

June 8, 2017

**Response to Public Comments**  
**Issuance of National Pollutant Discharge Elimination System (NPDES) Permit**  
**No. GUR040000 for Discharges from the Municipal Separate Storm Sewer System (MS4)**  
**Serving Department of Defense Facilities on Guam**

Public notice of EPA's tentative decision to issue the draft NPDES permit was published in the *Pacific Daily News* on September 28, 2016. The following parties submitted written comments on the draft permit within the public comment period that closed on November 28, 2016:

Department of the Navy (DON)  
National Marine Fisheries Service (NMFS)

The written comments that were submitted were reviewed by EPA and considered in the formulation of the final determinations regarding the draft permit. Our responses to the comments follow below.

**I. Responses to DON Comments**

1. **Comment:** DON, the permittee for the draft permit, noted that certain updates were needed for the mailing address and contact person for DON that had been included in the draft permit and fact sheet.

**Response:** The needed revisions noted by DON were made in the final permit and fact sheet.

2. **Comment:** DON noted that certain commercial and industrial facilities at the Naval Base Guam are already covered by EPA's Multi-Sector General Permit (MSGP) issued in 2015. Construction projects disturbing one or more acres at the Base are likewise covered by EPA's Construction General Permit (CGP), last reissued in January 2017. The draft MS4 permit would also require certain controls on these facilities. DON asked for clarification in dealing with the overlap in permit coverage.

**Response:** EPA's NPDES stormwater program envisions cooperation between NPDES permitting authorities and MS4 operators in the implementation of the programs for controlling pollutants in runoff from industrial/commercial sites and construction sites that enters an MS4. (EPA 833-B92-002). The industrial and commercial facilities at the Naval Base Guam that are currently covered by the MSGP would continue to be covered and comply with the requirements of the MSGP; similarly, construction projects would continue to be covered by the CGP. In implementing the requirements of the MS4 permit, DON would take a second look at control measures being implemented at industrial/commercial facilities (and construction sites)

discharging to the MS4 in accordance with the requirements of the MS4 permit. This additional oversight would enhance the effectiveness of the overall program consistent with the goals of the program.

In response to the issue DON has raised, the preamble to the Phase II stormwater regulations also points out (64 FR 68780) that it would be possible to issue one combination permit covering both MS4 and industrial discharges. However, the permitting authority would need to ensure that the appropriate CWA discharge standards are applied to the different categories of discharges, and such an approach may or may not be advantageous.

3. **Comment:** Table 3 in Part 5.2.2.2 of the draft permit requires composite sampling for most constituents. DON noted that due to the porous soils at military facilities such as the Naval Base Guam, stormwater discharges at outfalls suitable for monitoring are of brief duration, and that only grab samples are practicable. Moreover, since samples would only be required once/year for most constituents, the purchase of automatic sampling equipment would difficult to justify.

**Response:** The issue of composite versus grab sampling for stormwater discharges was evaluated in a 2008 report prepared by the National Research Council (NRC) entitled “Urban Stormwater Management in the United States.” In this report, the NRC conducted a comprehensive review of urban stormwater management in the United States and developed numerous recommendations for improvement. One recommendation was for the use of composite sampling of stormwater discharges in virtually all applications to obtain more accurate data on the quality of the discharges. Region 9 also reviewed several MS4 permits in Region 9, such as Navy Region Hawaii (NPDES permit No. HIS000257), City and County of Honolulu (NPDES permit No. HIS000002), and several MS4 permits in California, and found that composite sampling requirements tended to predominate. In view of the NRC recommendation, and the prevalence of composite sampling in MS4 permits in Region 9, the final permit for DON also requires composite sampling.

Region 9 would also point out that given the definition of composite sample in the permit, composite sampling should still be feasible if only short-term discharges are observed. Individual samples (from which a composite sample would be obtained) must be collected for the first three hours, or for the entire discharge if it is less than three hours, which may be the most common situation at Naval Base Guam. Further, samples may be manually composited as described in an EPA stormwater sampling guide (EPA 833-B-92-001) if the permittee would prefer not to purchase automatic sampling equipment.

4. **Comment:** DON contended that whole effluent toxicity (WET) testing is more appropriate for wastewater treatment facilities than for stormwater discharges. DON noted that MS4 permits in Hawaii do not include WET testing requirements. DON recommended that the WET testing requirements in its Guam MS4 permit be removed.

**Response:** Region 9 disagrees that WET testing is an inappropriate monitoring tool for stormwater discharges, and the final permit retains the proposed WET test requirements. Stormwater has been shown to contain a wide variety of pollutants, including many toxic

pollutants, by numerous studies such as the Nationwide Urban Runoff Program conducted by EPA from 1978-1983. A good summary of runoff data currently available can be found in the National Stormwater Quality Database available at: <http://www.bmpdatabase.org/nsqd.html>; the data continue to show a wide variety of pollutants in the runoff.

As noted in the EPA guidance manual entitled “Technical Support Document for Water Quality-Based Toxics Control” (EPA/505/2-90-001), the toxicants in complex discharges such as stormwater runoff may not all be known, and some toxicants may be missed by a monitoring program that focuses exclusively on chemical-specific testing. WET testing, on the other hand, measures the aggregate effect of all toxicants in a discharge and can be a vital tool for ensuring the ecological integrity of the receiving waters.

Although WET testing may not be required in recent MS4 permits issued by the State of Hawaii, recent MS4 permits in California often do include WET test requirements (e.g., NPDES permit No. CAS004001 for Los Angeles County and No. CAS612008 for the San Francisco Bay area). Region 9 believes these requirements are appropriate and worthwhile for stormwater discharges (and consistent with EPA guidance), and has therefore retained the proposed WET requirements in the final DON permit.

Lastly, we would note that WET monitoring requirements in future MS4 permits for the permittee could be modified if warranted by the results reported during the term of the initial permit.

## **II. Responses to NMFS Comments**

NMFS reviewed the draft MS4 permit pursuant to the Essential Fish Habitat (EFH) provisions of the Magnuson-Stevens Fishery Conservation and Management Act, and the NMFS comments focus on potential impacts to EFH.

1. **Comment:** NMFS indicated that stormwater discharges on Guam have had significant adverse effects on Guam’s marine EFH resources such as coral reefs over the years due to pollutants such as sediment and nutrients. However, NMFS agreed with Region 9’s conclusion that the issuance of the draft permit should have a beneficial effect on EFH, due to the additional controls on pollutant discharges. Moreover, the proposed BMPs in the draft permit for construction and stormwater projects were consistent with NMFS conservation recommendations for such projects.

**Response:** Comment noted.

2. **Comment:** NMFS disagreed with Region 9’s decision to exclude facilities in northern Guam (such as Andersen AFB) from permit coverage, given that studies have shown that surface stormwater discharges on Guam may quickly reach coastal waters via groundwater transport through Guam’s porous soils. NMFS recommended that Region 9 support additional study of this matter and consider wider MS4 permit coverage in the future, if warranted by such studies.

**Response:** As noted in the fact sheet for the draft permit, Region 9 and Guam EPA do

intend to continue to investigate the potential for surface water quality impacts from stormwater percolating into the porous soils of northern Guam. Region 9 would also consider revising the scope of MS4 permit coverage on Guam if new information indicates that would be warranted.

