

## **North Carolina Division of Water Quality Response to Comments and Summary of Final Changes to NPDES Stormwater General Permit NCG120000 (2012 Renewal)**

### **Background**

NPDES General Permit NCG120000, which regulates stormwater discharges from landfilling activities, expires on October 31, 2012. The North Carolina Division of Water Quality (DWQ) announced in selected newspapers across the state on or about September 1, 2012 that the draft of the proposed renewal General Permit would be posted on our website for public comment. DWQ also ran this notice in the North Carolina Register the same month; on the Stormwater Permitting Unit website in September 2012; and in renewal letters to all affected landfill permittees in the spring of 2012.

DWQ revises and reissues our NPDES stormwater General Permits on a five-year schedule. Every five years we review analytical data from the previous five-year term of the permits; evaluate identified compliance problems and problems in our enforcement of the permits; and seek to improve the effectiveness of the permits as stormwater management tools for the permittees.

The draft NCG120000 general permit and Fact Sheet were posted to the Stormwater Permitting Unit's website on September 1, 2012. The public comment period was scheduled to close on October 1, 2012 and was extended to October 8<sup>th</sup> as per requests from the regulated community, and to compensate for the delay in some newspaper notice publish dates. In addition, the Division received public comments about the proposed draft general permits for other industrial sectors expiring at the same time, and some of those comments on other draft permits have been addressed in the final NCG120000 permit for program consistency.

EPA Region IV staff in Atlanta was sent the draft General Permit on September 4, 2012. On September 17, 2012, EPA Region IV responded that the agency concurred with the draft permit and had no comments on it. EPA's additional review and approval would be necessary if the proposed final General Permit incorporated significant changes from the draft, or if significant public comments objecting to the permit were received. DWQ concluded that neither of these criteria was met and therefore, further EPA review is not required.

DWQ prepared this summary document both for those that submitted written comments on the draft General Permit, as well as for other interested parties. This document will be posted on our website for public access.

### **Comments and Responses**

DWQ received comments on the proposed draft General Permit from three private solid waste businesses, four municipal solid waste authorities, one consulting company, and the North Carolina Chapter of the National Solid Waste Management Association before or during the

announced public comment period. In addition, six of the seven DWQ Regional Offices provided comments on the draft General Permit.

Commenters addressed several aspects of the draft General Permit, with most attention being directed to revisions to the monitoring parameters and frequency. DWQ appreciates the time and effort reflected in the comments. The comments are summarized below, and are grouped by topic. Every written comment pertaining to the draft General Permit has been incorporated in the related topics below. We have noted which comments have been included in some form in the final version of NCG12. We have also identified those comments that we did not incorporate, and why.

**1. Qualitative monitoring and visual inspections**

- a. Seven commenters requested that DWQ relax the weekly requirement to conduct qualitative monitoring of the stormwaters discharge flows (color, odor, clarity, etc.) and/or the weekly requirement for visual inspections of the sedimentation and erosion control features.**

Response: DWQ Regional Office staff supported this request, in part. Our field staff experience suggests that the weekly evaluation of color, odor, clarity, etc., provides relatively little benefit at that frequency, especially in the cases where there may not be stormwater discharges on a weekly basis. The Regional Office staff recommended that DWQ relax the qualitative monitoring to only twice per year, provided that the weekly visual inspections of the sedimentation and erosion control facilities were continued as per previous versions of the permit.

Result: DWQ has revised Part II Section D: Qualitative Monitoring and Visual Inspection Requirements in the final permit to relax qualitative monitoring to twice per year. The requirement for weekly visual inspections of the sedimentation and erosion control features has been preserved.

- b. Four commenters noted that the requirement for visual monitoring daily “during stormy periods” was imprecise, and needlessly burdensome.**

Response: DWQ concurs that the draft permit language was imprecise and so could be problematic in interpretation and implementation.

Result: This requirement has been removed from the final form of the permit.

- 2. Six commenters requested that DWQ eliminate the requirement to sample the outfalls within 30 minutes of the beginning of the discharge. Commenters cited the large distances between outfalls that are common on landfill sites.**

Response: DWQ concurs that on many sites the physical separation of the outfalls may make it practically impossible to meet this condition of the draft

permit.

Result: The final permit text has been revised to require that sampling *begin* within 30 minutes of a discharge, and continue until completed.

- 3. Five commenters requested that DWQ eliminate the requirement to sample discharges from basins designed to hold the 25-year, 24-hour storm without discharging.**

Response: DWQ reasons that any basin meeting the commenters' stated design criterion would impose a sampling burden on each permittee, on average, once every 25 years. We see no substantive advantage to the permittees in making the requested change. The permit already has provisions for reporting 'No Flow', when there has been no discharge at any particular outfall. Further, DWQ is not persuaded in every case that '25-year-design' basins are actually operated to fully hold all flows except those in excess of the 25-yr rain. *As a point of program implementation, but not as a permit provision, if indeed a basin and its outfall structure have been designed, constructed, maintained, and operated to discharge only in the event of a 25-year rain, DWQ can re-evaluate the need to monitor that outfall on a case-by-case basis, and may provide relief from monitoring. Our experience is that there has in the past been some misunderstanding about the difference between a basin designed to provide peak flow shaving for the 25-yr storm (which does not qualify as a basin that will hold the 25-yr rain), and a basin designed to completely hold the 25-yr rain without discharging.*

Result: No change. The final permit language requiring monitoring at all outfalls (subject to Representative Outfall Status) is retained as published in the draft permit.

- 4. Four commenters requested that pH monitoring by certified personnel to meet field parameter certification specified in North Carolina rule at 15A NCAC 2H .0800 was unduly burdensome.**

Response: North Carolina rule does not require field parameter certification for *stormwater sampling and analysis*. Note however, that federal rule does require that sampling under NPDES permits be accomplished by EPA-approved methods, but that is not the same as requiring personnel to hold field certification credentials. Commenters misunderstand North Carolina rule and permit requirements on this point. The accompanying NCG12 Technical Bulletin posted on the SPU website further explains this subtle distinction.

Result: No change.

- 5. Two commenters requested that DWQ expand the circumstances that would qualify as acceptable excuses for failure to monitor.**

Response: It has long been DWQ's practice to excuse failure to sample for the reasons of 'No Flow', and for unsafe conditions due to night time rain or severe weather. In response to the commenters' request and as a matter of our permittees' operational convenience, we are expanding and clarifying the permit text to provide that the permittee need not retrieve samples from runoff occurring outside the normal hours of facility operation.

Result: The final permit now includes the allowance that samples need not be retrieved except during normal operating hours.

- 6. One commenter requested clarification that DWQ determinations of reduced sampling due to representative outfall status (ROS), and reduced sampling granted as relief from Tier 2 monthly sampling would be carried over into new revisions of the General Permit, and the qualifying conditions should not have to be reestablished within the new permit cycle.**

Response: DWQ concurs with this suggestion as far as the normally anticipated beginning point of such relief; provided that the DWQ letter granting ROS or relief from Tier 2 monthly sampling may contain contrary provisions as the Regional Office may determine.

Result: DWQ has revised the final permit text to include clarification that ROS and relief from monthly sampling under Tier 2 would normally be expected to bridge over subsequent renewals of the General Permit.

- 7. Four commenters requested that DWQ eliminate the draft permit provision that the unexcused failure to sample automatically kicks the permittee into six months of monthly monitoring.**

Response: DWQ concurs that this provision in the draft permit should not be *automatically* triggered.

Result: The final permit now provides that failure to sample, "may result in the Division requiring monthly monitoring for all parameters for a specified time period." The intent is to avoid *automatically* triggering monthly sampling, but also to set out DWQ's authority under the permit provisions to require such additional monthly testing upon our consideration of the specific site circumstances.

- 8. Eight commenters requested varying revisions to the requirement to sample for fecal coliform, including some comments requesting complete elimination of the parameter.**

Response: Our review of the sampling data from the previous permit cycle shows that approximately 43% of over 600 fecal measurements were in excess of the permit

benchmark; and conversely that approximately 57% (the remaining fraction) of measurements were at or below the benchmark. For all three pollutant parameters measured under this permit (COD, fecal, and TSS), an aggregate of approximately 32% of over 1800 measurements were exceedances. The monitoring of fecal coliform was contained in the original version of this permit in 1992, and in subsequent revisions in 1997, 2002, and 2007. Commenters offered several arguments in support of the requests to eliminate fecal testing:

- a. **Fecal testing only indicates the presence of wildlife.** *The fraction of fecal pollution attributable to wildlife is not established; multiple potential sources within MSW could also contribute, including disposable diapers, for one example. The commenters' interpretation that wildlife was the source of fecals was not extended to claim that wildlife was the only source, or to account for the 57% of compliant fecal measurements.*
- b. **Fecal testing and benchmarks are punitive in that the control of fecals is not realistically achievable.** *Commenters provided no interpretation that reconciled the 57% of compliant measurements with the comment that fecals are not controllable. DWQ Regional Office staff report that some landfills regularly meet the fecal benchmark. Commenters provided no information as to what fecal controls have been attempted broadly in the industry, and with what success, or lack of it. Note that the permit itself already provides a mechanism for a facility to be relieved from the burden of monthly fecal monitoring by demonstrating to the satisfaction of the DWQ Regional Office that all feasible attempts at fecal control have been exhausted. Further, it has long been a feature of the stormwater permits that representative outfall status can be employed to reduce the fecal sampling burden on our permittees. We do not see twice-per-year testing at a reduced number of outfalls as punitive, or as an unusual burden in controlling polluted stormwater discharges.*
- c. **Landfills encourage browsing in support of wildlife habitat, an environmental good.** *We have heard the contrary from landfill operators who view deer and vectors as nuisances to their operations.*
- d. **Other states in our region restrict fecal monitoring to just those receiving waters impaired for fecal coliform.** *While the actions of other states are interesting background information and may be instructive, such actions are not compelling reasons with respect to protecting water quality in North Carolina.*
- e. **The daily cover requirement effectively precludes fecal contamination in stormwater runoff.** *One purpose of stormwater monitoring is to alert the operator to conditions he may not be aware of, but that would show up as polluted stormwater discharges. While daily cover may certainly reduce polluted discharges, it is not established that daily cover alone will totally control polluted discharges from a landfill site, or that all facilities accomplish fully effective controls via the daily cover requirement. It is at least possible that the sampling data from the last 5-year permit cycle might be interpreted to suggest that cover requirements are not by themselves sufficient to control polluted discharges.*
- f. **The timely analysis of fecal coliform is difficult.** *Commenter provided no*

*supporting or anecdotal information to help us understand how significant this difficulty is. That fecal analysis requires coordination with third party labs, and that it involves a lab cost is not by itself an argument against fecal testing anymore than any other pollutant monitoring requirement. We note over 600 successful fecal coliform measurements over the last permit cycle.*

- g. **DWM already requires in-stream monitoring above and below the facility, and so DWQ monitoring of stormwater flows is redundant.** *The premise of the federal NPDES permit is that industrial facilities must control the runoff from their sites, and they must keep the pollutants generated by their activities contained on their sites, rather than slipping off into the waters of North Carolina. On the basis of this perspective on pollutant control, the NPDES stormwater program is called an “end-of-pipe” program. Meaning for this program, that site operators must measure the pollutant content in their discharges rather than in-stream, and they must react to the benchmarks as though they were “Action Levels” that require response actions to see what improvement can be made to the polluted discharges.*

Result: No change to fecal monitoring requirements. However, we note that some of the issues raised by commenters rightly deserve engineering evaluation and scientific research to assess their significance. But, until the results of such work are in hand, DWQ concludes that there is no sound basis to remove the fecal monitoring requirement.

9. **Two commenters requested that good sampling results in the first year should be the basis for excusing sampling for the bulk of the remaining permit term.**

Response: By the nature of its operation, a landfill has a footprint that changes over time. The changing configuration of a site argues that what might be a clean discharge at one point in time may have little relevance to the character of the flow in successive years. Without periodic testing how can a site manager know whether his discharges are clean or not, and how can he meet his responsibility to keep pollutants on his site if he is not even testing for those pollutants?

Result: No change to the requirement for twice-per-year sampling every year of the permit cycle.

10. **One commenter objected to the specific inclusion of construction and demolition landfills under NCG12; essentially a request to reduce the scope of the General Permit.**

Response: North Carolina’s stormwater permitting program is required by federal rule to conform to federal rule. Federal rules establishing the permitting program are found at 40 CFR 122.26. By our reading of that federal rule, C&D landfills must have stormwater discharge permits. Further, DWQ’s recent examination of the original permit development file from 1992 does not reveal any special consideration of C&D

landfills one way or the other. Those development files do note that the primary sources of pollutants from landfilling operations are disturbed earth including stockpiled materials, and the solid waste being landfilled. Our current assessment is that a C&D landfill would have a similar potential as an MSW landfill to generate pollutants from the first source, and though perhaps different pollutants, there would still be some potential for the landfilled materials to contribute to polluted discharges at a C&D.

Result: No change. The final permit clarifies that NCG12 pertains to C&D landfills.

11. **One commenter requested that the General Permit be revised to address the potential for polluted discharges arising from the auxiliary industrial activities now frequently taking place on landfill sites. Essentially a request to expand the scope of the General Permit.**

Response: DWQ acknowledges that over the last several years there appears to be an increase in the number of additional, but related, activities taking place at landfill sites. Many landfills now recycle plastics, electronics, metals, white goods, and other recoverable materials; mulching operations for woody materials may be present; composting operations may be present. It is not assured that the General Permit in its current form fully addresses the different pollutants that may arise from these secondary activities. However, the Stormwater Permitting Unit does not currently have the staff resources to support a reasoned and deliberate expansion of NCG12 into this area. Our approach will be to utilize the provisions of the current form of NCG12, until and unless discharges from these other operations are recognized as significantly problematic for water quality protection under NCG12.

Result: No change. No expansion of the scope of NCG12.

12. **Four commenters suggested several revisions to the secondary containment requirements, including that facilities subject to federal oil SPCC plans may use portions of the plan to satisfy the requirements of DWQ's stormwater discharge permit relative to secondary containment.**

Response: DWQ concurs with several of the related comments made on the topics of secondary containment, petroleum products, and spills.

Result: Permit text amended. Changes to the draft permit text include: clarification that bulk storage of petroleum products are subject to the secondary containment requirements; provisions that elements of the SPCC may be used to demonstrate compliance with the General Permit in so far as they are consistent; text no longer unrealistically prohibits spills onto the ground, but only requires that spills be cleaned up as per applicable regulations, and that spills to groundwater and surface water are prohibited.

13. **One commenter noted that the permit text states that the permittee may apply for an individual stormwater discharge permit in lieu of the General Permit. He requested that the text of the General Permit should explain what the likely different provisions of an Individual Permit would be.**

Response: While the General Permit is intended to improve both internal and external-facing efficiency at DWQ by its 'one-size-fits-all' approach, the content of an individual permit is determined by the particular site conditions at the permittee's site. We typically use individual permits when we judge that the General Permit is somehow inadequate to address the pollutant discharge risks at a permittee's site. Consequently, it would be difficult for us to provide meaningful generalizations about the content of an individual permit.

Result: No change.

14. **One commenter requested that the permit scope be expanded to include requirements for good housekeeping, training, spill response, and the other elements common to the Stormwater Pollution Prevention Plan (SPPP) required under other stormwater discharge General Permits.**

Response: Since 1992 DWQ has relied on the similar elements in the DWM requirements as to the site engineering plan and operational procedures for their landfill permittees. We continue to view an additional requirement for an SPPP as largely redundant. Until and unless we become aware of significant problems in this administrative approach, we judge that the current approach is sufficient.

Result: No change.

15. **One commenter requested that the provisions in the Tier 3 box be revised to establish that any up and downstream monitoring requirement would have a defined scope and duration determined collaboratively between DWQ and the permittee.**

Response: We agree in principle that every such monitoring program should have a pre-determined endpoint and duration, if at all possible. DWQ's practice in other similar administrative actions is to always identify in advance end dates and/or durations. We consider that our approach, including the collaborative aspects, is so ingrained in our staff that it is not necessary to amend the permit to include this notation.

Result: No change.

16. **One commenter requested that the boilerplate requirement to report spills be revised to specifically qualify the 24-hour time period as beginning upon the permittee's becoming aware of the spill.**

Response: The current wording in the boilerplate is consistent with provisions in other NPDES permitting programs. DWQ believes the requested distinction is largely immaterial in practice, but might provide a loophole for facilities to claim that until a specific person in management was notified of the spill, the facility was not aware of the spill. DWQ would prefer to establish the expectation that any employee becoming aware of the spill starts the 24-hour clock.

Result: No change.

**17. In addition to comments on the draft General Permit, DWQ received two comments on the content of the Fact Sheet, published concurrently with the draft General Permit.**

- a. **Please remove the paragraph establishing that there will be no variances granted to the General Permit conditions, since DWQ demonstrably grants variances to monthly monitoring requirements under Tier 2.** *DWQ's interpretation is that the permit text itself provides for relief from monthly monitoring, and so such relief cannot be considered as a variance to the permit conditions. No change to either the permit or the Fact Sheet.*
- b. **Please record the benchmark values (on COD, TSS, and fecal coliform) from adjoining states for comparison.** *We have no objection to reviewing and learning from the actions of other states. However, in general DWQ does not set the benchmark values based on other state values, but on review and consideration of the scientific literature. We are receptive to consideration of benchmarks in other states, and look to the regulated community to provide such information as may support further consideration of this aspect of the General Permit. Currently our procedures do not include amending the Fact Sheet after it is published along with the draft General Permit. But we are receptive to including such information in future Fact Sheets. No change to the Fact Sheet in this permit cycle.*

## **Conclusion**

DWQ's overall intent in proposing changes to the General Permit was to provide permit requirements that will encourage landfill permittees to respond with prompt corrective action to the discovery of pollutant discharges in excess of the benchmark values. DWQ incorporated public comments on the proposed draft General Permit NCG120000 as indicated above.

END