

- *Purpose:* EPA 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. Prior to inclusion of this requirement, many permittees (i.e., those with no benchmark or effluent limitation monitoring) had to submit nothing more than an NOI to obtain permit coverage and an NOT to terminate permit coverage. Unless an EPA inspector showed up on-site, the Agency had no information on which to assess compliance with the permit.
- *Comparison to MSGP 2000:* The MSGP 2000 did not include a requirement to submit annual comprehensive site inspection reports to EPA; rather, that permit only required permittees to retain a copy of the inspection report on-site with the SWPPP. Similarly, the previous permit did not have an inspection report template that could be used for conducting and documenting the findings of these inspections. As described above, many permittees covered under MSGP 2000 did not have to submit any compliance monitoring information on which the Agency could assess compliance.
- *Changes from Proposed Permit:* The proposed permit did not include a requirement to submit results of the annual comprehensive site inspections to EPA. Instead, it required all permittees to conduct benchmark monitoring for at least TSS and to submit the monitoring data to EPA. As noted above, under the MSGP 2000, there was no requirement for many permittees to submit any information to EPA between the beginning and end of permit coverage. EPA believes that some form of regular reporting is necessary to assess compliance with the effluent limitations. However, upon further consideration, 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). EPA also received several comments suggesting that permittees be required to submit a copy of the SWPPP as a way to assess compliance with the permit; however, EPA considers the comprehensive site inspection findings (and any corrective actions taken during the year) to be a better tool to assess permittee implementation of control measures. While the SWPPP does provide a description of the measures in place to meet the effluent limits, as a stand-alone document, it does not provide an indication of how well the control measures are performing during storm conditions. In comparison, the comprehensive site inspection report does provide 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.

XI.C. Exceedance Report for Numeric Effluent Limits (Part 7.3)

As described in Part 6.3, permittees must conduct follow-up monitoring any time a monitoring event identifies an exceedance of a numeric effluent limit, such as a limited based on

an effluent limitation guideline. Part 7.3 specifies that these data must be submitted to EPA no later than 30 days after receiving lab results. Part 7.3 also identifies the specific information to be included in this report, which is necessary for EPA to assess the potential impact of this discharge on water quality and the adequacy of the permittees response in addressing the exceedance.

- *Purpose:* EPA is requiring submission of exceedance reporting information as a way to assess the potential impact of these discharges on water quality and also as a way to assess the adequacy of the permittees response to the exceedance.
- *Comparison to MSGP 2000:* The MSGP 2000 did not include a requirement for follow-up monitoring or reporting in response to effluent limitation exceedances.
- *Changes from Proposed Permit:* The follow-up monitoring and reporting requirement is substantially similar language to the language in the proposed MSGP.

XI.D. Additional Reporting (Part 7.4)

Permittees must comply with a number of different reporting requirements described throughout this permit. Specific reporting requirements are included in Part 7; however, additional reporting requirements are described in Part 9 applicable to certain states or tribes as well as standard reporting requirements detailed in Appendix B, Subsection 12. Part 7.4 includes a summary of all of the required reports from Appendix B, Subsection 12, and specifies which reports are to be submitted to the appropriate EPA Regional Office and which ones must be submitted to EPA Headquarters.

- *Purpose:* This section provides notice to the permittee of applicable reporting requirements not elsewhere described in Part 7.
- *Comparison to MSGP 2000:* The MSGP 2000 did not contain a specific provision listing these additional reporting requirements in one place, although the standard permit conditions containing these substantive requirements were also included in MSGP 2000.
- *Changes from Proposed Permit:* EPA clarified language in the permit to identify those instances when additional reporting is necessary. Part 7.4 was added to the final rule to list in one place all of the reports required in Appendix B, Subsection 12, and to specify how and where the reports are to be submitted.

XI.E. Recordkeeping (Part 7.5)

Part 7.5 of this permit describes recordkeeping requirements associated with activities covered under this permit. These include the original SWPPP and any modifications, so as to provide a traceable historical record of the SWPPP and its evolution, additional documentation, all reports and certifications required by the permit, monitoring data, and records of all data used to complete the NOI to be covered by this permit. Permittees must retain copies of these documents for a period of at least 3 years from the date that the permittee's coverage under this permit expires or is terminated. The recordkeeping requirements in Appendix B, Subsection B.12 include a more general statement of the NPDES standard condition for records retention, but does not impose additional requirements on the permittee above what is required in Part 7.5.

- *Purpose:* This permit requires permittees to maintain certain records to help them assess performance of control measures and as a way to document compliance with permit

conditions. These requirements are consistent with Federal regulations at 40 CFR 122.41(j), but have been tailored to more closely reflect requirements of the MSGP.

- *Comparison to MSGP 2000:* The permit language specific to recordkeeping is similar to Part 8 of the MSGP 2000 although requirements have now been split between recordkeeping, reporting, and addresses for report submission. The current permit clarifies that specific records must be maintained to provide a traceable record of installation, maintenance, and monitoring of control measures and revisions to those control measures.
- *Changes from Proposed Permit:* The permit language is similar to that in the proposed permit.

XI.F. Addresses (Part 7.6)

Permittees are strongly encouraged to submit monitoring reports electronically using EPA's eNOI system (see section X.D above), but can submit paper copies of these reports to EPA at the addresses listed in Part 7.6 of the permit or for State/Tribal reporting requirements should submit those reports to the appropriate address listed in Part 9 of the permit. The permit clarifies which other reports should be submitted using EPA's eNOI system (i.e., to EPA Headquarters) and which are to be submitted to the respective EPA Regional offices.

- *Purpose:* This section provides addresses for EPA Headquarters and Regional offices to which permittees can submit reports or written correspondence. This section identifies appropriate locations to send monitoring data, NOIs and Notices of Termination, and other correspondence. The phrase "all other correspondence", as used in Part 7.6.1, refers to any written communication between the discharger and EPA that is not a paper copy of a report, an NOI, or a Notice of Termination.
- *Comparison to MSGP 2000:* EPA updated addresses consistent with areas covered under this permit and expanded the use of the eNOI system for submission of monitoring reports.
- *Changes from Proposed Permit:* Except for adding an overnight/express delivery address, there were no substantive changes from the proposed MSGP.

XII. Special Requirements for Discharges Associated with Specific Industrial Activities (Part 8)

Except for the changes to the monitoring requirements described in section X of this fact sheet and the changes to individual sectors listed below, the general format and requirements in the sector-specific parts of the permit (Part 8) are similar to both the MSGP 2000 and the proposed permit. A few general changes were made to each sector including:

- 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 both the MSGP 2000 and proposed

permit, however, the activities covered by the permit, including SIC Code or Activity Code, are already listed in Appendix D. EPA deleted this section 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.

Changes to several specific sectors are discussed in more detail below.

XII.A. Changes to Multiple Sectors

Removal of Additional TSS Sampling Requirements. As described in Section X.B.1.a.i of the fact sheet, the proposed extension of TSS benchmark requirements to additional sectors has been removed. For those sectors for which the proposed permit contained new monitoring requirements for TSS, this permit has eliminated that requirement.

Separation of Benchmark and Effluent Limitation Guideline Monitoring Requirements. Both the MSGP 2000 and the proposed permit 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.

Removal of Duplicative Sector-Specific Requirements. EPA has attempted to streamline the Sector-based requirements by eliminating those conditions which are duplicative of the Part 2.1 technology-based effluent limits. The following is a list of requirements that were deleted or significantly modified in the “additional requirements” part of the proposed sector-specific conditions (most of which were also carried over from the MSGP 2000):

- Sector C: 8.C.4.1 (drainage area site map), 8.C.4.2 (potential pollutant sources), and 8.C.4.3 (good housekeeping measures);
- Sector D: 8.D.4.1 (inspections);
- Sector E: 8.E.3.3 (inspections);
- Sector G: 8.G.5.6.2 (sediment and erosion control) and 8.G.5.6.3 (management of runoff);
- Sector I: 8.I.3.3 (inspections) and 8.I.3.5 (contact with wastewater pollutants at exploration and production facilities);

- Sector L: 8.L.5.3 (good housekeeping measures) and 8.L.5.9 (comprehensive site compliance evaluations);
- Sector N: 8.N.4.2.7 (spill prevention and response procedures), 8.N.4.2.8 (inspections), and 8.N.4.3.4;
- Sector O: 8.O.4.2.14 (vehicle maintenance activities) and 8.O.4.2.15 (material storage areas);
- Sector Q: 8.Q.4.3.7 (general yard area) and 8.Q.4.7 (comprehensive site compliance evaluation);
- Sector R: 8.R.3.3.7 (general yard area) and 8.R.3.7 (comprehensive site compliance evaluation);
- Sector V: 8.V.4.5 (comprehensive site compliance evaluation);
- Sector X: 8.X.3.1 (drainage area site map) and 8.X.3.2 (potential pollutant sources);
- Sector AA: 8.AA.3.5.3 (receiving, unloading, and storage areas) and 8.AA.3.5.4 (storage of equipment); and
- Sector AB: 8.AB.3.2 (non-stormwater discharges).

In addition, EPA made minor modifications to other sector-specific requirements to eliminate duplication with other parts of the permit. For example, EPA modified Sector L 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.

Clarification of Sector-Specific Documentation Requirements. EPA modified Part 8 of the permit in numerous places to clarify documentation requirements specific to any additional Part 8 requirements.

XII.B. Sector C – Chemical and Allied Products Manufacturing and Refining

Industrial Activities Covered by Sector C (Part 8.C.1). This permit defines the scope of coverage for discharges from chemical and allied products manufacturing and refining facilities.

- *Purpose:* Part 8.C.1 defines the scope of coverage for facilities covered under Sector C.
- *Comparison to MSGP 2000:* The language in this version (Part 8.C.1) was modified from MSGP 2000 to include petroleum refining activities (SIC 2911), previously covered under Sector I. EPA made this change 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
- *Changes from Proposed Permit:* EPA changed Sector C consistent with the addition of refining activities as described above.

XII.C. Sector G – Metal Mining (Ore Mining and Dressing)

For this permit, EPA has modified the requirements for Sector G 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 EPA'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 8.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 8.G.1 defines the scope of coverage for discharges from different types of mining activities.
- *Comparison to MSGP 2000:* The MSGP 2000 considered exploration for viable ore extraction sites and the construction of infrastructure prior to ore extraction to be activities more appropriately covered by the Construction General Permit. This was based on the fact that the pollutants and controls required for mine exploration and infrastructure construction are largely the same as at any other construction site, and that an unsuccessful exploration could otherwise be simply abandoned with no real requirement to clean up and stabilize the disturbed area. This permit now covers all of their discharge activities (see Part 8.G.1.3), including exploration and construction activities, under the same general permit (i.e., MSGP 2007).
- *Changes from Proposed Permit:* EPA modified the phrasing of “exploration and development” to be “exploration and construction” in the final permit. This change was made to more accurately reflect the intention of EPA to cover construction-related activities under this permit.

Definitions (Part 8.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. Based on comments received and discussions with industry, EPA has revised its definitions of the various phases of active and inactive mines.

- *Purpose:* This section clarifies EPA's intent with respect to the scope of coverage for Sector G facilities.
- *Comparison to MSGP 2000:* The definition of “Mining operations” (Part 8.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. EPA notes that 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. EPA considers exploration and construction to be distinct from “mining operations”.

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

“Active phase” (Part 8.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 8.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”). EPA also clarified that the “reclamation phase” is part of “mining operations,” and thus covered by the MSGP. In response to comments received, 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 8.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 8.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 8.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.

- *Changes from Proposed Permit:* The following definitions were changed as described above: “mining operations”, “exploration and construction”, “active phase”, “reclamation phase”, “active metal mining facility”, and “inactive metal mining facility”. No further discussion is necessary.

“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. This change was made in response to comments received that the proposed definition was more geared to the type of stabilization that should occur after residential and commercial construction, and did not fully capture the different requirements that affect the mining industry.

Technology-Based Effluent Limits for Clearing Grading and Excavation Activities (Part 8.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 EPA’s Construction General Permit but not by the prior version of the MSGP. Part 8.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.
- *Comparison to MSGP 2000:* These provisions were not included in the MSGP 2000. They were added to this permit in order to streamline operators' permit obligations in such a way that the MSGP can be used for discharges for which coverage from EPA was available previously under EPA's Construction General Permit but not under the prior version of the MSGP. The language in Parts 8.G.4.1 through 8.G.4.4 reflects substantive requirements found in the Construction General Permit.
- *Changes from Proposed Permit:* These provisions were revised to remove where appropriate any duplication of requirements between 8.G.4 and the effluent limits in Part 2.1. These revisions resulted in the deletion of all or a significant portion of proposed 8.G.4.1.4 (velocity dissipation), 8.G.4.2.4 (inspection reports), and 8.G.4.3 (maintenance of controls for clearing, grading, and excavation activities).

Additional Requirements (Part 8.G.5, 8.G.6, and 8.G.7). 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.
- *Comparison to MSGP 2000:* EPA has added the following new SWPPP provisions which require the operator to: describe the activities that can potentially affect stormwater discharges; identify mining-specific areas on the site map; and identify the types of pollutants likely to be present in significant amounts. This permit clarifies that these requirements are not applicable to inactive metal mining facilities. This clarification was made after considering several comments arguing for a more streamlined set of requirements for inactive mining facilities.
- *Changes from Proposed Permit:* EPA deleted specific controls that were duplicative of Part 2.1 requirements. Duplicative requirements that were eliminated from the proposed permit include 8.G.5.6.2 (sediment and erosion control) and 8.G.5.6.3 (management of runoff).

Sector-Specific Benchmarks (Part 8.G.8). All monitoring requirements for Sector G facilities are specified in Part 8.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 8.G.8.2).

- *Purpose:* This section details all monitoring requirements for Sector G facilities.
- *Comparison to MSGP 2000:* Changes to benchmarks, including hardness-dependent parameters, are discussed elsewhere in the Fact Sheet.
- *Changes from Proposed Permit:* Hardness-dependent benchmarks have been changed. These revisions are discussed elsewhere in the Fact Sheet. Additionally, proposed Part 8.G.6.4 (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 8.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 8.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, EPA believes 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.
- *Comparison to MSGP 2000:* Flexibility is given in this permit to inactive and unstaffed sites to reduce the frequency of inspections and to waive completely the requirement to conduct visual assessments. Annual inspections were required in the MSGP 2000 for inactive and unstaffed sites, except that allowance was given to reduce this frequency to once every 3 years in certain circumstances. This permit requires all inactive and unstaffed sites to conduct yearly inspections, without exception. EPA believes that inactive and unstaffed facilities should be treated in a consistent manner, thus the annual inspection requirement applies across all sectors. The ability to waive the visual assessment requirement for inactive and unstaffed sites does not represent a change from the MSGP 2000, which contained a similar waiver.
- *Changes from Proposed Permit:* In the proposed permit, 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 in the permit after receiving a number of adverse comments from the mining industry. Commenters objected to the increase in requirements based on concerns about cost, site access, staffing, monitoring equipment, and the limited value of the data.

In the proposed permit, inactive and unstaffed facilities were still given the option of a waiver from the quarterly visual assessment requirement, but all facilities, including Sector G facilities, would have been required to demonstrate that no industrial materials or activities were exposed to stormwater. This was a requirement that had not existed in prior permits. After considering the numerous comments received from the mining industry regarding the impracticability of conducting quarterly visual assessments and the impossibility of meeting the no exposure condition for mines, EPA modified the proposal by including 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 8.G.7.1). 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.
- *Comparison to MSGP 2000:* Language in the MSGP 2000 indicated that discharges from sites reclaimed after December 17, 1990 were not covered under the permit. EPA is including Part 8.G.7.1 language in this permit for clarification purposes
- *Changes from Proposed Permit:* Commenters raised concerns regarding the proposed language that required continued coverage, despite the fact that the site had been released from applicable reclamation requirements, for sites that have the potential to cause or contribute to exceedances of applicable water quality standards. EPA agreed that this language was inconsistent with 40 CFR 122.26(b)(14)(iii), and deleted it in the final permit.

XII.D. Sector H – Coal Mines and Coal Mining-Related Facilities

Definitions (Part 8.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 EPA’s intentions with regard to the scope of coverage and of the permit’s requirements.
- *Comparison to MSGP 2000:* Definitions were not included in the MSGP 2000. These were added to support the inclusion of requirements from the Construction General Permit (CGP), discussed in further detail below.
- *Changes from Proposed Permit:* Definitions were not included in the proposed permit.

Clearing, Grading, and Excavation Activities (Part 8.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 have generally been covered under EPA’s Construction General Permit but not under the previous version of the MSGP. Part 8.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 EPA by EPA’s Construction General Permit and not under the previous version of the MSGP.
- *Comparison to MSGP 2000:* These provisions were not included in the MSGP 2000. They were added to this permit in order to streamline operators’ permit obligations in such a way that the MSGP can be used for discharges that were authorized by EPA under the Construction General Permit and not under the previous version of the MSGP. The language in Parts 8.H.4.1 through 8.H.4.4 is based on similar conditions found in the Construction General Permit.

- *Changes from Proposed Permit:* These provisions were not included in the proposal. However, similar provisions were included in the sections dealing with the two other mining sectors, Sectors G and J. One commenter suggested that coal mines receive the same type of flexibility that Sectors G and J were given. After consideration, EPA found that adopting such an approach for coal mining is reasonable considering the similarities in the land disturbing activities undertaken by coal and metal mining facilities.

Drainage Area Site Map (Part 8.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.
- *Comparison to MSGP 2000:* The site map requirements for this sector are largely the same as before, except in this section, EPA has clarified which mining-specific areas are to be identified on the site map. The language identifying the mining-specific areas in the MSGP 2000 was referenced as all applicable mining related areas described in Part 7.H.2.
- *Changes from Proposed Permit:* The proposed permit contained the reference for all applicable mining related areas described in Part H.2. Part H.2 has been deleted in the final version as described above, and EPA has modified the site map requirements 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 8.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.” EPA 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.”
- *Comparison to MSGP 2000:* Benchmark monitoring and visual assessments for these sites were not required for inactive and unstaffed sites, so this does not represent a change. The ability to reduce inspection frequencies to an annual frequency for inactive and unstaffed facilities is a change from the quarterly routine inspection frequency required of all Sector H facilities.

- *Changes from Proposed Permit:* The proposed permit would have 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. Commenters were concerned about the increased burden on inactive facilities in Sectors G and J, sites with substantially similar concerns as Sector H. EPA agrees with these comments, and has revised the proposal to make the conditional exemption available for Sector H, which enables inactive and unstaffed facilities to waive these requirements.

Additionally, this permit's flexibility in Part 8.H.8.1 to reduce inspection frequencies to an annual frequency for inactive and unstaffed facilities represents a change from the proposed permit's quarterly routine inspection frequency required of all Sector H facilities.

XII.E. Sector I – Oil and Gas Extraction

Covered Stormwater Discharges (Part 8.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 8.I.1 defines the scope of coverage for facilities covered under Sector I.
- *Comparison to MSGP 2000:* The language in this version (Part 8.I.1) was not included in the MSGP 2000. EPA notes that petroleum refining activities, as distinct from oil and gas extraction activities, have been moved to Sector C, which has now been broadened to cover Chemical and Allied Products Manufacturing and Refining processes. EPA made this change because petroleum refining activities are more similar to chemical and allied products manufacturing than to oil and gas extraction activities.
- *Changes from Proposed Permit:* While always implicit in the permit, EPA added 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). EPA 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 8.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.
- *Comparison to MSGP 2000:* The additional language in this version (See Part 8.I.2.1) was not included in the MSGP 2000. However, MSGP 2000, like MSGP 2007, was not intended to cover these discharges.
- *Changes from Proposed Permit:* The additional discussion on runoff subject to 40 CFR Part 419 effluent guidelines is a clarification from the proposed permit that facility discharges are not authorized from petroleum refining or drilling operations that are subject to effluent limitation guidelines. It was never the intent that these discharges be authorized by the MSGP.

XII.F. 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 previous MSGPs did not cover (exploration and construction were covered separately under EPA’s Construction General Permit).

Covered Stormwater Discharges (Part 8.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 8.J.1 defines the scope of coverage for discharges from different types of mining activities.
- *Comparison to MSGP 2000:* When EPA issued the MSGP 2000 the Agency considered exploration for viable mineral extraction sites and the construction of infrastructure prior to extraction to be activities more appropriately covered by the Construction General Permit. This was based on the fact that the pollutants and controls required for exploration and infrastructure construction are largely the same as at any other construction site, and that an unsuccessful exploration might otherwise be simply abandoned with no real requirement to clean up and stabilize the disturbed area. This permit now covers all of their discharge activities (see Part 8.J.1.3), including exploration and construction activities, under the same MSGP.
- *Changes from Proposed Permit:* The final 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). Several commenters pointed out that the proposed permit’s description of facilities covered inappropriately repeated language used in the description of coverage for Sector G facilities. EPA agrees, and has revised the language accordingly to be in agreement with the scope of coverage defined in the regulations.

EPA modified the phrasing of “exploration and development” to be “exploration and construction” in the final permit. This change was made to more accurately reflect the intention of EPA to cover construction-related activities under this permit.

Limitations on Coverage (Part 8.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.
- *Comparison to MSGP 2000:* The use of the clarifying term “uncontaminated” to describe the groundwater seepage covered by this permit is a new modification. This revision was made to reflect the scope of 40 CFR Part 436, which covers wastewater (including groundwater seepage) that comes into contact with overburden or waste rock. What is not covered by 40 CFR Part 436, and therefore covered by this permit, is any uncontaminated groundwater seepage.
- *Changes from Proposed Permit:* The use of the term “uncontaminated” to describe the type of groundwater seepage covered by the permit is a change from the proposal.

Definitions (Part 8.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. Based on comments received and discussions with industry, EPA has revised its definitions of the various phases of active and inactive mines.

- *Purpose:* This section clarifies EPA’s intent with respect to the scope of coverage for Sector J facilities.
- *Comparison to MSGP 2000:* “Mining operations” (Part 8.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. EPA notes that 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. EPA considers exploration and construction to be distinct from “mining operations”.

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

“Active phase” (Part 8.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 8.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”). EPA also clarified that the “reclamation phase” is part of “mining operations”, and thus covered by the MSGP. In response to comments received, these changes were made in order to more clearly describe when reclamation is considered to have begun and what it includes.

“Inactive metal mining facility” (Part 8.J.3.7) was revised with additional language that clarifies these facilities have identifiable owners / operators and that inactive facilities do not apply to sites where claims or minimal activities are ongoing. 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 8.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 what EPA means when it refers to the scope of Sector J with regard to uncontaminated groundwater.

- *Changes from Proposed Permit:* The following definitions were changed as described above: “mining operations”, “exploration and construction”, “active phase”, “reclamation phase”, and “active mineral mining facility”. The term “uncontaminated”, used to describe the limitations of coverage for Sector J, was included as a new definition. No further discussion is necessary.

“Final stabilization” was modified by including the implementation of applicable Federal and State reclamation requirements. This change was made in response to comments received that the proposed definition was more geared to the type of stabilization that should occur after residential and commercial construction, and did not fully capture the different requirements that affect the mining industry.

Technology-Based Effluent Limits for Clearing Grading and Excavation Activities (Part 8.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 8.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 EPA’s Construction General Permit and not by the previous version of the MSGP.
- *Comparison to MSGP 2000:* These provisions were not included in the MSGP 2000. They are added to this permit in order to streamline operators’ permit obligations in such a way that the MSGP is used for stormwater discharges associated with activities that were previously authorized under the EPA’s Construction General Permit but not by the previous version of the MSGP. The language in Parts 8.J.4.1 through 8.J.4.4 is based on similar conditions found in the Construction General Permit.
- *Changes from Proposed Permit:* A provision was added (Part 8.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 8.G.4.4.2). All other language in the comparable section of Sector G is the same as in Sector J (Part 8.J.4.4), with the exception of this final stabilization language. One commenter recommended that this correction be made. EPA agrees that the omission of this language in the proposal was an error that should be corrected; 8.J.4.4.2 was added as a result. All other provisions are the same as proposed.

Additional Requirements (Part 8.J.5, 8.J.6, and 8.J.7). Under these sections, additional sector-specific effluent limits, SWPPP requirements, and inspection requirements are specified.

- *Purpose:* This section specifies additional requirements applicable to Sector J facilities.
- *Comparison to MSGP 2000:* EPA has added provisions that require the operator to: describe the activities that can potentially affect stormwater discharges; identify mining-specific areas on the site map; identify the types of pollutants likely to be present in significant amounts; inspect sites monthly; conduct annual employee trainings; and adopt specific control measures, as appropriate for individual sites. This permit clarifies that these requirements are not applicable to inactive metal mining facilities. This

clarification was made after considering several comments arguing for a more streamlined set of requirements for inactive mining facilities.

- *Changes from Proposed Permit:* This is substantially the same language as was included in the proposal.

Sector-Specific Benchmarks and Effluent Limitations Based on Effluent Limitations

Guidelines (Part 8.J.8 and 8.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.
- *Comparison to MSGP 2000:* Benchmark monitoring for this sector is largely the same as before.
- *Changes from Proposed Permit:* The final permit deletes language in the proposal that applied additional monitoring and reporting requirements to discharges from waste rock and overburden piles (see proposed Part J.7.2 and J.7.3). These changes were made in response to comments that observed that these provisions were taken from similar requirements in Sector G, but 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 8.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 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, EPA believes 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.
- *Comparison to MSGP 2000:* Flexibility is given in this permit to inactive and unstaffed sites to reduce the frequency of inspections and to waive completely the requirement to conduct visual assessments. Annual inspections were required in the MSGP 2000 for inactive and unstaffed sites, except that allowance was given to reduce this frequency to once every 3 years in certain circumstances. This permit requires all inactive and unstaffed sites to conduct yearly inspections, without exception. EPA believes that inactive and unstaffed facilities should be treated in a consistent manner, thus the annual inspection requirement applies across all sectors. The ability to waive the visual

assessment requirement for inactive and unstaffed sites does not represent a change from the MSGP 2000, which contained a similar waiver.

- *Changes from Proposed Permit:* In the proposed permit, 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 in the permit after receiving a number of adverse comments from the mining industry. Commenters objected to the increase in requirements based on concerns about cost, site access, staffing, monitoring equipment, and the limited value of the data.

In the proposed permit, inactive and unstaffed facilities were still given the option of a waiver from the quarterly visual assessment requirement, but all facilities, including Sector J facilities, would have been required to demonstrate that no industrial materials or activities were exposed to stormwater. This was a requirement that had not existed in prior permits. After considering the numerous comments received from the mining industry regarding the impracticability of conducting quarterly visual assessments and the impossibility of meeting the no exposure condition for mines, EPA modified the proposal by including a conditional exemption from the no exposure requirement for Sector J inactive and unstaffed facilities.

Additional Information Regarding Phosphate Mining. In certain areas of the US where phosphate mining is concentrated (notably where the states of Montana, Wyoming, Utah, and Idaho are conjoined) selenium, a listed section 313 toxic chemical, is present within the mineral matrix. Although the selenium is relatively insoluble within the formation, it is often transformed into the soluble forms of selenite and selenate when exposed to weathering and oxidation in open pit mining processes. Exposed mining wastes create an opportunity for these other toxic forms of selenium to form and be introduced into receiving waters and groundwater via stormwater runoff. Because of this, EPA is alerting phosphate mine operators of the potential for selenium contamination to occur so that proper control measures can be installed and implemented.

XII.G. Sector K – Hazardous Waste Treatment Storage or Disposal

Industrial Activities Covered by Sector K (Part 8.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.
- *Comparison to MSGP 2000:* The language relating to the exemption of disposal facilities which have been properly closed and capped was not included in the MSGP 2000 and is a new provision.
- *Changes from Proposed Permit:* EPA included language, after the proposal, to clarify exactly what types of facilities are covered under this permit. The change was made to more accurately reflect the intention of EPA 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, EPA deleted definitions in the permit for “land treatment facility,” “pile,” and “surface impoundment” as these terms are not used in the permit, and thus serve no purpose in the permit. EPA

acknowledges that these are three common hazardous waste management practices that may be used by permittees eligible for coverage under this permit.

XII.H. Sector N – Scrap Recycling Facilities

Scrap and Recyclable Waste Processing Areas (Part 8.N.3.2.5). This section identifies requirements for scrap and recyclable waste processing areas for facilities in Sector N.

- *Purpose:* Under this section, control measure requirements are specified for processing areas at Sector N facilities.
- *Comparison to MSGP 2000:* Requirements in this section are substantially the same as in the MSGP 2000.
- *Changes from Proposed Permit:* The proposed permit would have added a new control measure requirement to remove mercury switches from the hood and trunk lighting units and anti-lock brake systems. The final permit removes this language.

For background, automotive recyclers, in Sector M (Automobile Salvage Yards), process retired passenger vehicles, removing parts for reuse, recycling, or disposal, and then sell the stripped-down vehicles to scrap recyclers. Scrap recyclers, in Sector N (Scrap Recycling and Waste Recycling Facilities), shred the vehicles and produce scrap metal for sale to steelmakers. The mercury in certain switches used in many vehicles prior to 2003 can, if the switches are not recovered before the vehicles are flattened or shredded, be released into the environment later in this recycling stream, especially from steel mill furnaces.

In the absence of a national solution to this problem, the Agency considered including a requirement for facilities in Sectors M and N to remove and dispose of these mercury-containing switches. However, EPA has decided that this requirement is unnecessary given that facilities in Sectors M and N now have the option to participate in, or to purchase car hulks that have come through, the National Vehicle Mercury Switch Recovery Program (NVMSRP), and various incentives to do so. This comprehensive voluntary program, established in August 2006, is available to all such facilities, regardless of the State in which the facility is located or whether the facility has a stormwater permit. Complete information about the program is available on-line at www.epa.gov/mercury/switch.htm.

Stockpiling of Turnings Exposed to Cutting Fluids (Outdoor Storage) (Part 8.N.4.2.3). This section describes controls for managing wastes generated from storage of turnings that have been exposed to cutting fluids. Specifically, these wastes must be managed to eliminate contact between the turnings that have been exposed to cutting fluids and precipitation or conversely, where this is not possible, to capture and treat any contaminated stormwater from these areas.

- *Purpose:* Under this section, the permit establishes requirements for eliminating exposure or capturing and treating any stormwater that does come in contact with turnings that have been contaminated with cutting fluids.
- *Comparison to MSGP 2000:* The MSGP 2000 included similar requirements; however, EPA believes the current language provides clearer direction for managing these wastes. The permit now specifies two options for managing turnings exposed to cutting fluids: (1) eliminate exposure or (2) capture and treat runoff.

- *Changes from Proposed Permit:* The proposed permit contained language identical to that of MSGP 2000.

Inspection Requirements (Part 8.N.5.1). This section requires Sector N permittees to perform quarterly site inspections, as required in Part 4.1, but also specifies, at a minimum, that such inspections include all areas where waste is generated, received, stored, treated, or disposed of and that are exposed to either precipitation or stormwater runoff.

- *Purpose:* To specify the frequency of inspections and provide sector-specific instructions for the scope of the inspections.
- *Comparison to MSGP 2000:* The MSGP 2000 included the same requirements.
- *Changes from Proposed Permit:* The proposed permit included a monthly inspection frequency, which was a change from the prior permit's quarterly inspections. Consistent with the final permit's adoption of a quarterly inspection frequency, the proposed increase in inspection frequency for Sector N facilities was changed back to quarterly.

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.
- *Comparison to MSGP 2000:* The MSGP 2000 included the same requirements.
- *Changes from Proposed Permit:* The proposed permit considered expanding benchmark monitoring requirements to source-separated facilities. In response to comments that raised concerns about the proposed monitoring expansion, EPA has decided to retain the MSGP 2000's distinction between non-source separated and source separated recycling facilities with respect to monitoring requirements. Therefore, in the final permit, source separated recycling facilities do not have benchmark monitoring requirements.

XII.I. Sector O – Steam Electric Generating Facilities

Changes have been made to this sector in order to clarify exactly what types of facilities are covered with an eye towards preserving the original intent of the stormwater regulations and the MSGP 1995. In past permits, there has been considerable confusion about the types of power generation facilities covered or not covered by the regulations. The clarifications in this permit do not change the universe of covered 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 8.O.2.3). “Dual fuel co-generation facilities” has been replaced with “dual fuel facilities that could employ a steam boiler.”

The EPA and 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 by EPA would have the capability of using both a gas turbine and an oil-fired steam boiler (or both in tandem), but would not 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 option 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:* In past permits, 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 EPA’s 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, EPA has updated and defined the applicable terminology.
- *Comparison to MSGP 2000:* The language in this version (see Part 8.O.2.3) was not included in the MSGP 2000.
- *Changes from Proposed Permit:* EPA added this language after the proposal.

Limitations on Coverage (Part 8.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. EPA

has added clarifying language for this term, 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 8.O.3.2.2) and configuration 2-type gas turbine cogeneration facilities (see 8.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.
- *Comparison to MSGP 2000:* The language in this version (see Part 8.O.3.2) was not included in the MSGP 2000.
- *Changes from Proposed Permit:* EPA added this language after the proposal.

Additional Requirements (Part 8.O.4). Part 8.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.
- *Comparison to MSGP 2000:* EPA removed the following requirements from Part 8.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).
- *Changes from Proposed Permit:* Proposed Parts O.4.2.14 and O.4.2.15 were deleted as explained above.

XII.J. Sector S – Air Transportation Facilities

Sector S has been modified for this permit with the inclusion of requirements to identify operators’ deicing/anti-icing season and to perform applicable deicing-related permit tasks at the appropriate time and place. Also, as described in Section X.B.1.a.iv of the fact sheet, the ammonia benchmark is now 2.14 mg/L, down from 19 mg/L in the proposed permit. In general, ammonia discharges are attributable to the use of urea for deicing purposes although lower levels of ammonia have been detected as by-products from wastewater collection and treatment of other deicers.

Deicing Season (Part 8.S.4.2.1). The permittee must document in the SWPPP the seasonal timeframe (e.g., December- February) during which deicing activities typically occur at the facility. The permit requires an emphasis on conducting deicing-related stormwater control tasks such as implementation of control measures, monitoring, and facility inspections during the defined deicing season. In addition, for operators meeting the annual average deicing chemical usage minimums of 100,000 gallons glycol or 100 tons of urea, all benchmark monitoring

samples must be taken during the identified deicing season for the deicing-related parameters (BOD, COD, ammonia and pH).

- *Purpose:* EPA believes it is important for operators and other stakeholders to specify and align appropriate permit activities to facilities' deicing timeframes. Focusing resources on specific problems at appropriate times will streamline facilities' programs. EPA also believes it is appropriate to monitor for deicing-related parameters only when deicers are used.
- *Comparison to MSGP 2000:* These are new requirements.
- *Changes from Proposed Permit:* None.

Commenters suggested that confusion exists regarding how to determine the glycol and urea "average annual usage rate" which determines whether deicing-related benchmark parameter monitoring must be done. For clarification, this rate is determined by averaging the total amounts of deicing/anti-icing chemicals used for the three previous calendar years by the airport authority plus all tenants. It is recognized that dilution of chemicals is standard procedure, so the pre-dilution volumes of the chemicals should be used.

As discussed above, in the final permit, EPA lowered the ammonia benchmark from 19 mg/L to 2.14 mg/L. This change affects both Sector S and Sector K facilities. See Section X.B.1.a.iv for more specific information.

XIII. Permit Conditions Applicable to Specific States, Indian Country or Territories (Part 9)

Section 401 of the CWA (See also 40 CFR §122.44(d)(3)) and §124.53(a)) provides that no Federal license or permit, including NPDES permits, to conduct any activity that may result in any discharge into navigable waters shall be granted until the State/Tribe in which the discharge originates certifies that the discharge will comply with the applicable provisions of sections 301, 302, 303, 306, and 307 of the CWA. The section 401 certification process has been completed for this permit. Similarly, the Coastal Zone Management Act (CZMA) (See 40 CFR §122.49(d)) requires that all Federal licensing and permitting actions be reviewed for consistency with each approved State coastal zone management plan. This permit also includes the results of that effort.

Permit conditions that apply only to industrial activities located in a specific State, Indian country or other area are in Part 9 of the permit. These conditions are modifications or additions to conditions in Parts 1 through 8 of the MSGP, and reflect additional requirements arising from the State section 401 or CZMA certification processes.

Where a State or Tribe has imposed a numeric effluent limitation or has established a wasteload allocation as a condition for certification under Section 401 of the CWA or under the CZMA, yet no monitoring frequency is specified, this permit imposes a minimum monitoring frequency of once per year (refer to Part 6.2.3.2).

XIV. Appendices

XIV.A. Definitions and Acronyms (Appendix A)

Definitions (Appendix A). Appendix A of this permit provides definitions for permit-specific terms used in this permit. Based on comments received EPA has revised, deleted or added several definitions.

- *Purpose*: This section of the permit defines permit-specific terms.
- *Comparison to the MSGP 2000*: The following definitions were added:
 - “Action Area”
 - “Approved or Established TMDL”
 - “Arid Climate”
 - “Co-located Industrial Activities”
 - “Drought-stricken area”
 - “Existing Discharger”
 - “Federal Facility”
 - “New Source Performance Standards (NSPS)”
 - “Pollutant of concern”
 - “Semi-Arid Climate”
 - “Tier 2”
 - “Tier 2.5”
 - “Tier 3”
 - “Water Quality Standards”

The definition for “Waters of the United States” was deleted.

- *Changes from the Proposed Permit*: In addition to the changes mentioned above, the following definitions were also revised to more accurately reflect their regulatory counterparts or current EPA policy:
 - “Impaired Water”
 - “Indian Country”
 - “Industrial Activity”
 - “Industrial Stormwater”
 - “Primary Industrial Activity”
 - “Stormwater Discharges Associated with Construction Activity”
 - “Total Maximum Daily Loads (TMDLs)”

Acronyms (Appendix A). Appendix A of this permit provides acronyms for permit-specific terms used in this permit. Several acronyms, from Appendix A, were deleted since these acronyms were not used in the permit.

- *Purpose:* This section of the permit defines acronyms for permit-specific terms.
- *Comparison to the MSGP 2000:* Substantially similar acronyms were included in the MSGP 2000.
- *Changes from the Proposed Permit:* The following acronyms were deleted:
 - “ACHP” – Advisory Council on Historic Preservation
 - “APA” – Administrative Procedure Act
 - “CAA” – Clean Air Act
 - “CSGWPP” – Comprehensive Groundwater Protection Program
 - “ELG” – Effluent Limitation Guideline
 - “FEMA” – U.S. Federal Emergency Management Agency
 - “LA” – Load Allocation
 - “MDMR” – MSGP Discharge Monitoring Report
 - “NURP” – Nationwide Urban Runoff Program
 - “SBREFA” – Small Business Regulatory Enforcement Fairness Act
 - “SDWA” – Safe Drinking Water Act
 - “TRI” – Toxic Release Inventory

XIV.B. Standard Permit Conditions (Appendix B)

Standard Permit Conditions (Appendix B). The standard permit conditions have been adapted in some minor ways for this permit.

- *Purpose:* This section of the permit includes all of the standard permit conditions applicable to dischargers authorized by the MSGP.
- *Comparison to the MSGP 2000:* A technical edit was made to clarify that monitoring information and other records must be kept at least three years from the date of termination of coverage or from the permit expiration date. Any reference to “sludge use or disposal” has been removed since such requirements do not apply to MSGP dischargers.

Several wording changes were made to the B.11 and B.12 to reflect the requirements for the different reports, documentation provisions, and SWPPP modifications. More specifically, language was added to clarify this permit’s signatory requirements for NOIs, reports submitted to EPA, the SWPPP and any modifications made to it, and the additional documentation (required by Part 5.4). These changes were included to reflect EPA’s intent and to mirror modifications made to the permit. For instance, for the NOI, the SWPPP and modifications made to it to address changes made in response to corrective actions, and reports submitted to EPA, the operator is required to include a signature and certification in accordance with Appendix B.11.A. In

comparison, for all other changes to the SWPPP and additional documentation requirements, the permit requires the person who made the SWPPP change or documented compliance action to sign and date the change or documentation.

- *Changes from Proposed Permit:* The changes described above were not included in the proposed permit.

XIV.C. Areas Covered (Appendix C)

Areas Covered (Appendix C). The areas covered are described in Section III of this fact sheet and are listed in Appendix C of the permit. In contrast to the MSGP 2000, facilities in EPA Regions 4 and 8 are not covered under this permit, and facilities in Maine are no longer covered.

XIV.D. Activities Covered (Appendix D)

Activities Covered (Appendix D). Appendix D describes the types of activities covered by this permit by subsector, SIC or Activity Code, and activity represented. There have not been any substantive changes to this from either the MSGP 2000 or the proposed permit. A clarification was added regarding the SIC Codes that are covered in Sector A in response to a comment that correctly pointed out that the corresponding table contained a typographical error. Appendix D now includes the following modified SIC Codes, which should have originally appeared in the proposed permit: SIC 2441 (Nailed and Lock Corner Wood Boxes and Shook), SIC 2448 (Wood Pallets and Skids), and 2449 (Wood Containers, Not Elsewhere Classified).

XIV.E. Procedures relating to Endangered Species (Appendix E)

Endangered Species (Appendix E). The MSGP requires the permittee to assess, consistent with the Endangered Species Act (ESA) of 1973 and 40 CFR 122.49(c), the effect of its discharges and discharge-related activities on endangered species or their critical habitat. In order to be eligible for coverage under this permit, an operator must determine that it satisfies one of six criteria (A - F), included in Part 1.1.4.5. Appendix E includes the procedures that must be followed for determining whether a facility is eligible for permit coverage with regard to Part 1.1.4.5 (i.e., whether any of the six eligibility criteria can be met and how). In accordance with MSGP Part 5.1.6.1, the process employed and results of the endangered species investigation must be documented in the SWPPP.

Operators who cannot certify to one of the endangered species eligibility criteria cannot submit an NOI to gain coverage under the MSGP; instead they must apply to EPA for an individual NPDES permit. As appropriate, EPA will conduct ESA section 7 consultations when issuing individual permits. If there are concerns that MSGP coverage for a particular facility may result in adverse effects to listed species or critical habitat, EPA may hold up discharge authorization until such concerns are adequately addressed. Regardless of an operator's eligibility certification under one of the six criteria, EPA may require an application for an individual permit on the basis of adverse effects to species / habitat.

- *Purpose:* Consistent with Section 7(a)(2) of the Endangered Species Act (ESA), EPA consulted with the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS), both collectively known as the "Services."

Appendix E provides the operator with a step-by-step process to follow in determining its eligibility under the MSGP consistent with Part 1.1.4.5. Changes to the information in Appendix E from the proposed permit are generally the result of EPA's ongoing consultation with the Services.

- *Background:* The FWS and NMFS are responsible for developing and maintaining the list of protected species and critical habitat. Once listed as endangered or threatened, a species is afforded the full range of protections available under the ESA, including prohibitions on killing, harming or otherwise taking a species. In certain instances, the FWS or NMFS may establish a critical habitat for a threatened or endangered species as a means to further protect those species. Critical habitat is an area determined to be essential for the conservation of a species and need not be in an area currently occupied by the species. Some, but not all, listed species have designated critical habitat. Exact locations of such designated critical habitat are provided in the Services regulations at 50 CFR Parts 17 and 226.

Operators have an independent ESA obligation to ensure that any of their activities do not result in prohibited "take" of listed species. Section 9 of the ESA prohibits any person from "taking" a listed species, e.g., harassing or harming it, with limited exceptions. See ESA Sec 9; 16 U.S.C. §1538. This prohibition generally applies to "any person," including private individuals, businesses and government entities. Many of the requirements and procedures in the MSGP to protect species may also assist operators in ensuring that their industrial activities do not result in a prohibited take of species in violation of section 9 of the ESA. Operators who intend to undertake industrial activities in areas that harbor endangered and threatened species may want protection from potential takings liability under ESA section 9 by obtaining either an ESA section 10 permit or by requesting coverage under an individual permit and participating in the section 7 consultation process with the appropriate FWS or NMFS office. Operators unsure of what is needed for takings liability protection should confer with the appropriate Services.

- *Comparison to MSGP 2000:* The criteria in this permit are similar to those used in the MSGP 2000, with some enhancements to provide additional protection for listed species. The following changes are noteworthy:
 - Criterion D is new to the MSGP.
 - Criterion E, which is similar in many respects to the MSGP 2000's Criterion D, has been revised. The principal difference is that the current Criterion E specifies supporting information that must be provided by the operator. Different information requirements apply depending on what documentation the operator may have submitted in a previous MSGP. EPA and the Services agreed that this information would assist in permit review and oversight, by providing EPA, the Services and the public with specific information on the scientific and technical basis of the operators' certification of eligibility under Criterion E.
 - Criterion F, which allows an operator to "piggy-back" on another operator's certification for the same activities, is similar to the MSGP 2000's Criterion E. However, the revised Criterion F adds a condition that "there is no reason to believe that federally- listed species or federally-designated critical habitat not considered in the prior certification may be present or located in the action area." Criterion F

specifies that any terms or conditions agreed upon in the prior certification must be complied with and documented with the SWPPP. Also, where the prior certification was based on what is now Criterion E, that certification may be relied upon only where documentation demonstrates compliance with this permit's Criterion E, and the operator provides EPA with such documentation when it submits its NOI.

- *Changes from Proposed Permit:* The following noteworthy changes were made to Appendix E:
 - Criterion E was modified pursuant to EPA's consultation with the Services to require additional information from operators to support their eligibility determinations. This information must be submitted as part of the operator's NOI.
 - Criterion F was changed to add the following sentence: "If your certification is based on another operator's certification under Criterion E, that certification is valid only if you have documentation showing that the other operator had certified under Criterion E, and you provide EPA with the relevant supporting information in your NOI form."
 - Steps 2 and 3 of the assessment procedures were revised to list the specific information required for the NOI for operators certifying their eligibility under Criterion E.

XIV.F. National Historic Preservation Act Procedures (Appendix F)

Section 106 of the National Historic Preservation Act (NHPA) requires Federal agencies to take into account the effects of Federal "undertakings" on historic properties that are listed on, or eligible for listing on, the National Register of Historic Places. The term Federal "undertaking" is defined in the NHPA regulations to include a project, activity, or program under the direct or indirect jurisdiction of a Federal agency including those requiring a Federal permit, license or approval. See 36 CFR 800.16(y). Historic properties are defined in the NHPA regulations to include prehistoric or historic districts, sites, buildings, structures, or objects that are included in, or are eligible for inclusion in, the National Register of Historic Places. See 36 CFR 800.16(l).

EPA's issuance of the Multi-Sector General Permit is a Federal undertaking within the meaning of the NHPA. To address any issues relating to historic properties in connection with issuance of the permit, EPA has included criteria for certifications (see Part 1.1.4.6) by applicants that potential impacts of their covered activities on historic properties have been appropriately considered and addressed. Although individual applications for coverage under the general permit do not constitute separate Federal undertakings, the screening criteria and certifications provide an appropriate site-specific means of addressing historic property issues in connection with EPA's issuance of the permit.

Under the NHPA regulations, a determination that a Federal undertaking has no potential to cause effects on historic properties fulfills an agency's obligations under section 106 of the NHPA. See 36 CFR 800.3(a)(1). EPA has reason to believe that the vast majority of activities authorized under the MSGP have no potential to cause effects on historic properties. EPA does not anticipate effects on historic properties from the pollutants in stormwater and allowable non-stormwater discharges from industrial facilities covered under this permit. Thus, to the extent EPA's issuance of this general permit authorizes discharges of such constituents, confined to existing stormwater channels or natural drainage areas; the permitting action does not have the

potential to cause effects on historic properties. In addition, the overwhelming majority of sources covered under this permit will be facilities that are seeking renewal of previous permit coverage. These existing dischargers should have already addressed NHPA issues in the 2000 MSGP as they were required to certify that they were either not affecting historic properties or they had obtained written agreement from the applicable State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO) regarding methods of mitigating potential impacts. Both existing and new dischargers must follow the historic property screening procedures to determine their eligibility. EPA is not aware of any impacts on historic properties from activities covered under the 2000 MSGP, or, for that matter, any need for a written agreement. Therefore, to the extent this permit authorizes renewal of prior coverage without relevant changes in operations; it has no potential to cause effects on historic properties.

EPA believes this permit may have some potential to cause effects on historic properties where this permit authorizes the construction and/or installation of stormwater control measures that involve subsurface disturbance and impact less than 1 acre of land. (Ground disturbances of 1 acre or more require coverage under a different permit, the Construction General Permit.) Where the operator has to disturb the land through the construction and/or installation of control measures, there is a possibility that artifacts, records, or remains associated with historic properties could be impacted. Therefore, if the operator is establishing new or altering existing control measures to manage its stormwater that will involve subsurface ground disturbance of less than 1 acre, the operator will need to ensure (1) that historic properties will not be impacted by the activities, (2) that historic properties may be affected and the operator is in compliance with an agreement between it and the SHPO, THPO, or other tribal representative regarding mitigation of those effects, or (3) that the operator has attempted to contact the SHPO, THPO, or other tribal representative regarding potential adverse effects on historic properties, yet no response was received within 30 days. If the operator and the SHPO, THPO, or other tribal representative are able to agree on appropriate measures to mitigate or prevent adverse effects, these must be kept with the facility's SWPPP. EPA may impose additional requirements in the permit on a site-specific basis.

- *Purpose:* This appendix details the eligibility procedures relating to historic properties.
- *Comparison to MSGP 2000:* Criterion A was revised to specify that the operator is certifying that its stormwater discharges and allowable non-stormwater discharges “do not have the potential to cause effects” to historic properties as specified in the National Historic Preservation Act regulations (See 36 CFR 800.3(a)(1)). The previous language required that the operator certify that its discharge or discharge-related activities “do not affect” historic properties. That language is included as Criterion B. Criterion C (previously called Criterion B in the 2000 MSGP) was revised to require compliance with any written agreement between the operator and the SHPO, THPO, or tribal representative regarding the “potential to cause effects” to historic properties. A fourth option (Criterion D) for obtaining permit coverage has also been added. Permit coverage is granted if the operator has contacted the State Historic Preservation Officer, Tribal Historic Preservation Officer, or other tribal representative and EPA in writing regarding the potential to cause effects to an historic property, and the operator did not receive a response within 30 days. The Notice of Intent (NOI) form language has been modified to include the four criteria for permit coverage so that operators must identify which of the four options they are using to ensure eligibility for permit coverage under the MSGP. The

NHPA screening procedures have also been modified to reflect the above changes and appear in Appendix F rather than Addendum B.

- *Changes from Proposed Permit:* The eligibility criteria have been moved from the appendix to Part 1.1.4.6. Appendix F, Step Four was also altered to reflect this change. In addition, the proposed permit Appendix F included discussions referencing mainly subsurface artifacts. These discussions have been expanded to include artifacts found on both the ground surface and subsurface. In addition, in Appendix F, Step Four clarification was provided regarding the 30 day response time. The text has been modified to provide the SHPO, THPO, or tribal representative a response time of 30 days from receipt of the submitter's letter requesting to discuss the mitigation or prevention of any adverse effects to historic properties.

XIV.G. Notice of Intent (Appendix G)

Like the MSGP 2000, this permit requires all facilities to prepare and submit a complete and accurate NOI for EPA review to be eligible for permit coverage. The NOI form and the majority of NOI requirements are included in Appendix G of the permit. In addition, all new and existing facilities must submit NOIs in accordance with the deadlines provided in Table 1-2 of this permit.

The NOI form has been updated and expanded from previous versions. Permittees must provide the following types of information on the NOI form: (A) Permit Number, (B) Facility Operator Information, (C) Facility Information, (D) Discharge Information, (E) Facility Contact Information and SWPPP Location, (F) Endangered Species Act Certification, (G) Historic Preservation Act Certification, and (H) Certifier Name and Title.

- *Purpose:* The NOI form provides EPA with the information necessary to determine an industrial operator's eligibility to discharge under this permit, and enables EPA to better match up permittees with their respective monitoring requirements and to prioritize oversight activities.
- *Comparison to MSGP 2000:* EPA made a number of changes to the NOI form to clarify permit eligibility and monitoring requirements. This includes adding new sections on discharge information (section D), facility contact information and SWPPP location (section E), endangered species protection (section F), and historic preservation (section G). Some of the information in these new sections was asked for under facility/site information in the MSGP 2000 NOI. The changes include:
 - Under Section B, Facility Operator Information, EPA now asks for the IRS Employer Identification Number (EIN) and the operator's E-mail.
 - Under Section C, Facility Information, EPA gives permittees three different options for providing latitude/longitude data and asks where the NOI is for a federal facility. EPA now asks for the estimated area of industrial activity at the site exposed to stormwater.
 - Under Section D, Discharge Information, EPA asks clarifying questions about the receiving water including whether the water is impaired, the name of the impaired water, the pollutants for which the water is impaired, and whether a TMDL has been developed. For new or increased dischargers, EPA asks questions about whether the

receiving water is considered a Tier 2 (or Tier 2.5) waterbody. EPA also asks which effluent limitation guidelines potentially apply and requests information for Sector S facilities and stormwater discharges from coal storage piles to help determine monitoring requirements. EPA revised how it asks for SIC code and sector information. EPA no longer asks for a secondary SIC code. Instead, a primary SIC or activity code is required, along with all the applicable sectors and subsectors for that facility (up to six are listed). Finally, EPA asks whether the operator expects the site to be inactive and unstaffed during the permit term, and, if so, how long the site is expected to be inactive and unstaffed.

- Under Section E, Facility Contact Information, EPA asks for the contact information for the facility contact and the URL of the SWPPP if available online.
- Under Section F, Endangered Species Protection, the MSGP 2000 simply asked in a yes/no question whether eligibility criteria have been met. Now, EPA asks under which criterion in Appendix E is the permittee claiming its eligibility. If the permittee selects criterion E the permittee is asked which listed species and habitat are in proximity, which benchmarks were exceeded (if an existing discharger), and the pollutants expected in their discharge (if a new discharger). EPA has included a list of potential stormwater pollutants (taken from the toxic and hazardous pollutant list in NPDES Application Form 2.c; refer to <http://www.epa.gov/npdes/pubs/3510-2C.pdf>) in the NOI form instructions for use in answering this question. If a permittee selects criterion F, they are asked to provide the NPDES tracking number for the permit which contained the prior certification on which they are relying.
- Under Section G, Historic Preservation, the MSGP 2000 simply asked in a yes/no question whether eligibility criteria have been met. Now, EPA asks under which specific criterion in Appendix F is the permittee eligible.
- Under Section H, Certified Name and Title, EPA has added contact information on the NOI preparer, if the NOI was prepared by someone other than the certifier.
- *Changes from Proposed Permit:* Some of the changes described above were also included on the proposed form, including the IRS EIN number, whether the operator is a federal facility, the SWPPP contact information, and under which criterion is the operator certifying its eligibility for endangered species and historic preservation purposes. Unlike the proposed NOI form, the final form does not request information on the SWPPP location, since all SWPPPs are required to be located onsite. Other changes, such as more detailed information regarding endangered species and impaired waters, have been added since proposal to facility compliance oversight.

XIV.H. Notice of Termination (Appendix H).

Part 1.5.2 of this permit requires permittees to submit a Notice of Termination within 30 days of the occurrence of one of several different triggering events. Permittees can use the eNOI system to submit their Notices of Termination pursuant to Part 1.5.1. A paper copy of the form is included as Appendix H of the form.

- *Purpose:* EPA's Notice of Termination form is used when a new owner or operator assumes responsibility for a facility, when industrial operations have ceased, when a

facility no longer has a stormwater discharge associated with industrial activity, or when a facility is covered by an individual or alternative permit.

- *Comparison to MSGP 2000:* EPA added a field for the designated permit tracking number instead of the general permit number. Also added were a list of reasons for termination (e.g., transferred operational control to another operator, terminated facility operations, covered under an alternative permit, no longer have a stormwater discharge, or a mining facility that has met applicable termination requirements) and the IRS Employee Identification Number. Under facility information, EPA no longer asks for the facility's latitude, longitude, quarter, section, township, or range. EPA now asks for "county or similar government subdivision" for facility information.
- *Changes from Proposed Permit:* In part A.2 of the Notice of Termination form, EPA replaced one of the reasons for termination, "qualifying for a no exposure exemption" with "no longer have a stormwater discharge associated with industrial activity." Facilities that qualify for the no exposure certification are considered not to have a stormwater discharge associated with industrial activity. Also in A.2, EPA has included an additional reason for termination that a Sector G, H, or J facility has met the applicable termination requirements.

XIV.I. Annual Reporting Form (Appendix I)

Dischargers are strongly encouraged in Part 7.2 to use the Annual Reporting Form provided in Appendix I. This form asks for general information on the facility, summary findings from the comprehensive site inspection, and a description of corrective actions taken and the status of follow-up repairs, maintenance activities, or new BMP installations.

- *Purpose:* To establish a consistent reporting form for permittees to use for the annual report.
- *Comparison to MSGP 2000:* Annual reports were not required in the MSGP 2000. The form was created to help implement the Part 7.2 Annual Report requirement.
- *Changes from Proposed Permit:* The proposed permit also did not require an annual report. It was added to facilitate permit compliance oversight, as an alternative to the expanded TSS benchmark monitoring requirements in the proposal that were dropped for the final permit. See the discussion under Part 7.2 Annual Report.

XIV.J. Calculating Hardness in Receiving Waters for Hardness-Dependent Metals (Appendix J)

Appendix J describes the alternatives for establishing the hardness level for an operator's receiving water.

- *Purpose:* To provide guidance to operators for determining their receiving water's hardness level.
- *Comparison to MSGP 2000:* This language did not exist in the MSGP 2000, which did not include hardness-dependent benchmarks. It was created to help implement the Part 6.2.1.1 requirement for dischargers required to conduct benchmark monitoring for hardness-dependent metals to determine their receiving water's hardness level.

- *Changes from Proposed Permit:* The proposed permit also did not include hardness-dependent benchmarks. They were added to the final permit as a result of consultation with the Services, in order to enhance protection for certain endangered species.