Elimination of Discovered Nutrient Discharges From Grey Infrastructure

Findings: Expert Panel Final Report

WTWG Meeting November 6, 2014

The Process So Far

- Panel deliberated for over two years
- Expert Panel Report Released in June
- 3 Briefings with stormwater and wastewater workgroups in June and July
- July Teleconference with EPA WPD
- 18 major comments received from numerous parties
- August 21 Co-Regulators Meeting

Process Continued

- Consolidated Response to Comments Memo drafted in September, along with Revised Report
- Revised Report conditionally approved at USWG meeting on 9/23, subject to October 3 comment deadline (MDE)
- October 2 Briefing for WTWG
- Scenario Builder Appendix Drafted
- Seeking WTWG Approval Today

Key Changes in September Version

- Wet Weather SSOs Dropped (N-9)
- Revised Program Credit
- Expiration Dates for Credits
- Phasing in Panel Recommendations
- Reporting and Verification Issues
- Other Changes in RTC Memo

Editorial Changes in Current Version

- Fewer References to Wet Weather Discharges
- Profile Sheets for Individual Discharges Moved to Appendix A
- Segregated Discussion of Program Credit versus Credit for Individual Discharges
- Updated Appendix C and D
- Appendix E (Scenario Builder) Added

Appendix E Highlights

Part 1: Credit for Advanced MS4 Nutrient Discovery Programs

Table 7 Qualifying Criteria for Advanced MS4 Nutrient Discovery Programs
The locality will provide justification to indicate that they are operating at an advanced level. At a minimum, they will document the following in their annual MS4 permit report: • Methods used to analyze dry weather stream monitoring data to prioritize the catchments and/or sewer-sheds with the highest risk for nutrient and bacteria discharge that warrant targeted investigation. • Number of outfalls in the priority catchments/sewer-sheds identified during the Outfall Reconnaissance Inventory (ORI) as described in (Brown et al 2004). • Number of outfalls in the priority catchments/sewer-sheds that were subject to nutrient testing, using the Flow Chart Method (Brown et al 2004) or equivalent. The testing must focus on outfalls of all diameters. Nutrient testing should be conducted on at least 10% of flowing outfalls (as determined during the ORI) annually. • Specific methods and techniques they use to track a suspect illicit discharge to its source in the storm drain network (Table 3). • Number and type of illicit discharges that were discovered and actually eliminated each year. In addition, localities will need to document that they are conducting <u>at least two</u> of the following activities to discover and or prevent nutrient discharges to receive credit: • GIS assessments of storm and sanitary sewer network to identify high risk segments for cross-connections or exfiltration • Dry weather stream monitoring is used to prioritize the stream segments with the highest nutrient and bacteria levels that warrant further investigation • CCTV inspections, dye testing or other methods to investigate for sewer leaks in problem storm drain systems. • Targeted inspection and outreach to businesses and/or industrial facilities subject to high risk for illicit discharges or sewer clogging (e.g. restaurants, car rental agencies, etc.) • Detailed field assessments of the sewer network to identify segments with high risk of nutrient discharge due to exfiltration and/or dry weather overflows (i.e., sewer modeling and metering tools).

Q2. What is the definition for the program credit ?

A2. The panel defines the annual credit as being equivalent to a maximum of 1% of the dry weather nutrient load within the jurisdiction, which is defined as 20% of the total annual N and P load discharged from the urban pervious land in which advanced nutrient reduction programs are targeted.

Credit is contingent on documentation that they possess advanced program elements to target, screen, detect and correct the nutrient discharges with the highest nutrient loading risks.

Q3. How will the reductions be calculated in Scenario Builder and the Watershed Model ?

A3. Reductions for qualifying programs will be applied as a 0.2% percent reduction in annual nutrient load discharged from urban pervious land targeted by the programs.

Q4. What do jurisdictions need to report to NEIEN in order to receive program credit?

A4. Jurisdictions will need to report the following to NEIEN:

Practice Name: Advanced Nutrient Discovery Program.

Acres Treated: Number of pervious acres in targeted catchments and/or sewersheds being treated by the advanced program

Approved NEIEN land uses: Pervious urban land

Location: Jurisdictions should report the location of the targeted catchments/sewershed being treated at the finest scale that the program is tracking (e.g., lat/long, HUC 12 watershed code, etc.). The pervious acres need to be assigned to the appropriate river basin segment

Year of Implementation: first year in which the advanced MS4 nutrient discharge discovery program fully meets the qualifying criteria outlined in Table 7.

Q5. How will the program credit for advanced MS4 nutrient discovery be combined with other urban BMPs in Scenario Builder or the Watershed Model?

A-5 (see text, from Jeff Sweeney)

Q.6. What is the first year that a locality is eligible for the advanced program credit?

A.6. 2015, assuming they meet the qualifying conditions outlined in Table 7. Most Ms4s in the Bay watershed, however, will not immediately qualify for the credit by 2015

Q7. How many years can a locality claim the advanced MS4 nutrient discovery program credit?

A7. The specific acres subject to the program credit lapse five years after the first year in which they are reported to the appropriate state regulatory authority.

A locality may report additional acres in succeeding years if they elect to target additional storm/sewersheds for intensive nutrient discovery. The credit program for the additional acres also expires after five years.

Part 2

Individual Nutrient Discharge Credits

Q9. What individual nutrient discharges are eligible for annual nutrient reduction credit in Phase 6 of the Watershed Model?

A-9. The Panel defined eight discharge types that were eligible for annual nutrient reduction credit, if they were effectively eliminated. They include:

- Laundry Washwater
- Commercial Car Washing
- Floor Drains
- Miscellaneous High Nutrient Non-Sanitary Discharge
- Sanitary Direct Connections
- Sewage Pipe Exfiltration
- Drinking Water Transmission Loss
- Dry Weather Sanitary Sewer Overflows

Q11. How will the reductions be calculated in Scenario Builder and the Watershed Model ?

A11: The reduction credited in the Watershed Model will equal the aggregate nutrient load (in pounds) associated with the elimination of individual nutrient discharges within the river basin segment for that year by the MS4.

Q12. What do jurisdictions need to report to NEIEN in order to receive credit for the elimination of individual discharges?

Practice Name: Type of discharge eliminated (e.g. N-1, N-2, etc)

Protocol Used: (1, 2, 3)

Individual Discharge Data:

- Nutrient concentration (mg/l)
- Flow volume prior to elimination (gallons)
- Estimated flow duration (up to maximum of one year)

A*pproved NEIEN land uses*: Pervious land (or whatever land use category, overlay or sector the load is allocated to in Phase 6 of watershed model)

Location: Same general approach ass for program credit so it can be assigned to the appropriate river basin segment. No more specific NEIEN geographic resolution is needed per the more flexible reporting standards for this class of urban BMPs, as outlined in USWG (2014).

Year of Elimination: first year in which elimination of the discharge is confirmed.

Q.14. What is the first year that a locality is eligible to calculate nutrient reduction for elimination of individual nutrient discharges ?

- **A.14.** When the Phase 6 model is implemented, which should be 2017.

Q15. How many years do the individual nutrient credits exist before they expire? Can they be renewed ?

A-15. The credits expire after ten years. The credits cannot be renewed.

Questions and Comments