

Stormwater Discharge Permits – What’s Really Required?

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By now, you’re probably aware that the USEPA has targeted the ready mixed concrete industry for strict enforcement, with the focus of the effort being directed toward stormwater issues (for more information, see “U.S. EPA’s Enforcement Initiative and the Ready Mixed Concrete Industry: What You Need to Do,” NRMCA *Concrete InFocus*, Summer 2008). According to the EPA, this targeted enforcement effort directed at the concrete industry was necessary due to significant non-compliance with stormwater permitting and discharge issues among the industry. Furthermore, this reported non-compliance includes lack of proper National Pollutant Discharge Elimination System permits; unpermitted discharges under existing permits (i.e., discharges of other than stormwater, which is usually not permitted under a stormwater discharge permit) and failure to meet permit requirements. While concrete facilities may have the appropriate stormwater permit, they may fail to meet the many requirements and conditions of that permit, which can lead to potential enforcement action.

What is a stormwater discharge permit? These types of permits, issued by a state (or federal government) under their NPDES regulatory program, generally only cover the discharge of “stormwater associated with industrial activity,” i.e., stormwater that has fallen onto (or run onto) a concrete plant that comes into contact with “source materials” capable of causing stormwater pollution before running into a surface waterway. While there are some variations on this common theme, most stormwater permits have this as their central theme. Since it doesn’t make sense, in most cases, to prohibit stormwater runoff from a facility, and no one can realistically expect that an industrial facility will discharge crystal clear potable water, an NPDES stormwater discharge permit is, in effect, a permit to discharge “polluted water.”

However, the goal of a stormwater permit, and virtually all stormwater regulations, is to require a facility to do nearly everything possible to minimize, if not outright eliminate, the pollution that is discharged via stormwater runoff. Many, in fact, have strict requirements to prove that the stormwater being discharged meets certain water quality criteria (such as the requirement for analytical testing of stormwater that is being discharged to ensure it meets certain discharge limits). Therefore, stormwater permits always require the development and implementation of specific activities designed to ensure that the stormwater that leaves the concrete plant site is as clean as it can be. It is these activities that form the “core requirements” of a stormwater permit.



What are these common stormwater permit requirements? Typically, NPDES stormwater discharge permit requirements include the following:

1. **STORMWATER ONLY!** A prohibition on the discharge of anything other than stormwater (as described above). This means that nothing other than stormwater can be discharged, including all forms of process water or wastewaters. At a concrete plant setting, this means that most permits prohibit the discharge of mixer truck washout, truck and chute rinse off water, equipment and grounds washwater, etc. Collectively, these discharges may be referred to as “non-stormwater” and they are almost always prohibited from being discharged by a stormwater permit. Some stormwater permits may permit certain types of non-stormwater discharges under certain circumstances – check your permit carefully to ensure you know exactly what you are approved to discharge.
2. **SWP3.** The development and implementation of a Stormwater Pollution Prevention Plan (or “SWP3” or “SWPPP”, often pronounced “swip”). This is a guidebook for how the facility performs relative to stormwater runoff and management, what is currently being done and what additional steps will be implemented in order to ensure that stormwater runoff is as clean as possible. The SWP3 should be a living document, in regular use by facility personnel who have been trained on its contents and applicability, should undergo regular updates as required and should be prominently available at the concrete plant.
3. **BMPS.** The development and implementation of a suite of Best Management Practices (or “BMPs” designed to minimize or prevent stormwater contamination). These include standard activities such as plant housekeeping, spill cleanup, removing or covering source materials from contact with stormwater, etc., and are collectively referred to as “baseline BMPs.” In addition, site-specific BMPs may be appropriate to address specific concerns at a concrete plant as compared to other plants, such as drainage-way, swale, containment berms or curb construction, erection of a storage shed to house source materials such as oil drums, constructing containment around fuel tanks, etc. While these site-specific BMPs are generally not specified in a stormwater permit (they couldn’t, being dependent upon individual site characteristics), nearly all stormwater permits specify that baseline BMPs be implemented at a concrete plant. All of these BMPs should be documented in a facility’s SWP3.
4. **INSPECTIONS.** Nearly all stormwater permits require that a facility conduct regular, comprehensive facility inspections directed toward overall site conditions and stormwater considerations. This should include areas such as outfall inspections, equipment storage areas, fuel tanks, stockpile areas and any other areas that could contribute pollutants to stormwater. While the required number of inspections per year may vary depending on a particular stormwater permit, nearly all permits require at least one comprehensive inspection per year, with many others requiring quarterly or monthly inspections. Like training, all inspec-

tions should be conducted by trained personnel and documented on inspection forms.

5. **MONITORING.** Most stormwater discharge permits require some form of discharge sampling and analysis in order to gauge how clean the stormwater being discharged is. Often, this is relative to a “benchmark” level for certain water quality parameters (such as pH or total suspended solids content), or may be evaluated against a numeric effluent limitation for the same parameters (which can carry penalties if exceeded). Many permits also require various types of visual monitoring of stormwater that is being discharged, by regularly (e.g., quarterly) obtaining a sample of stormwater as it is being discharged and observing its characteristics (i.e., is it cloudy, sediment-laden, discolored, foamy, etc.). Nearly all monitoring requirements require that records obtained be submitted on a regular basis on appropriate forms to the permitting authority, particularly in when engaging in analytical water quality monitoring.
6. **TRAINING.** Facility personnel should undergo regular training on stormwater management at the concrete plant, as well as the SWP3 and the BMPs implemented at the plant. This training should occur once per year, at a minimum, and should involve all individuals with responsibilities under the stormwater permitting program – this likely should involve most employees at the concrete plant, since all have their own roles in preventing stormwater pollution. This should involve a component of driver’s training, by explaining concepts such as spill prevention, the need for careful process water management, etc. Like all training, regular stormwater training should be documented.
7. **DOCUMENTATION / RECORDKEEPING.** Recordkeeping of activities conducted under a stormwater permit is not only a great idea, but usually a mandatory requirement of the permit. All activities such as inspections, training, BMP implementation activities, BMP maintenance, housekeeping, etc. should be documented via written records, and retained as part of the SWP3 (or their location referenced in the SWP3) and available for review by inspectors.

Beyond these common requirements, many other stormwater permits may have additional or different requirements. What’s the best way to know what requirements you’re subject to? Read your permit and any associated guidance information you can obtain; if you still have questions, seek qualified help.

It’s obvious that it’s not enough just to “have a stormwater permit” – you have very specific and detailed requirements and responsibilities that come with that permit. Fail to follow these requirements and you can expect to be the next enforcement initiative headline. Carefully address and follow your permit requirements and NPDES stormwater permitting can be a fairly routine and worry-free part of operations at your concrete plant! ■

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