Final Effluent Limitation Guidelines for the Construction and Development Industry

On December 1, 2009 the Environmental Protection Agency (EPA) finalized the Effluent Limitation Guidelines (ELGs) for the Construction and Development Industry. The ELG establishes the minimum control requirements that must be met by everyone who has or needs a National Pollutant Discharge Elimination System (NPDES) construction stormwater permit issued by EPA or an authorized state. Operators will have to comply with the ELG requirements once they are incorporated in EPA's or a state's NPDES construction general permit. EPA was under a court ordered deadline to develop the Effluent Limitation Guidelines by December 1, 2009. EPA's website on ELG is http://www.epa.gov/waterscience/guide/construction

Although this rule is effective on February 1, 2010, EPA has established a minimum of a four year timeframe for full nationwide implementation. This is intended to provide the states and the regulated community sufficient time to develop compliance processes and a full understanding of the new requirements.

What Are The Main Requirements Of The ELG?

In December 2009, EPA issued its final Effluent Limitation Guidelines for everyone who has an NPDES permit for construction site stormwater discharges. The ELG establishes two tiers of requirements based on disturbed acreage. The ELG will apply as each delegated state incorporates the requirements into its construction general permit. For those states that remain under EPA's authority (ID, MA, NH, NM, DC), EPA will incorporate the ELG requirements when it reauthorizes the construction general permit in July 2011.

- **All construction activities that require an NPDES storm water permit**
  Must implement the following Best Management Practices (BMPs):
  a. Erosion and sediment control should be designed, installed and maintained to:
     - Control stormwater volume, velocity and peak flow rates;
     - Minimize the amount of soil exposed, the disturbance of steep slopes, soil compaction, and the amount of sediment discharge from the site;
     - Direct stormwater to vegetated areas, maximize infiltration, and provide and maintain natural buffers around surface waters unless infeasible.

  b. Stabilize soils immediately after activities have permanently ceased or temporarily ceased on any portion for a period exceeding 14 calendar days.

  c. Pollution Prevention Measures should be designed, installed, implemented and maintained to:
     - Minimize discharge of pollutants from equipment, vehicle washing, wheel wash waters, and other wash waters;

- Minimize exposure of building materials and other materials to precipitation and stormwater; and
- Minimize discharge of pollutants from spills and leaks and implement prevention and response procedures.

d. Prohibited discharges include:
   - Discharges from dewatering activities or concrete washouts unless managed by appropriate controls;
   - Wastewater from washout and cleanout of stucco, paint, and other construction materials;
   - Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and
   - Soaps or solvents used in vehicle and equipment washing.

e. Surface outlets that withdraw water from the surface are required when discharging from basins and impoundments, unless infeasible.

- **All Construction Activities that disturb 10 or more acres of land at one time** (whether contiguous or not) must meet the following Numeric Effluent Limit:
  - Discharges from activities disturbing 20 or more acres must not exceed a daily average turbidity limit of 280 NTU. The deadline for complying with this numeric limit is August 2011.
  - The 280 NTU effluent limit will be expanded to include all construction activities that disturb 10 or more acres of land at one time (whether contiguous or not) in February, 2014.
  - The turbidity effluent limit must only be met for the 2-year, 24-hour storm event.
  - Compliance with the numeric limit will require regular sampling and monitoring. These requirements will be defined by the state permitting authorities.

- The new ELGs set a technology "floor" that all permittees will be required to meet. Because this is a baseline, the states may adopt provisions that are more onerous than the federal minimum if they so choose, such as a lower NTU limit or a more aggressive implementation timeline.

What Technology Can Builders & Developers Use To Meet The 280 NTU Limit?

Unlike previous ELGs in which EPA has identified a "model" technology that has been demonstrated to meet the established limits, in this instance, EPA has left the determination of what methodology to use to the permit holder. EPA has stated that it believes the limit can be met through the use of a combination of BMPs; polymer-aided settling techniques, such as chitosan and PAM ; and site planning practices, such as limiting the amount of land disturbed at any one time or phasing construction activities.

Because EPA has limited data regarding the efficacy of these techniques, however, it is not certain whether the use of these practices will meet the 280 NTU limit on a consistent basis. As

a result, builders and developers will likely have to go through a period of trial and error to determine which suite of control measures will achieve the required discharge limitation for each project. In fact, EPA cites the need to adjust, modify, and revise the new control techniques as one of the primary factors for the 18 month delay in implementation.

What Are The Monitoring Requirements?

Each delegated state will be responsible for determining its monitoring and compliance protocols, including frequency, location, and duration in relation to storm events, analysis parameters and quality assurance procedures. EPA intends to provide monitoring guidance (which the states may or may not follow) and has provided the following glimpse into its expectations in the Federal Register notice:

- A minimum of three samples per day will need to be collected at each discharge point while a discharge is occurring;
- Any storm event or snowmelt that generated a discharge should be monitored;
- Sampling should be conducted, at a minimum, during normal business hours;
- The use of a properly calibrated turbidimeter is sufficient;
- Reporting requirements are uncertain, but will likely include, at a minimum, monthly discharge monitoring reports (DMRs);
- EPA has also suggested that permitting authorities may want to consider requirements in their permits and mechanisms by which permittees would notify the permitting authority when they have exceeded the 10 acre disturbance threshold and monitoring is required;
- EPA has also indicated that the 18 month period will allow permitting authorities to develop any necessary training or certification programs.

What Happens If My Average Discharge Exceeds 280 NTU?

The numeric turbidity limitation is a daily maximum meaning an owner or operator will not be in violation of the limitation if individual samples of their discharges exceed the limitation as long as the average of the samples taken over the course of a day are below the limitation. If a daily discharge exceeds the limit, the discharger could be found in violation of the permit. The state permitting authorities, when establishing the monitoring and reporting procedures, are expected to also determine how they will assess and enforce the standard.

When Will The ELG Be Implemented In My State?

For those states that have not yet been authorized to administer the NPDES program (Idaho, Massachusetts, New Hampshire, New Mexico, District of Columbia), EPA will include the ELG requirements in its Construction General Permit when it is reauthorized in July 2011. For the delegated states (i.e. states that have their own state construction general permits), they must each incorporate the ELG limits and obligations the next time they issue a new construction general permit. If a state adopts a 5 year permit prior to February 1, 2010, it is not required to impose the ELGs until the permit is renewed in 2015. Some states, such as Maryland, however, have publicized their intent to adopt the ELG into their state permits as soon as the rule is

finalized (i.e., immediately). Below is a list of state permit expiration dates which can be used to determine when the ELG will be incorporated and become effective in your state.

Importantly, because EPA is phasing in the numeric limits and monitoring requirements, while the non numeric part of the ELG will be effective as soon as it is implemented into the state permits after February 1, 2010, no one disturbing 20 acres or more should have to meet the numeric limits until August 2011 (the only exception to this would be if a state purposely accelerated the ELG's adoption). Likewise, no one disturbing 10 acres or more should be required to meet the numeric limit prior to February, 2014.

In the end, the rule will not be fully implemented until all state and EPA general permits have expired and new general permits are issued that incorporate the ELG, which will take approximately five years. During that time, builders and developers should be vigilant in monitoring and participating in their state's efforts to revise their construction general permits.

State Stormwater Permit Expiration Dates

States	Expiration Year
Maine, Michigan, Indiana	2009
Connecticut, Tennessee, Oregon, Washington	2010
Delaware, Wyoming, South Carolina, Vermont, Wisconsin, Arkansas, Kansas, Montana, New Hampshire, New Mexico, Idaho, Massachusetts, Pennsylvania, North Carolina	2011
Missouri, New Jersey, Coloroado, Oklahoma, Nevada, Iowa, Hawaii, West Virgina, Nebraska	2012
Arizona, Ohio, Texas, Utah, Georgia, Illinois, Minnesota, Rhode Island, Maryland	2013
Florida, Kentucky, Virginia, California, Louisiana, North Dakota, South Dakota, Alabama, New York	2014 and 2015

What Can Builders & Developers Do To Avoid The Numeric Limit?

The 280 NTU limit only applies when the total amount of disturbed area on the project at any one time is at or above the specified acreage threshold (i.e., 10 or 20 acres). As a result, the only way to avoid the limit and its associated obligations is to reduce the area of disturbance to below the threshold (i.e., 9.9 or 19.9 acres). This can be done throughout the entire project or during specific phases. For example, if a project initially disturbs 10 or more acres of land at one time during construction activity, but after completion of clearing and grading and infrastructure installation the site is stabilized prior to or during commencement of vertical construction, then the sampling requirements and turbidity limitations would cease to apply at the point where the total disturbed land area at the site is less than 10 acres at one time. However, in all instances where the amount disturbed at any given time is greater than the specified threshold, the numeric limit will have to be met. As above, EPA expects the states to determine what type of recordkeeping and/or notification procedures operators must follow to keep track of how much land is disturbed at any given time and when the limit applies.