

August 17, 2011

Sand and Gravel General Permit – Tier II Antidegradation Plan

Background: Federal regulations (40 CFR 131.12) and the Water Quality Standards for Surface Waters of the State of Washington (WAC 173-201A-300, 310, 320, 330) establish a water quality antidegradation program. The federally mandated program establishes three tiers of protection for water quality. These three tiers function to protect existing and designated in-stream uses, to limit the conditions under which water of a quality higher than the state standards can be degraded, and to provide a means to set the very best waters of the state aside from future sources of degradation entirely.

WAC 173-201A-320 contains the Tier II antidegradation provisions for the state's surface water quality standards: <http://apps.leg.wa.gov/WAC/default.aspx?dispo=true&cite=173-201A-320>

A Tier II analysis is required when new or expanded actions are expected to cause a measurable change in the quality of a receiving water that is of a higher quality than the criterion designated for that waterbody[WAC 173-201A-320(1)]. A “measurable change” is defined at WAC 173-201A-320(3) as specific or measureable reductions in water quality. “New or expanded actions” are defined as “human actions that occur or are regulated for the first time, or human actions expanded such that they result in an increase in pollution, after July 1, 2003 (WAC 173-201A-020). This definition includes facilities that first begin to discharge pollutants, or increase the discharge of pollutants, after July 1, 2003. The definition also applies to those facilities that discharged pollutants prior to July 1, 2003, but are regulated by Ecology for the first time after July 1, 2003. Ecology has prepared this plan to comply with the Tier II antidegradation rule (WAC 173-201A-320).

Formal Adaptive Process to comply with WAC 173-201A-320(6):

WAC 173-201A-320(6) states that “the antidegradation requirements of this section can be considered met for general permits and programs that have a formal process to select, develop, adopt, and refine control practices for protecting water quality and meeting the intent of this section. This adaptive process must:

- (i) Ensure that information is developed and used expeditiously to revise permit or program requirements.
- (ii) Review and refine management and control programs in cycles not to exceed five years or the period of permit reissuance,
- (iii) Include a plan that describes how information will be obtained and used to ensure full compliance with this chapter. The plan must be developed and documented in advance of permit or program approval under this section”.

Permit Development Process

The development and reissuance of Ecology's Sand and Gravel General Permit (SGGP) includes a formal process to select, develop, adopt, and refine control practices for protecting water quality and meeting the intent of WAC 173-201A-320. All NPDES permits, including the SGGP, are effective for a fixed term not to exceed five years (40 CFR 122.25). Each time Ecology reissues the SGGP, the effluent limits and permit conditions are evaluated to determine if

August 17, 2011

additional or more stringent requirements should be incorporated. Federal rules mandate that permits not become less stringent each five-year permit cycle with few exceptions. In the case of effluent limitations established on the basis of Best Professional Judgment [Section 402(a)(1)(B) of the CWA], a permit generally may not be renewed, reissued, or modified on the basis of effluent guidelines to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit. [40 CFR 122.44 (1)(2)]

Ecology's evaluation of the SGGP includes a review of information on new pollution prevention and treatment practices for storm and process wastewater. These are considered for possible incorporation into the SGGP as permit conditions or effluent limits to further reduce the discharge of pollutants during the five-year permit cycle. Sources of such information include, but are not limited to:

- **Public comments and testimony.** Comment is provided during the public comment period on draft permit. The public is encouraged to tell Ecology what is working and what is not, including any new and appropriate pollutant control methods. Ecology uses this formal public process to review and refine stormwater management and control requirements in each successive permit.
- **Ecology's Stormwater Management Manuals (SWMMs).** The SWMMs receive periodic updates based on new information and science and includes a public involvement process. Since the SGGP requires Permittees to select BMPs from the most recent edition of the SWMMs (or approved equivalent SWMMs), the BMPs contained in updated SWMMs are adopted and used to refine and improve the effectiveness of stormwater controls to protecting water quality and meet the intent of the antidegradation provisions in the WQ Standards.
- **Technology Assessment Protocol – Ecology (TAPE) process.** This formal process includes reviewing and testing treatment technologies for eventual adoption into Ecology's Stormwater Management Manuals. This process stimulates the development and use of innovative stormwater technologies, including chemical treatment systems (e.g., multi-media filtration, electrocoagulation, polymer-enhanced sand filtration, etc.) used at sites covered under the SGGP.
- **Industry-Sponsored Pilot Projects.** For example, the boatyard industry and an environmental organization sponsored a pilot test of three stormwater treatment devices specifically for boatyard stormwater.
- **US EPA Effluent Limitation Guidelines** (40 CFR Parts 405 through 471 - Effluent Limitations Guidelines and Standards). Ecology and other NPDES permitting authorities are required to incorporate effluent limit guidelines (ELGs) developed by the US Environmental Protection Agency (US EPA) into each permit as the permits come up for reissuance. Although Ecology's NPDES permit requirements are typically more stringent than US EPA ELGs, this is another formal process used to develop, adopt, select and refine control practices for protecting water quality and meeting the anti-degradation provisions in the WQ standards.
- **Ecology stormwater staff** (inspectors, enforcement staff, permit writers and engineers) attend training and conferences, and review professional journals and scientific literature. Ecology conducts research on pollutant control practices and

August 17, 2011

the effect of discharges on water quality. Ecology uses its expertise in the field of pollution control to adopt and refine controls and management practices in the SWMMs and the SGGP.

- **SGGP requires adaptive management.** In addition to the formal programmatic improvements to the SWMM and SGGP described above, the final 2011 SGGP contains an adaptive management process that requires Permittees to implement timely revisions to their Stormwater Pollution Prevention Plans when stormwater discharges exceed the benchmarks. As such, stormwater controls on individual projects are subject to ongoing refinement (such as addition of new BMPs and/or enhancement of existing BMPs) that reduces the amount of pollutants that would otherwise be discharged to receiving waterbodies. In some cases, an industry or trade group may consult with Ecology to develop a set of effective BMPs or treatment devices and place these in a guidance manual. Ecology will seek public comment on these manuals before adoption.

Public Notice of the General Permit Antidegradation Plan and Individual Actions

Ecology will specify the Tier II antidegradation plan in either the fact sheet of each general permit or as a separate public notice and comment. The public notice of application for general permit coverage will include information currently required on the SGGP Notice of Intent form including the name/location of the facility and the receiving water. The following new statement must also be included:

“Ecology developed the Boatyard General Permit with the expectation that sites covered under this permit will meet water quality standards and antidegradation requirements. Any persons desiring to present their views to the Department of Ecology regarding this application, or interested in the Department’s action on this application, may notify Ecology in writing within 30 days of the last date of publication of this notice. Ecology will review all public comments regarding this application and antidegradation and consider whether coverage under the SGGP is appropriate for this facility.”

In addition, Ecology maintains a website that contains a list of all facilities covered under the SGGP.