UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

NPDES PERMIT NO. GUS040001

In compliance with the provisions of the Clean Water Act ("CWA") (Public Law 92-500, as amended, 33 U.S.C. 1251 et seq.), the following discharger is authorized to discharge stormwater runoff and specified non-stormwater discharges from all outfalls from the facility specified below, in accordance with the effluent limits, monitoring requirements, and other conditions set forth in this permit:

Discharger Name	Guam Department of Public Works
Discharger Address	Department of Public Works (DPW) 542 N. Marine Corps Drive Tamuning, Guam 96913
Facility Name	Municipal Separate Storm Sewer System (MS4)
Facility Location Address	DPW MS4 on the Island of Guam
Facility Rating	Minor

This permit was issued on:	December 20, 2018
This permit shall become effective on:	February 1, 2019
This permit shall expire at midnight on:	January 31, 2024

In accordance with 40 CFR 122.21(d), the discharger shall submit a new application for a permit at least 180 days before the expiration date of this permit, unless permission for a date no later than the permit expiration date has been granted by the Director.

Signed this 20th day of December, 2018, for the Regional Administrator.

/s/
Tomás Torres, Director
Water Division

This permit was originally issued on December 20, 2018. As of the date of the signature below, the permit is modified to extend all the deadlines of the programmatic requirements of the permit by 18 months (see Part 3.6.14 and Table 5 of the permit for a summary of the extended deadlines). This modification will become effective on _____, 2021, and will expire on January 31, 2024, the same date as the other provisions of this permit.

Signed for the Regional Administrator,

_____
Tomás Torres, Director
Water Division

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1. Discharges Authorized Under This Permit

1.1 Permit Area. This permit applies to the MS4 operated by the permittee on the Island of Guam, including permittee-owned and operated baseyards and facilities, but it does not cover the portions of Guam that are under the jurisdiction of the military. See Appendix C for a map showing the military area. The requirements of this permit also apply to all additional MS4s owned or operated by the permittee that are constructed in the future within the permit area.

1.2 Authorized Discharges. Subject to the terms of this permit, during the period beginning the effective date of this permit and lasting through the expiration of this permit, the permittee is authorized to discharge stormwater and other non-prohibited discharges from all outfalls of the permittee's MS4.

1.3 Prohibitions – Non-Stormwater Discharges

1.3.1 The permittee shall effectively prohibit all types of non-storm water discharges into its MS4 unless such discharges are either authorized by a separate NPDES permit or not prohibited in accordance with Part 1.3.2.

1.3.2 The following categories of non-storm water discharges (occurring within the jurisdiction of the permittee) are only prohibited if they are identified by the permittee as significant contributors of pollutants to or from the MS4. If any of the following categories of discharges are identified as a significant contributor, the permittee must address the category as an illicit discharge as specified in Part 3.3 of this permit:

a. Water line flushing,
b. Landscape irrigation,
c. Diverted stream flows,
d. Rising ground waters,
e. Uncontaminated ground water infiltration,
f. Uncontaminated pumped groundwater,
g. Discharges from potable water sources,
h. Foundation drains,
i. Air conditioning condensate,*
j. Irrigation water,
k. Springs,
l. Water from crawl space pumps,
m. Footing drains,
n. Lawn watering,
o. Individual residential car washing,
p. Discharges from riparian habitats and wetlands,
q. Dechlorinated swimming pool discharges,*
r. Street wash water,
s. Discharges or flows from emergency firefighting activities,* and
t. Additional discharges which may be developed in accordance with Part 1.3.3 of

this permit.

*Beginning 5.5 years following the permit effective date, discharges of air conditioning condensate, dechlorinated swimming pool discharges, and discharges or flows from emergency firefighting activities must be addressed as illicit discharges in accordance with Part 3.3 of this permit, unless the permittee develops and implements additional BMPs to minimize the potential discharges of pollutants from these discharges into the MS4. Following below are examples of jurisdictions that have already developed BMPs that could serve as models for Guam DPW.

For firefighting runoff, see Appendix L of the 2015 Stormwater Management Plan for the Whitewater River Region, Riverside County, CA available at: http://rcflood.org/downloads/NPDES/Documents/WW_SWMP_WQMP/Jan2015_App_L_FireAgencyBMPs.pdf. For dechlorinated swimming pool water, see the 2012 MS4 permit issued by the Los Angeles Regional Water Board (NPDES permit No. CAS004001), available at: http://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/index.shtml. For air conditioning condensate, see the 2015 Municipal Regional Permit for the San Francisco Bay area available at: http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/stormwater/Municipal/R2-2015-0049.pdf.

1.3.3 The permittee may also develop a list of other similar occasional incidental non-stormwater discharges that it will allow to be discharged into its MS4. These non-stormwater discharges must not be reasonably expected (based on information available to the permittee) to be significant sources of pollutants to the MS4, because of either the nature of the discharges or conditions the permittee has established for allowing these discharges to the MS4. The permittee shall describe in the stormwater management program document any local controls or conditions placed on the discharges, and include a provision describing the prohibition on any individual non-stormwater discharge that is determined to be contributing pollutants to the MS4.

1.3.4 If the permittee allows discharges from non-commercial or charity car washes into the MS4, the permittee shall develop and implement a program to minimize discharges of pollutants into the MS4 from such events. The program must be developed and implemented within 5.5 years of the permit effective date. Examples of jurisdictions where such programs have already been developed that could serve as models for Guam DPW include Alameda County, CA and Sacramento, CA; additional information is available at:

http://www.cleanwaterprogram.org/uploads/IDC%20Car%20Wash%20Flyer.pdf
http://riverfriendlycarwash.org/index.html

2. Stormwater Management Program (SWMP)

2.1 General Requirements. The permittee must develop, implement and enforce a SWMP designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP), to protect water quality and to satisfy the water quality requirements of the Clean Water Act. The SWMP must include management practices; control techniques; system, design, and

engineering methods; and other provisions EPA determines appropriate for the control of pollutants. The SWMP must be implemented throughout the permit area described in Part 1.1 of this permit.

2.2 SWMP Document. The permittee must prepare a written SWMP document and submit the document to Region 9 for review within 3.5 years after the permit effective date. A progress report for the SWMP shall be submitted to Region 9 no later than three years after the permit effective date. The SWMP does not contain effluent limitations; the effluent limitations are contained in Parts 1 through 5 of this permit. The SWMP describes the various BMPs and other activities that the permittee will implement to comply with the effluent limitations.

2.2.1 Contents of the SWMP Document. At a minimum, the permittee must include the following information in its SWMP document:

2.2.1.1 Ordinances, or other regulatory mechanisms, providing the legal authority necessary to implement and enforce the requirements of this permit (see Part 2.3);

2.2.1.2 Statement by the permittee's legal counsel (see Part 2.3.2.11), a list or description of areas where the permittee lacks adequate legal authority to implement specific requirements of this permit (see Part 2.3.1), a description of any new ordinances, regulations, other mechanisms, or planned Memoranda of Understanding to be developed (see Part 2.3.1);

2.2.1.3 An enforcement response plan (Part 2.4);

2.2.1.4 Written procedures describing how the permittee will implement the minimum control measures described in Part 3 of this permit, and the special conditions in Part 4; and

2.2.1.5 A description of the monitoring program required by Part 5 of this permit.

2.2.2 Modifications to the SWMP document. EPA Region 9 may notify the permittee of the need to modify the SWMP document. The permittee must make changes to its SWMP and revise the SWMP document within 90 days of notification. The permittee is required to keep the SWMP document up to date during the term of the permit. Where the permittee determines that modifications are needed to address any procedural, protocol, or programmatic change, such changes must be made as soon as practicable, but not later than 90 days after determining that modifications are needed.

2.3 Adequate Legal Authority

2.3.1 Within three years after the permit effective date, the permittee must review its relevant ordinances or other regulatory mechanisms to identify areas where the permittee currently lacks

legal authority, as described in Part 2.3.2, to implement specific requirements of the permit.[1] [2] After completion of the legal authority review, the permit may be reopened to include revisions and/or compliance schedules for requirements that the permittee does not have direct control of implementing. The permittee must do one or more of following:

Option 1 – request legislation or other mechanisms that would provide Guam DPW with additional legal authority to fully implement all permit requirements, or

Option 2 – enter into a Memorandum of Understanding (MOU) with another entity that would provide that the other entity would implement certain permit requirements on behalf of Guam DPW. If the other entity already has adequate legal authority, the MOU would provide that the other entity would begin implementation upon initiation of the MOU. If necessary, the MOU could also provide that the other entity would seek additional legal authority and then implement a permit requirement on behalf of Guam DPW.

Additional legal authority or regulatory mechanisms, where needed, shall be established as described above as soon as practicable.

2.3.2 To be considered adequate, this legal authority must, at a minimum, address the following:

2.3.2.1 Authority to Prohibit and Eliminate Illicit Discharges. Illicit discharges are defined in Appendix A of this permit. Exceptions to this prohibition are found in Part 1.3.2 and 1.3.3 of this permit.

2.3.2.2 Authority to Prohibit Spills or Other Releases. Control the discharge of spills, and prohibit dumping or disposal of materials other than stormwater into the MS4.

2.3.2.3 Authority to Require Compliance. Require compliance with conditions in the permittee's ordinances, permits, contracts, or orders (i.e., hold dischargers accountable for their contributions of pollutants and flows).

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[1] The permittee is required to implement all requirements of the permit pursuant to the implementation schedules provided in the permit. While the permittee may rely on another entity to implement certain requirements of the permit, the permittee is ultimately responsible for compliance with the permit. A description of any such reliance on another entity must be included in the SWMP.

[2] The legal authority review must also investigate potential entities and mechanisms for implementation of the following: (1) implementation of the requirements of Part 3.6 of this permit for publicly-owned or operated facilities listed in Part 3.6.2.1 that are not owned or operated by the permittee; (2) implementation of a procedure for ensuring long-term maintenance of structural controls that are installed to comply with the post-construction standards of Part 3.5.2 of the permit; and (3) implementation of the requirements of Part 3.7 of this permit for all commercial and industrial sites listed Part 3.7.2.2 of this permit.

2.3.2.4 Authority to Require Installation, Implementation, and Maintenance of Control Measures. Require owners/operators of construction sites, new or redeveloped land, and industrial and commercial facilities to minimize the discharge of pollutants to the MS4 through the installation, implementation, and maintenance of stormwater control measures consistent with the requirements of this permit.

2.3.2.5 Authority to Receive and Collect Information. The permittee must have the authority to request from operators of construction sites, new or redeveloped land, and industrial and commercial facilities information such as stormwater plans, inspection reports, and monitoring results, and other information deemed necessary to assess compliance with this permit. The permittee must also have the authority to review designs and proposals for new development and redevelopment to determine whether adequate stormwater control measures will be installed, implemented, and maintained.

2.3.2.6 Authority to Inspect. The permittee must have the authority to enter all property for the purpose of inspecting at reasonable times any facilities, equipment, practices, or operations related to stormwater discharges to determine whether there is compliance with local stormwater control ordinances/standards or requirements in this permit.

2.3.2.7 Response to Violations. The permittee must have the ability to promptly require that violators cease and desist illicit discharges or discharges of stormwater in violation of any ordinance or standard and/or cleanup and abate such discharges, including the ability to:

2.3.2.7.1 Effectively require the discharger to abate and clean up their discharge, spill, or pollutant release within 48 hours of notification; or

2.3.2.7.2 For uncontrolled sources of pollutants that could pose an environmental threat, require abatement within 30 days of notification; or,

2.3.2.7.3 Perform the clean-up and abatement work and bill the responsible party, if necessary.

2.3.2.7.4 If a situation persists where pollutant-causing sources or activities are not abated, provide the option to order the cessation of activities until such problems are adequately addressed.

2.3.2.7.5 When all parties agree that clean-up activities cannot be completed within the timeframe provided, determine a new timeframe and notify Region 9.

2.3.2.8 Monetary Penalties. The permittee must have the ability to:

2.3.2.8.1 Levy citations or administrative fines against responsible parties either immediately at the site, or within a few days.

2.3.2.8.2 Require recovery and remediation costs from responsible parties.

2.3.2.9 Civil/Criminal Penalties. The permittee must have the ability to impose more substantial civil or criminal sanctions and escalate corrective response, consistent with its enforcement response plan developed pursuant to Part 2.4, for persistent non-compliance, repeat or escalating violations, or incidents of major environmental harm.

2.3.2.10 Interagency Agreements. Control the contribution of pollutants from one MS4 to another MS4 through interagency agreements or other similar agreements with other owners of the MS4, such as the Department of the Navy.

2.3.2.11 The permittee must include as part of its written SWMP document a statement certified by its chief legal counsel that the permittee has taken the necessary steps, as described in Part 2.3.1, to obtain and maintain full legal authority to implement and enforce each of the requirements contained in this permit. This statement must include:

2.3.2.11.1 Identification of all departments within the permittee's jurisdiction that conduct stormwater-related activities and their roles and responsibilities under this permit. Include an up-to-date organizational chart specifying these departments, key personnel, and contact information;

2.3.2.11.2 Identification of the local administrative and legal procedures and ordinances available to mandate compliance with stormwater-related ordinances and therefore with the conditions of this permit;

2.3.2.11.3 A description of how stormwater related-ordinances are implemented and appealed; and

2.3.2.11.4 A description of whether the permittee can issue administrative orders and injunctions, or whether it must go through the court system for enforcement actions.

2.4 Enforcement Measures and Tracking

2.4.1 The permittee must develop and implement within 3.5 years of the permit effective date an enforcement response plan (ERP), which sets out the permittee's potential responses to violations and addresses repeat and continuing violations through progressively stricter responses as needed to achieve compliance. The ERP must describe how and when the permittee will use each of the following types of enforcement responses based on the type of violation:

2.4.2 Verbal Warnings – Verbal warnings are primarily consultative in nature. At a minimum, verbal warnings must specify the nature of the violation and required corrective action.

2.4.3 Written Notices. Written notices of violation (NOVs) must stipulate the nature of the violation and the required corrective action, with deadlines for taking such action.

2.4.4 Escalated Enforcement Measures. The permittee must have the legal ability to employ

any combination of the enforcement actions below (or their functional equivalent), and to escalate enforcement responses where necessary to address persistent non-compliance, repeat or escalating violations, or incidents of major environmental harm:

2.4.4.1 Citations (with Fines). The ERP must indicate when the permittee will assess monetary fines, which may include civil and administrative penalties.

2.4.4.2 Stop Work Orders. The permittee must have the authority to issue stop work orders that require construction activities to be halted, except for those activities directed at cleaning up, abating discharge, and installing appropriate control measures.

2.4.4.3 Withholding of Plan Approvals or Other Authorizations. Where a facility is in non-compliance, the ERP must address how the permittee's own approval process affecting the facility's ability to discharge to the MS4 can be used to abate the violation.

2.4.4.4 Additional Measures. The permittee may also use other escalated measures provided under local legal authorities. The permittee may perform work necessary to improve erosion control measures and collect the funds from the responsible party in an appropriate manner, such as collecting against the project's bond or directly billing the responsible party to pay for work and materials.

2.4.5 Enforcement Tracking. The permittee must track instances of non-compliance (electronic tracking is recommended). The enforcement case documentation must include, at a minimum, the following:

2.4.5.1 Name of owner/operator of facility or site of violation;

2.4.5.2 Location of stormwater source (i.e., construction project, industrial facility);

2.4.5.3 Description of violation;

2.4.5.4 Required schedule for returning to compliance;

2.4.5.5 Description of enforcement response used, including escalated responses if repeat violations occur or violations are not resolved in a timely manner;

2.4.5.6 Accompanying documentation of enforcement response (e.g., notices of noncompliance, notices of violations);

2.4.5.7 Any referrals to different departments or agencies; and

2.4.5.8 Date violation was resolved.

2.4.6 Recidivism Reduction. The permittee is required to identify chronic violators of any ordinance or other regulatory mechanism and reduce the rate of noncompliance recidivism. The

permittee must summarize inspection results by these chronic violators and include incentives, disincentives, or an increased inspection frequency at the operator's sites.

2.5 Ensuring Adequate Resources to Comply with the MS4 Permit

2.5.1 Secure Resources. The permittee must secure the resources necessary to meet all requirements of this permit.

2.5.2 Annual Fiscal Analysis. The permittee must conduct an annual analysis of the capital and operation and maintenance expenditures needed, allocated, and spent as well as the necessary staff resources needed and allocated to meet the requirements of this permit, including any development, implementation, and enforcement activities required. The analysis must include estimated expenditures for the reporting period, the preceding period, and the next reporting period and be submitted with the annual report required by Part 5.4.

2.5.2.1 Each analysis must include a description of the source of funds that are proposed to meet the necessary expenditures, including legal restrictions on the use of such funds.

2.5.2.2 Each analysis must include a narrative description of circumstances resulting in a 25 percent or greater annual change for any budget line items.

2.5.2.3 Each analysis must include a description of the staff resources necessary to meet the requirements of this permit.

3. Minimum Control Measures

3.1 Public Education and Outreach

3.1.1 The permittee must develop and implement a comprehensive stormwater education/outreach program. Within 3.5 years of the permit effective date, the permittee must develop BMPs and measurable goals for the program, and describe those BMPs and measurable goals in the SWMP document. The permittee must implement all BMPs developed in the program beginning 3.5 years after the effective date of the permit. The program must, at a minimum:

3.1.1.1 Define the goals and objectives of the program.

3.1.1.2 Target Island residents, school children, land developers and contractors, commercial and industrial businesses.

3.1.1.3 Develop appropriate educational materials (e.g. the materials can utilize various media such as printed materials, billboard and mass transit advertisements, signage at select locations, radio advertisements, social media, television advertisements, websites);

3.1.1.4 Determine methods and process of distribution;

3.1.1.5 Evaluate the effectiveness of the program; and

3.1.1.6 Utilize public input (e.g., the opportunity for public comment, or public meetings) in the development of the program.

3.1.2 Upon implementation of the program, the permittee must distribute the educational materials, using whichever methods and procedures determined appropriate by the permittee, in such a way that is designed to convey the program's message to a minimum of 20% of the target audience each year.

3.1.3 Within 4.5 years of the effective date of this permit, the permittee shall assess changes in public awareness and behavior resulting from the implementation of the program such as using a statistically valid survey and modify the education/outreach program accordingly.

3.1.4 Beginning 3.5 years after the effective date of the permit, the permittee shall assess its stormwater education/outreach program annually as specified in Part 5.4 of this permit. The permittee must adjust its educational materials and the delivery of such materials to address any shortcomings found as a result of this assessment.

3.1.5 Written procedures for implementing this program must be incorporated into the SWMP document.

3.2 Public Involvement/Participation

3.2.1 The permittee must include the public (i.e., Island residents, developers and contractors, and commercial and industrial businesses) in developing, reviewing and implementing the SWMP. Within 3.5 years of the permit effective date, the permittee must make the SWMP available to the public for comment on the Guam Transportation Program (GTP) website. The permittee must implement all BMPs developed in the program beginning 3.5 years after the effective date of the permit.

3.2.2 The program must include the creation of opportunities for the public to participate in the implementation of stormwater controls (e.g., stream clean-ups, storm drain stenciling, volunteer monitoring, and educational activities).

3.2.3 Written procedures for implementing this program must be incorporated into the SWMP document.

3.3 Illicit Discharge Detection and Elimination (IDDE)

3.3.1 IDDE Program Development. The permittee must develop and implement a program to detect, investigate, and eliminate non-stormwater discharges (see Part 1.3), including illegal dumping, into its system. Within 5.5 years of the permit effective date, the permittee must

develop BMPs and measurable goals for the program. The permittee must implement all BMPs developed in the program beginning 5.5 years after the permit effective date. Written procedures for implementing this program, including the components described in Parts 3.3.1 – 3.3.7, must be incorporated into the SWMP document.

3.3.1.1 The IDDE program must, at a minimum include the following:

3.3.1.1.1 An up-to-date storm sewer system map (see Part 3.3.2);

3.3.1.1.2 Procedures for identifying priority areas within the MS4 likely to have illicit discharges, and a list of all such areas identified in the system (see Part 3.3.3);

3.3.1.1.3 Field screening to detect illicit discharges (see Part 3.3.4);

3.3.1.1.4 Procedures for source investigation and elimination (see Part 3.3.5);

3.3.1.1.5 Public reporting of non-stormwater discharges and spills (see Part 3.3.6); and

3.3.1.1.6 Illicit discharge education and training (see Part 3.3.7)

3.3.1.2 In implementing the IDDE program, the permittee may conduct the necessary investigations, contract for investigation, coordinate with storm drain investigation activities of others, or use any combination of these approaches.

3.3.1.3 If illicit connections or illicit discharges are observed related to another operator's municipal storm sewer system then the permittee must notify the other operator within 48 hours of discovery.

3.3.1.4 If another operator notifies the permittee of an illegal connection or illicit discharge to the municipal separate storm sewer system then the permittee must follow the requirements specified in Part 3.3.5.4.

3.3.2 MS4 Mapping. Within 4.5 years of the permit effective date, the permittee must develop a complete, up-to-date and accurate storm sewer system map. The map must be geographic information system (GIS) based. The map due within 4.5 years may be restricted to surface features and subsurface features for which as-built plans are currently available; within 4.5 years of the permit effective date, the permittee must also develop and implement a plan for mapping undocumented features as accurately as practicable; the plan must include a schedule leading to a complete map within 6 years of the permit effective date. The map must be updated as necessary at least annually.

3.3.2.1 The storm sewer system map must show the following, at a minimum:

3.3.2.1.1 Jurisdictional boundaries of the permittee's facilities;

3.3.2.1.2 Land use overlay for the areas under the permittee's jurisdiction;

3.3.2.1.3 The location of all MS4 outfalls and drainage areas contributing to those outfalls that are operated by the permittee, and that discharge within the permittee's jurisdiction to a water of the U.S.;

3.3.2.1.4 The location (and name, where known to the permittee) of all waters of the U.S. receiving discharges from the permittee's outfalls. Each mapped outfall must be given an individual alphanumeric identifier, which must be noted on the map. The outfalls must be located using a geographic position system (GPS) and photographs should be taken to provide baseline information and track operation & maintenance needs over time.

3.3.2.1.5 The location of all points at which the permittee's MS4 interconnects with other MS4s and the drainage areas contributing to those points of interconnection;

3.3.2.1.6 Geographic areas (if any) served by the permittee's MS4 that do not discharge to a water of the U.S., either directly or indirectly through an MS4 operated by another entity.

3.3.2.1.7 Priority outfalls identified under Part 3.3.3; and

3.3.2.2 A copy of the storm sewer system map must be available onsite for review by the permitting authority.

3.3.3 Identification of Priority Outfalls. The permittee shall evaluate all outfalls and identity as priority outfalls within 4.5 years of the permit effective date. Priority outfalls include any outfall that has any of the areas described below in the drainage area for the outfall:

3.3.3.1 Areas with older infrastructure that are more likely to have illicit connections;

3.3.3.2 Industrial, commercial, or mixed use areas;

3.3.3.3 Areas with a history of past illicit discharges;

3.3.3.4 Areas with a history of illegal dumping;

3.3.3.5 Areas with onsite sewage disposal systems;

3.3.3.6 Areas with older sewer lines or with a history of sewer overflows or cross-connections;

3.3.3.7 Areas upstream of sensitive waterbodies; and

3.3.3.8 All other areas that may discharge significant quantities of pollutants directly to waters of the U.S. or indirectly through the MS4 operated by another entity.

3.3.3.9 The permittee must document in the SWMP document the basis for its selection of each

priority outfall and create a list of all priority outfalls identified in the system. This priority outfall list must be updated annually to reflect changing priorities and be available for review by the permitting authority. The initial selection of priority outfalls may be based on the based information available at that time.

3.3.4 Field Screening

3.3.4.1 The IDDE program must include written dry weather field screening protocols designed to detect and eliminate illicit discharges to the MS4. The protocols must be incorporated into the permittee's SWMP document. Dry weather field screening consists of (1) field observations; and (2) analytical monitoring.

3.3.4.2 Beginning in year three of the permit term, the permittee shall conduct dry weather field screening. At a minimum, the permittee must:

3.3.4.2.1 Following the start of the implementation of the field screening program, conduct dry weather field screening at each priority outfall identified above in Part 3.3.3 at least once annually; for all other MS4 outfalls conduct dry weather field screening for a minimum rate of 20% of the total outfalls each year.

3.3.4.2.2 Analyze discharges according to requirements outlined in Part 3.3.4.2.2.1 and 3.3.4.2.2.2 below if flow or ponded runoff is observed at an outfall and there has been at least seventy-two (72) hours of dry weather. The permittee must also record general information such as time since last rain, quantity of last rain, site descriptions (e.g., conveyance type, dominant watershed land uses), flow estimation (e.g., width of water surface, approximate depth of water, approximate flow velocity, flow rate), and visual observations (e.g., odor, color, clarity, floatables, deposits/stains, vegetation condition, structural condition, and biology).

3.3.4.2.2.1 Dry Weather Monitoring Requirements. The permittee is required to analyze for the following constituents: ammonia, conductivity, surfactants, pH and enterococcus. Field sampling techniques[3] may be used except for enterococcus for which samples must be collected and analyzed consistent with the procedures required by 40 CFR Part 136.

3.3.4.2.2.2 The benchmark concentration levels in Table 1 below for dry weather monitoring must be used whereby exceedance of the benchmark will require follow-up investigations to be conducted to identify and eliminate the source causing the exceedance of the benchmark.

Table 1 – Dry Weather Field Screening Benchmark Levels

[3] For appropriate field test methods, see document entitled "Illicit Discharge Detection and Elimination, A Guidance Manual for Program Development and Technical Assessments", Center for Watershed Protection, 2004.

Indicator	Benchmark
Ammonia (Total)	> 50 mg/l
Conductivity	>2000 uS/cm
Surfactants	>0.25 mg/l
pH	<6.5 or >8.5 s.u. (marine waters) <6.5 or >9 s.u. (surface waters)
Enterococcus	Same Table 2

3.3.4.2.3 Conduct a follow-up investigation under Part 3.3.5 if the benchmarks associated with the constituents listed above in Parts 3.3.4.2.2.1 or 3.3.4.2.2.2 are exceeded; and

3.3.4.2.4 Maintain records of all applicable observations and monitoring results.

3.3.4.3 The permittee must assess its IDDE program once during the term of the permit to determine if updates are needed. Where updates are found to be necessary, the permittee must propose such changes with the permit reapplication.

3.3.5 IDDE Source Investigation and Elimination

3.3.5.1 The IDDE program must include written procedures for conducting investigations into the source of all identified illicit discharges, including approaches to requiring such discharges to be eliminated.*

*Note: Guidance for implementing these requirements can be found in the 2004 document entitled "Illicit Discharge Detection and Elimination, A Guidance Manual for Program Development and Technical Assessments", published by the Center for Watershed Protection, and available at: https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater-documents. Additional guidance can be found in the 2004 document entitled "Source Verification of Inappropriate Discharges to Storm Drainage Systems" prepared by Robert Pitt, Soumya Chaturvedula, Verra Karri and Yukio Nara of the University of Alabama.

3.3.5.2 Minimum Investigation Requirements. At a minimum, the permittee is required to conduct an investigation(s) to identify and locate the source of any continuous or intermittent non-stormwater discharge within 12 hours of becoming aware of the illicit discharge.

3.3.5.2.1 Illicit discharges suspected of being sanitary sewage and/or significantly contaminated must be investigated first.

3.3.5.2.2 Investigations of illicit discharges suspected of being cooling water, wash water, or natural flows may be delayed until after all suspected sanitary sewage and/or significantly contaminated discharges have been investigated, eliminated and/or resolved.

3.3.5.2.3 The permittee must report immediately the occurrence of any dry weather flows believed to be an immediate threat to human health or the environment to the appropriate emergency contact phone number.

3.3.5.2.4 The permittee must track all investigations to document at a minimum the date(s) the illicit discharge was observed; the results of the investigation; any follow-up of the investigation; and the date the investigation was closed.

3.3.5.3 Determining the Source of the Illicit Discharge. The permittee is required to determine and document through its investigations, carried out in Part 3.3.5.1, the source of all illicit discharges. If the source of the illicit discharge is found to be a discharge authorized under an NPDES permit, no further action is required.

3.3.5.3.1 If an illicit discharge is found, but within six (6) months of the beginning of the investigation neither the source nor the same non-stormwater discharge has been identified/observed, then the permittee must maintain written documentation for review by the permitting authority.

3.3.5.3.2 If the observed discharge is intermittent, the permittee must document that a minimum of three (3) separate investigations were made to observe the discharge when it was flowing. If these attempts are unsuccessful, the permittee must maintain written documentation for review by the permitting authority. However, since this is an ongoing program, the permittee should periodically recheck these suspected intermittent discharges.

3.3.5.4 Corrective Action to Eliminate Illicit Discharge. Once the source of the illicit discharge has been determined, the permittee must immediately notify the responsible party of the problem, and require the responsible party to conduct all necessary corrective actions to eliminate the non-stormwater discharge within 7 days. The permittee must implement the ERP to address illicit discharges. Upon being notified that the discharge has been eliminated, the permittee must conduct a follow-up investigation and field screening, consistent with Part 3.3.4, to verify that the discharge has been eliminated. The permittee is required to document its follow-up investigation. The permittee may seek recovery and remediation costs from responsible parties or require compensation for the cost of field screening and investigations.

3.3.6 Public Reporting of Non-Stormwater Discharges and Spills

3.3.6.1 The IDDE program must promote, publicize, and facilitate public reporting of illicit discharges or water quality impacts associated with discharges into or from MS4s through a central contact point, including phone numbers for complaints and spill reporting, and publicize to both internal permittee staff and the public. If 911 is selected, the permittee must also create, maintain, and publicize a staffed, non-emergency phone number with voicemail, which is checked daily during regular business hours.

3.3.6.2 The permittee must develop a written spill/dumping response procedure, and a flow chart or phone tree, or similar list for internal use, that shows the procedures for responding to public notices of illicit discharges, the various responsible agencies and their contacts, and who would be involved in illicit discharge incidence response, even if it is a different entity other than the permittee.

3.3.6.3 The permittee must conduct reactive inspections in response to complaints and follow-up inspections as needed to ensure that corrective measures have been implemented by the responsible party to achieve and maintain compliance.

3.3.7 Illicit Discharge Education & Training

3.3.7.1 The IDDE program must include training for all field staff, who, as part of their normal job responsibilities, may come into contact with or otherwise observe an illicit discharge or illicit connection to the storm sewer system. Contact information, including the procedure for reporting an illicit discharge, must be included in the permittee's fleet vehicles that are used by field staff. Training program documents must be available for review by the permitting authority.

3.3.7.2 Not later than 5.5 years from the effective date of this permit, the permittee must train all staff identified in Part 3.3.7.1 above on the identification of an illicit discharge or connection, and on the proper procedures for reporting and responding to the illicit discharge or connection. Follow-up training must be provided as needed to address changes in procedures, techniques, or staffing. The permittee must document and maintain records of the training provided and the staff trained.

3.4 Construction Site Runoff Control

3.4.1 General Requirements. The permittee must develop and implement a construction site management program to reduce to the MEP the discharge of pollutants from both private and public construction projects (i.e., contract, in-house and encroachment). The construction site runoff control program shall be consistent with requirements of Guam Soil Erosion and Sediment Control Regulations (Title 22 of Guam Annotated Rules and Regulations (GAR): GEPA, Chapter 10) dated October 2000, the 2006 CNMI and Guam Stormwater Management Manual, and the requirements of this permit set forth in Parts 3.4.1 through 3.4.6.

The requirements of Guam Soil Erosion and Sediment Control Regulations and the 2006 CNMI and Guam Stormwater Management Manual must be implemented upon the effective date of this permit. Within 4.5 years of the permit effective date, the permittee shall develop additional BMPs and measurable goals to comply with Parts 3.4.1 through 3.4.6 of the permit. The permittee must implement all BMPs developed in the program beginning 4.5 years after the effective date of the permit. Written procedures for implementing this program, including the components described in Parts 3.4.1 – 3.4.6, must be incorporated into the SWMP document.

"Construction activity" for this permit includes, at a minimum, all public and private construction (i.e., contract, in-house and encroachment) sites that result in a total land disturbance of one or more acres or that result in a total land disturbance of less than one acre if part of a larger common plan or development or sale.

3.4.1.1 Erosion and Sediment Controls. Design, install and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, such

controls must be designed, installed and maintained to:

3.4.1.1.1 Control stormwater volume and velocity within the site to minimize soil erosion;

3.4.1.1.2 Control stormwater discharges, including both peak flow rates and total stormwater volume, to minimize erosion at outlets and to minimize downstream channel and stream bank erosion;

3.4.1.1.3 Minimize the amount of soil exposed during construction activity;

3.4.1.1.4 Minimize the disturbance of steep slopes;

3.4.1.1.5 Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site;

3.4.1.1.6 Provide and maintain natural buffers around surface waters, direct stormwater to vegetated areas to increase sediment removal and maximize stormwater infiltration, unless infeasible; and

3.4.1.1.7 Minimize soil compaction and, unless infeasible, preserve topsoil.

3.4.1.2 Soil Stabilization. Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. Stabilization must be completed within a period of time determined by the permittee.

3.4.1.3 Dewatering. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are prohibited unless managed by appropriate controls.

3.4.1.4 Pollution Prevention Measures. Design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented and maintained to:

3.4.1.4.1 Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;

3.4.1.4.2 Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater; and

3.4.1.4.3 Minimize the discharge of pollutants from spills and leaks and implement chemical

spill and leak prevention and response procedures.

3.4.1.5 Prohibited Discharges. The following discharges are prohibited:

3.4.1.5.1 Wastewater from washout of concrete, unless managed by an appropriate control;

3.4.1.5.2 Wastewater from washout and cleanout of stucco, paint, from release oils, curing compounds and other construction materials;

3.4.1.5.3 Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and,

3.4.1.5.4 Soaps or solvents used in vehicle and equipment washing.

3.4.1.6 Surface Outlets. When discharging from basins and impoundments, utilize outlet structures that withdraw water from the surface, unless infeasible.

3.4.2 Construction Site Inventory

3.4.2.1 The permittee must develop and maintain an inventory of all active public and private construction sites that result in a total land disturbance of one or more acres (electronic tracking is recommended). The inventory must be continuously updated as new projects are permitted and projects are completed. The inventory must contain relevant contact information for each project (e.g., name, address, phone, etc.), the size of the project and area of disturbance, whether the project has submitted for permit coverage under the NPDES general construction permit for Guam (NPDES permit No. GUR100000), the permit tracking number issued by EPA, and the date the permittee issued a Clearing and Grading Permit[4] in accordance with Part 3.4.3. The permittee must make it available to the permitting authority upon request.

3.4.3 Construction Plan Review Procedures

3.4.3.1 The permittee must require each operator of a construction activity to comply with the requirements of the Clearing and Grading Permit prior to the disturbance of land. The permittee must make it clear to operators of construction activity that they are prohibited from commencing construction activity until they receive receipt of written approval of the plans. If the construction plans are revised, the permittee must review and approve those revisions.

3.4.3.2 The permittee must implement site plan review procedures that ensure compliance with the following minimum requirements:

3.4.3.2.1 The permittee must not approve any Clearing and Grading Permit unless it requires

[4] Per Title 21 of the Guam Code Annotated, Real Property, Chapter 66: Building Law, Article 2, Section 66202.1

appropriate site-specific construction site control measures that meet the minimum requirements in Part 3.4.1.1 of this permit.

3.4.3.2.2 The stormwater pollution prevention plan (SWPPP) developed pursuant to the Guam NPDES general construction permit (NPDES permit No. GUR100000) may substitute for the requirements of the Clearing and Grading Permit where a SWPPP is developed pursuant to NPDES permit No. GUR100000. The permittee is responsible for reviewing those portions of the SWPPP that comply with the permittee's Clearing and Grading Permit.

3.4.3.2.3 The permittee's approval of a Clearing and Grading Permit must include the rationale for approval of the selected control measures, including how the control measure protects a waterway or stormwater conveyance.

3.4.3.2.4 The permittee must use qualified individuals, knowledgeable in the technical review of application of a Clearing and Grading Permit to conduct such reviews.

3.4.3.2.5 The permittee must document its review and approval of each Clearing and Grading Permit using a checklist or similar type of form.

3.4.4 Construction Site Inspections and Enforcement

3.4.4.1 The permittee must conduct inspections of all construction projects at least quarterly.

3.4.4.2 The permittee must also identify a list of priority construction projects for which more frequent inspections would be appropriate, based on threat to water quality. In evaluating the threat to water quality, the following factors must be considered: soil erosion potential; site slope; project size and type; sensitivity of receiving waterbodies; proximity to receiving waterbodies; non-stormwater discharges; and past record of non-compliance by the operators of the construction site. The priority construction projects must be inspected at a frequency determined by the permittee to be appropriate to ensure protection of the receiving waters.

3.4.4.3 The permittee must adequately inspect all phases of construction.

3.4.4.3.1 Prior to Land Disturbance: Prior to allowing an operator to commence land disturbance, the permittee must perform an inspection to ensure all necessary erosion and sediment controls are in place.

3.4.4.3.2 During Active Construction. During active construction, the permittee is required to conduct inspections in accordance with the frequencies determined under Parts 3.4.4.1 and 3.4.4.2 of this permit.

3.4.4.3.3 Following Active Construction. At the conclusion of the project, the Permittee must inspect all projects to ensure that all graded areas have reached final stabilization and that all temporary control measures are removed (e.g., silt fence).

3.4.4.4 The permittee must have trained and qualified inspectors (See Part 3.4.5). The permittee must also develop, and revise as necessary, written procedures outlining the inspection and enforcement procedures. Inspections of construction sites must, at a minimum:

3.4.4.4.1 Check for coverage under the EPA construction general NPDES permit (Permit No. GUR100000) by requesting a copy of any application or Notice of Intent (NOI) or other relevant application form during initial inspections.

3.4.4.4.2 Review the requirements of the Clearing and Grading Permit and conduct a thorough site inspection to determine if control measures have been selected, installed, implemented, and maintained according to the plan.

3.4.4.4.3 Assess compliance with the permittee's ordinances and permits related to stormwater runoff, including the implementation and maintenance of designated minimum control measures.

3.4.4.4.4 Assess the appropriateness of planned control measures and their effectiveness.

3.4.4.4.5 Visually observe and record non-stormwater discharges, potential illicit connections, and potential discharge of pollutants in stormwater runoff.

3.4.4.4.6 Provide education and outreach on stormwater pollution prevention, as needed.

3.4.4.4.7 Provide a written or electronic inspection report generated from findings in the field.

3.4.4.5 The permittee must track the number of inspections for the inventoried construction sites throughout the reporting period to verify that the sites are inspected at the minimum frequencies required. Inspection findings must be documented and maintained for review by the permitting authority.

3.4.4.6 Based on site inspection findings, the permittee must take all necessary follow-up actions (i.e., re-inspection, enforcement) to ensure compliance in accordance with the permittee's enforcement response plan required in Part 2.4. These follow-up and enforcement actions must be tracked and maintained for review by the permitting authority.

3.4.5 Permittee Staff Training

3.4.5.1 The permittee must ensure that all staff whose primary job duties are related to implementing the construction stormwater program, including permitting, plan review, construction site inspections, and enforcement, are trained to conduct these activities. The training can be conducted by the permittee or outside training can be attended, however, this training must include, at a minimum:

3.4.5.1.1 Erosion and Sediment Control/Stormwater Inspectors:

3.4.5.1.1.1 Initial training, beginning no later than 3.5 years after the permit effective date,

regarding proper control measure selection, installation, implementation, and maintenance, as well as administrative requirements such as inspection reporting/tracking and use of the permittee's enforcement responses; and

3.4.5.1.1.2 Annual refresher training for existing inspection staff to update them on preferred controls, regulation changes, permit updates, and policy or standards updates. Throughout the year, e-mails and/or memos must be sent out to update the inspectors as changes happen.

3.4.5.1.2 Other Construction Inspectors: Initial training must be held beginning no later than 3.5 years after the permit effective date, on general stormwater issues, basic control measure implementation information, and procedures for notifying the appropriate personnel of noncompliance. Refresher training held at least once every two years.

3.4.5.1.3 Plan Reviewers:

3.4.5.1.3.1 Initial training, beginning no later than 3.5 years after the permit effective date, regarding control measure selection, design standards, and review procedures; and

3.4.5.1.4.1 Annual training regarding new control measures, innovative approaches, permit updates, regulation changes, and policy or standard updates.

3.4.5.1.5 Third-Party Inspectors and Plan Reviewers: If the permittee utilizes outside parties to conduct inspections and/or review plans, these outside staff must be trained per the requirements listed in Part 3.4.5.1.1 (above).

3.4.6 Construction Site Operator Education & Public Involvement

3.4.6.1 Construction Operator Education. The permittee must develop and distribute educational materials to construction site operators as follows:

3.4.6.1.1 Each year, the permittee must either provide information on existing training opportunities or develop new training for construction operators on control measure selection, installation, implementation, and maintenance as well as overall program compliance.

3.4.6.1.2 The permittee must develop or utilize existing outreach tools (i.e. brochures, posters, website, plan notes, manuals etc.) aimed at educating construction operators on appropriate selection, installation, implementation, and maintenance of stormwater controls, as well as overall program compliance.

3.4.6.1.3 The permittee must make available appropriate outreach materials to all construction operators who will be disturbing land within the MS4 boundary. The permittees' contact information and website must be included in these materials.

3.4.6.1.4 The permittee must include information on appropriate selection, installation, implementation, and maintenance of controls, as well as overall program compliance, on the

permittee's existing website.

3.4.6.2 Public Involvement.

3.4.6.2.1 The permittee must adopt and implement procedures for receipt and consideration of information submitted by the public regarding construction projects. This includes, but is not limited to, the public reporting mechanisms described in Part 3.3.6.

3.5 Post-Construction Stormwater Management for New Developments and Redevelopments

3.5.1 General Requirements. The permittee must develop and implement a program to control stormwater discharges from new development and redevelopment sites that is consistent with the performance standards set forth in the documents found in Part 3.5.2, and that is applicable to projects described in these documents. The permittee must ensure consistency with the standards in Part 3.5.2 upon the effective date of this permit. Within 5.5 years of the permit effective date, the permittee must develop additional BMPs and measurable goals to comply with Parts 3.5.3 through 3.5.6. The permittee must implement all BMPs developed for Parts 3.5.3 through 3.5.6 beginning 5.5 years after the effective date of the permit. Written procedures for implementing this program, including the components described in Parts 3.5.2 – 3.5.7, must be incorporated into the SWMP document.

3.5.2 Site Performance Standards. The program must ensure the design, installation, implementation and maintenance of post-construction stormwater control measures from new development and redeveloped sites discharging to the MS4 consistent with the following:*

3.5.2.1 2006 CNMI and Guam Stormwater Management Manual; and

3.5.2.2 2010 Guam Transportation Stormwater Drainage Manual.

*Note: If these manuals are updated during the term of the permit, the updated manuals may also be used.

3.5.2.3 In reviewing and approving site plans in accordance with Parts 3.5.2.1 and 3.5.3, the permittee must prioritize post-construction control practices in favor of those that infiltrate, evapotranspire or harvest/reuse stormwater runoff. Management practices that treat and release stormwater are not allowed unless a project proponent demonstrates that practices that infiltrate, evapotranspire or harvest/reuse stormwater are not feasible for a given project.

3.5.3 Site Plan Review

3.5.3.1 To ensure that all applicable new development and redeveloped sites conform to the performance standards required in Part 3.5.2, the permittee must implement project review, approval, and enforcement procedures that include:

3.5.3.1.1 Procedures for the site plan review and approval process(es) that include inter-departmental consultations, as needed, and a required re-approval process when changes to an approved plan are desired; and

3.5.3.1.2 A requirement for submittal of 'as-built' certifications within 90 days of completion of a project.

3.5.3.2 The permittee must conduct site plan reviews, using the procedures described in Part 3.5.3.1, for all new development and redevelopment sites described in the documents found in Part 3.5.2 and that discharge to the MS4. The site plan review must specifically address how the project applicant meets the performance standards in Part 3.5.2 and how the project will ensure long-term maintenance as required in Part 3.5.4.

3.5.4 Long-Term Maintenance of Post-Construction Stormwater Control Measures

3.5.4.1 All structural stormwater control measures installed and implemented to meet the performance standards of Part 3.5.2 must be maintained in perpetuity. The permittee must ensure the long-term maintenance of structural stormwater control measures installed according to this Part as described in Part 3.6.7 of this permit.

3.5.5 Tracking of Post-Construction Stormwater Control Measures

3.5.5.1 Inventory of Post-Construction Stormwater Control Measures. The permittee must maintain an inventory of all post-construction structural stormwater control measures installed and implemented at new development and redeveloped sites, including both public and private sector sites with connections to the MS4 located within the permit area. The inventory must be searchable by property location (electronic tracking is recommended). New entries to the inventory must be made during the site plan review and approval process in Part 3.5.3.1.

3.5.5.2 Tracking Information. Each entry to the inventory must include basic information on each project, such as project name, owner's name and contact information, location, start/end date, etc. In addition, inventory entries must include the following for each project:

3.5.5.2.1 Short description of each stormwater control measure (type, number, design or performance specifications);

3.5.5.2.2 Latitude and longitude coordinates of each stormwater control measure;

3.5.5.2.3 Short description of maintenance requirements (frequency of required maintenance and inspections); and

3.5.5.2.4 Inspection information (date, findings, follow up activities, prioritization of follow-up activities, compliance status).

3.5.5.3 Based on inspections conducted under Part 3.5.6, the permittee must update the inventory

as appropriate where changes occur in property ownership or the specific control measures implemented at the site. This inventory must be maintained and available for review by the permitting authority.

3.5.6 Inspections and Enforcement

3.5.6.1 Inspection Frequency. To ensure that all stormwater control measures are operating correctly and are being maintained as required consistent with its applicable maintenance agreement, the permittee must conduct inspections of each project site covered under Part 3.5.2 performance standards at least one time during the permit term. A description of inspection procedures must be developed and be included in the SWMP document.

3.5.6.2 Post-Construction Inspection. Within 1 week of completion of construction of any project required to meet the Part 3.5.2 performance standards, the permittee must conduct a post-construction inspection to verify that the permittee's performance standards have been met. The permittee must include in its SWMP a procedure for being notified by construction operators/owners of their completion of active construction so that the post-construction inspection may be conducted.

3.5.6.3 Inspection Reports. The permittee must document its inspection findings in an inspection report. Each inspection report must include:

3.5.6.3.1 Inspection date;

3.5.6.3.2 Name and signature of inspector;

3.5.6.3.3 Project location (street address, latitude/longitude, etc.) and inventory reference number (from inventory established in Part 3.5.5.1)

3.5.6.3.4 Current ownership information (for example, name, address, phone number, fax, and email)

3.5.6.3.5 A description of the condition of the structural stormwater control measure including the quality of: vegetation and soils; inlet and outlet channels and structures; embankments, slopes, and safety benches; catch basins; spillways, weirs, and other control structures; and sediment and debris accumulation in storage and forebay areas as well as in and around inlet and outlet structures;

3.5.6.3.6 Photographic documentation of all critical structural stormwater control measure components; and

3.5.6.3.7 Specific maintenance issues or violations found that need to be corrected by the property owner or operator along with deadlines and reinspection dates.

3.5.6.4 The permittee must document and maintain records of inspection findings and

enforcement actions and make them available for review by the permitting authority.

3.5.7 Retrofit Plan

3.5.7.1 The permittee must develop and implement a plan to retrofit existing developed sites that are impacting water quality. The retrofit plan must be developed and submitted within 6 years of the permit effective date. The plan must emphasize controls that infiltrate, evapotranspire, or harvest and use stormwater discharges. Written procedures for implementing this plan must be incorporated into the SWMP document. The plan must include:

3.5.7.1.1 An inventory of potential retrofit locations, which considers, at a minimum:

- Locations that contribute pollutants of concern to an impaired waterbody
- Locations that contribute to receiving waters that are significantly eroded
- Locations that are tributary to a sensitive ecosystem or protected area
- Locations that are tributary to areas prone to flooding

3.5.7.1.2 An evaluation and ranking of the inventoried locations to prioritize retrofitting which includes, at a minimum:

- Feasibility
- Cost effectiveness
- Pollutant removal effectiveness
- Impervious area potentially treated
- Maintenance requirements
- Landowner cooperation
- Neighborhood acceptance
- Aesthetic qualities, and
- Efficacy at addressing concern.

3.6 Pollution Prevention/Good Housekeeping for DPW Operations

3.6.1 Program Development. The permittee must develop and implement a program to minimize pollutants discharges from DPW facilities through good housekeeping and pollution prevention. The permittee shall develop BMPs and measurable goals for the program in accordance with the Schedule of Compliance in Part 3.6.14. The permittee must implement all BMPs developed in the program in accordance with the dates provided in Part 3.6.14. Written procedures for implementing this program, including the components described in Parts 3.6.2 – 3.6.13, must be incorporated into the SWMP document.

3.6.2 DPW Facility and Controls Inventory

3.6.2.1 Development of a DPW Facility and Stormwater Control Inventory. The permittee must develop and maintain an inventory of DPW-owned or operated facilities and stormwater

controls, including but not limited to the following:

- Composting facilities
- Equipment storage and maintenance facilities
- Fuel farms
- Hazardous waste disposal facilities
- Hazardous waste handling and transfer facilities
- Incinerators
- Landfills
- Landscape maintenance on DPW property
- Materials storage yards
- Pesticide storage facilities
- Public buildings, including schools, libraries, police stations, fire stations, DPW buildings, and similar buildings
- Public parking lots
- Public golf courses
- Public swimming pools
- Public works yards
- Recycling facilities
- Solid waste handling and transfer facilities
- Street repair and maintenance sites
- Vehicle storage and maintenance yards
- DPW-owned and/or maintained structural stormwater controls

3.6.2.2 Documentation. The inventory of DPW-owned or operated facilities and stormwater controls must be maintained and available for review by the permitting authority.

3.6.2.3 Mapping. On a map of the area covered by the MS4 permit, the permittee must identify where the DPW-owned or operated facilities and stormwater controls are located. The map must identify the stormwater outfalls corresponding to each of the facilities as well as the receiving waters to which these facilities discharge. The permittee must also identify the manager of each facility and their contact information. The map must be maintained and updated regularly and be available for review by the permitting authority. Incorporation of facility information into the GIS required by Part 3.3.2 of the permit is recommended.

3.6.3 Facility Assessment

3.6.3.1 DPW-Owned or Operated Facility Assessment

3.6.3.1.1 Comprehensive Assessment of Pollutant Discharge Potential. The permittee must conduct a comprehensive assessment of each DPW-owned or operated facilities identified in Part 3.6.2.1 annually for their potential to discharge in stormwater the following typical urban pollutants: sediment, nutrients, metals, hydrocarbons (e.g., benzene, toluene, ethylbenzene and xylene), pesticides, chlorides, and trash. Other pollutants may be associated with, but not

generated directly from, the DPW-owned or operated facilities, such as bacteria, chlorine, organic matter, etc. Therefore, the permittee must determine additional pollutants associated with its facilities that could be found in stormwater discharges. A description of the assessment process must be included in the SWMP document. This assessment must be updated annually.

3.6.3.1.2 Identification of "High Priority" Facilities. Based on the Part 3.6.3.1.1 comprehensive assessment, the permittee must identify as "high-priority" those facilities that have a high potential to generate stormwater pollutants. Among the factors that must be considered in giving a facility a high priority ranking is the amount of pollutants stored at the site, the identification of improperly stored materials, activities such as vehicle or equipment maintenance or washing, proximity to waterbodies, poor housekeeping practices, and discharge of pollutant(s) of concern to impaired water(s). High priority facilities must include the permittee's maintenance yards, hazardous waste facilities, fuel storage locations, and any other facilities at which chemicals or other materials have a high potential to be discharged in stormwater.

3.6.3.1.3 Documentation of Comprehensive Assessment Results. The permittee must document the results of the assessments and maintain copies of all site evaluation checklists used to conduct the comprehensive assessment. The documentation must include the results of the permittee's initial assessment, any identified deficiencies and corrective actions taken, and a list of the "high priority" facilities identified per Part 3.6.3.1.2.

3.6.4 Development of Facility-Specific Stormwater Management Standard Operating Procedures (SOPs) and Implementation of Facility Stormwater Controls

3.6.4.1 Facility-Specific Stormwater Management SOPs for "High Priority" Facilities

3.6.4.1.1 For each "high priority" facility or operation identified in Part 3.6.3.1.2, the permittee must develop a site-specific SOP that identifies stormwater controls (i.e., structural and non-structural controls, and operational improvements) to be installed, implemented, and maintained to minimize the discharge of pollutants in stormwater. At a minimum, the facility-specific SOP must include the stormwater control measures described below in Part 3.6.4.2, as well as inspection and visual monitoring procedures and schedules described in Part 3.6.4.3.

3.6.4.1.2 A copy of the facility-specific stormwater management SOP must be maintained and be available for review by the permitting authority. The SOP must be kept on-site at each of the DPW-owned or operated facilities' offices for which it was completed. The SOP must be updated as necessary.

3.6.4.1.3 The permittee must install, implement, and maintain all stormwater controls required per Part 3.6.4.2 of this permit and included in the facility's site-specific SOP.

3.6.4.2 Stormwater Controls for "High Priority" Facilities. The following stormwater controls must be implemented at all "high priority" DPW-owned or operated facilities identified in Part 3.6.3.1.2. A description of any controls included in this part and any standard operating

procedures developed to comply with this part must be included as part of the of each facility's SOP:

3.6.4.2.1 General Good Housekeeping. The following good housekeeping practices must be implemented for all facilities identified as "high priority":

3.6.4.2.1.1 The permittee must keep all DPW-owned or operated facilities neat and orderly, minimizing pollutant sources through good housekeeping procedures and proper storage of materials.

3.6.4.2.1.2 Materials exposed to stormwater must be covered where feasible (without creating additional impervious surfaces, if possible).

3.6.4.2.2 Fueling Operations. The permittee must implement standard operating procedures for vehicle fueling and receiving of bulk fuel deliveries at DPW-owned or operated facilities with the goal of reducing the likelihood of spills, and providing spill controls in the event that accidental spills do occur.

3.6.4.2.3 Vehicle Maintenance. The permittee must implement an SOP for vehicle maintenance and repair activities that occur at DPW-owned or operated facilities with the goal of reducing the likelihood of spills or releases and providing controls in the event that accidental spills do occur. The SOPs must include regular inspections of all maintenance areas and activities.

3.6.4.2.4 Equipment and Vehicle Washing. The discharge of equipment and vehicle wash wastewater to the MS4 or directly to receiving waters from DPW facilities is prohibited. The permittee may meet this requirement by either installing a vehicle wash reclaim system, capturing and hauling the wastewater for proper disposal, connecting to sanitary sewer (where applicable and approved by local authorities), ceasing the activity, and/or applying for and obtaining a separate NPDES permit.

3.6.4.3 Inspections and Visual Monitoring

3.6.4.3.1 Weekly Visual Inspections. The permittee must perform weekly visual inspections to ensure materials and equipment are clean and orderly, and to minimize the potential for pollutant discharge. The permittee must look for evidence of spills and immediately clean them up to prevent contact with precipitation or runoff. The weekly inspections must be tracked in a log for every facility, and records kept with the SWMP document. The inspection report must also include any identified deficiencies and the corrective actions taken to fix the deficiencies.

3.6.4.3.2 Quarterly Comprehensive Inspections. At least once per quarter, a comprehensive inspection of "high priority" facilities, including all stormwater controls, must be performed, with specific attention paid to waste storage areas, dumpsters, vehicle and equipment maintenance/fueling areas, material handling areas, and similar potential pollutant-generating areas. The quarterly inspection results must be documented and records kept with the SOP

document. This inspection must be done in accordance with the developed SOPs. The inspection report must also include any identified deficiencies and the corrective actions taken to fix the deficiencies.

3.6.5 Storm Sewer System Maintenance Activities

3.6.5.1 MS4 Catch Basin Maintenance

3.6.5.1.1 Assessment/Prioritization of Catch Basins. The permittee must assign a priority to each of its catch basin inlets within its jurisdiction as one of the following:

- Priority A – Catch basins that are designated as consistently generating the highest volumes of trash and/or debris
- Priority B – Catch basins that are designated as consistently generating moderate volumes of trash and/or debris
- Priority C – Catch basins that are designated as generating low volumes of trash and/or debris

The permittee must use information compiled from citizen complaints/reports to help in the determination of the appropriate priority level. A description of the prioritization scheme must be included in the SWMP. The prioritization may be based on the best information available to the permittee at any given time, and then refined as new information becomes available.

3.6.5.1.2 Catch Basin Inspection and Cleaning

3.6.5.1.2.1 Based on the priorities assigned in Part 3.6.5.1.1, the permittee must inspect and clean catch basins in accordance with the following schedule:

- Priority A – 3 times per year
- Priority B – 2 times per year
- Priority C – 1 time per year

The permittee must develop a catch basin cleaning schedule based on the frequency specified in this permit, along with a list of each of its catch basins and the priority assigned to them per Part 3.6.5.1.1.

3.6.5.1.2.2 In addition to catch basin cleanings performed above, the permittee must ensure that any catch basin that is inspected and found to be at least one third full of trash and/or debris must be cleaned within 30 days of discovery. The permittee must maintain a log of all maintenance performed.

3.6.5.1.2.3 The permittee must document that it has performed all required catch basin cleanings in a log that is to be made available for review by the permitting authority upon request.

3.6.5.1.3 Catch Basin Labeling. The permittee must ensure that each catch basin includes a

legible stormwater awareness message (e.g., a label, stencil, marker, or pre-cast message such as "drains to the creek" or "only rain in the drain"). Catch basins with illegible or missing labels must be recorded and re-labeled within 7 days of inspection.

3.6.5.1.4 Maintenance of Surface Drainage Structures. The permittee must visually monitor permittee-owned open channels and other drainage structures for debris at least once per year and identify and prioritize problem areas, such as those with recurrent illegal dumping, for inspection at least three times per year. Removal of trash and debris from open channels and other drainage structures must occur at least annually. The permittee must document its drainage structure maintenance in a log that is to be made available for review by the permitting authority upon request.

3.6.5.1.5 Disposal of Waste Materials. The permittee must develop a procedure to dewater and dispose of materials extracted from catch basins. This procedure must ensure that waste material and water removed during the catch basin cleaning process will not discharge or reenter the MS4.

3.6.5.2 DPW Operation and Maintenance Activities

3.6.5.2.1 Assessment of DPW Activities and Operations

3.6.5.2.1.1 The permittee must assess and revise as necessary its operation and maintenance (O&M) activities to minimize pollutant discharges from the MS4. The following DPW O&M activities must be included in the assessment for their potential to discharge pollutants in stormwater:

- Road and parking lot maintenance, including pothole repair, pavement marking, sealing, and re-paving
- Bridge maintenance, including re-chipping, grinding, and saw cutting
- Right-of-way maintenance, including mowing, herbicide and pesticide application, and planting vegetation
- DPW-sponsored events such as large outdoor festivals, parades, or street fairs

3.6.5.2.1.2 The permittee must identify all materials that could be discharged from each of these O&M activities. Typical pollutants associated with these activities include metals, chlorides, hydrocarbons (e.g. benzene, toluene, ethylbenzene, xylene), sediment, and trash.

3.6.5.2.1.3 The permittee must develop a set of pollution prevention measures that, when applied during DPW O&M activities, will reduce the discharge of pollutants in stormwater. These pollution prevention measures must include, at a minimum:

- Replacing materials/chemicals with more environmentally benign materials or methods (e.g., use mechanical methods vs. herbicides, use of more environmentally friendly firefighting foam, or use water-based paints or thermoplastics rather than solvent-based paints for stripping)

- Changing operations and maintenance to minimize the exposure or mobilization of pollutants (e.g., mulch, compost or landfill grass clippings) to prevent them from entering surface waters

3.6.5.2.1.4 The permittee must develop and implement a schedule for instituting the pollution prevention measures. At a minimum, with respect to all roads, highways, and parking lots with more than 5,000 square feet of pollutant-generating impervious surface area that are owned, operated, or maintained, the permittee must implement all pollution prevention measures shall be implemented upon development of the measures as required in Part 3.6.14.

3.6.5.2.1.5 The results of the assessments and pollution prevention measures, including schedules for implementation, must be documented and made available for review by the permitting authority upon request.

3.6.5.2.2 Inspection of Pollution Prevention Measures. All pollution prevention measures implemented at DPW facilities must be visually inspected quarterly to ensure they are working properly; a log of inspections must be maintained and made available for review by the permitting authority upon request.

3.6.6 Street Sweeping and Cleaning

3.6.6.1 The permittee must evaluate and rate all DPW-owned streets, roads, and public parking lots within their jurisdiction. The permittee must include in the evaluation the sweeping frequency, timing, and efficiency of existing street sweeping programs. The street sweeping frequency must be based on land use, trash and stormwater pollutant levels generated. At a minimum, the following areas must be regarded as "high priority," for sweeping activities while the "medium priority" and "low priority" areas are recommended:

- High priority – Streets, road segments, and public parking lots that must be designated as high priority include, but are not limited to, high traffic zones, commercial and industrial districts, shopping malls, large schools, high-density residential dwellings, sport and event venues, and plazas. This designation must include areas that consistently accumulate high volumes of trash, debris, and other stormwater pollutants.
- Medium priority – Streets, road segments and public parking lots the permittee can designated as medium priority include medium traffic zones; warehouse districts; and light, small-scale commercial and industrial areas.
- Low priority – Streets and road segments designated as low priority include light traffic zones and residential zones.

3.6.6.2 The permittee must show on a map of its service area how the streets, roads, and public parking lots have been rated in accordance with Part 3.6.6.3.1.

3.6.6.3 Implementing Sweeping Schedules. The permittee must sweep streets/roads/public parking lots in accordance with the following frequency:

- High priority – annual average of at least twice per month
- Medium priority – annual average of at least once per month
- Low priority – annual average of at least twice per year

If a permittee's existing overall street sweeping effort provides equivalent or greater street sweeping frequency relative to the requirements above, the permittee may continue to implement its existing street sweeping program.

3.6.6.4 For areas where street sweeping is technically infeasible (e.g., streets without curbs), the permittee must increase implementation of other trash/litter control procedures to minimize pollutant discharges to storm drains and creeks. The permittee must show on its Part 3.6.6.3.2 map the location of these areas.

3.6.6.5 Sweeping Equipment Selection and Operation

3.6.6.5.1 When replacing existing sweeping equipment, the permittee must select and operate high-performing sweepers that are efficient in removing pollutants, including fine particulates, from impervious surfaces.

3.6.6.5.2 The permittee must follow equipment design performance specifications to ensure that street sweeping equipment is operated at the proper equipment design speed with appropriate verification, and that it is properly maintained.

3.6.6.5.3 The permittee must operate sweepers to optimize pollutant removal by permitting sweepers access to the curb through the use of parking restrictions that clear the curb or through effective public outreach to inform citizens of sweeping days and times so that voluntary curb clearing can occur.

3.6.6.6 Sweeper Waste Material Disposal. The permittee must develop a procedure to dewater and dispose of street sweeper waste material. This procedure must ensure that water and material will not reenter the MS4. The permittee must ensure that its procedure is fully functional by the end of the permit term.

3.6.6.7 Operator Training. Street sweeper operators must be trained to enhance operations for water quality benefit.

3.6.7 Maintenance of DPW-Owned and/or Maintained Structural Stormwater Controls. The permittee must inspect at least yearly, and maintain if necessary, all DPW-owned or maintained structural stormwater controls. The permittee must also maintain all green infrastructure practices through regularly scheduled maintenance activities.

3.6.8 Flood Management

3.6.8.1 Flood Management Projects. The permittee must develop and implement a process to assess the water quality impacts in the design of all new flood management projects that are

associated with the permittee or that discharge to the MS4. This process must include consideration of controls that can be used to minimize the impacts to site water quality and hydrology while still meeting the project objectives. A description of this process must be included in the SWMP document.

3.6.9 Pesticide, Herbicide, and Fertilizer Application and Management

3.6.9.1 Landscape Maintenance

3.6.9.1.1 The permittee must evaluate the materials used and activities performed on public spaces such as parks, schools, golf courses, easements, public rights of way, and other open spaces for pollution prevention opportunities. Maintenance activities for the turf landscaped portions of these can include mowing, fertilization, pesticide application, irrigation, etc. Typical pollutants include sediment, nutrients, hydrocarbons, pesticides, herbicides and organic debris.

3.6.9.1.2 The permittee must implement the following practices to minimize landscaping-related pollutant generation:

3.6.9.1.2.1 Educational activities, permits, certifications, and other measures for DPW applicators and distributors.

3.6.9.1.2.2 Integrated pest management measures that rely on non-chemical solutions, including:

- Use of native plants, xeriscaping (reduces water usage and fertilization)
- Keeping clippings and leaves away from waterways and out of the street using mulching, composting, or landfilling
- Limiting application of pesticides and fertilizers if precipitation is forecasted within 24 hours or as specified in label instructions
- Limiting or replacing pesticide use (e.g., manual weed and insect removal)
- Limiting or eliminating the use of fertilizers, or, if necessary, prohibiting application within 5 feet of pavement, 25 feet of a storm drain inlet, or 50 feet of a waterbody
- Reducing mowing of grass to allow for greater pollutant removal, but not jeopardizing motorist safety

3.6.9.1.2.3 Schedules for chemical application that minimize the discharge of such constituents due to irrigation and expected precipitation.

3.6.9.1.2.4 The collection and proper disposal of unused pesticides, herbicides, and fertilizers.

3.6.10 Training and Education

3.6.10.1 Employee Training Requirements. The permittee must develop an annual employee training program for appropriate employees involved in implementing pollution prevention and good housekeeping practices in the Part 3.6 of this permit. All new hires must receive training within the first year of their hire date. This annual training must include a general stormwater education component, any new technologies, operations, or responsibilities that arise during the

year, and the permit requirements that apply to the staff being trained. A description of the program must be maintained for review by the permitting authority. The permittee must also identify and track all personnel requiring training and records must be maintained.

3.6.11 Contractor Requirements and Oversight

3.6.11.1 Requirements for Contractors:

3.6.11.1.1 Any contractors hired by the permittee to perform DPW maintenance activities must be contractually required to comply with all of the stormwater control measures, good housekeeping practices, and facility-specific stormwater management SOPs described above.

3.6.11.1.2 The permittee must provide oversight of contractor activities to ensure that contractors are using appropriate control measures and SOPs. Oversight procedures must be described in the SWMP document.

3.6.12 Trash Reduction Plan

3.6.12.1 The permittee must develop a trash reduction plan which assesses the issue, identifies and implements trash reduction activities, and monitors reductions of trash loads from the MS4. The plan shall be submitted with the permit reapplication not less than 180 days prior to permit expiration. The plan shall include, at a minimum, the following elements:

3.6.12.1.1 Quantitative estimate of the trash currently being discharged (baseline load) from the MS4, including methodology used to determine the load.

3.6.12.1.2 Description of trash reduction activities currently being implemented as well as those needed to eliminate trash discharges from the MS4 in a phased approach consistent with targeted reductions.

3.6.12.1.3 Identification of priority areas for trash reduction activities including as appropriate watersheds of waterbodies listed as impaired for trash on the CWA Section 303(d) list, and areas of high trash generation and accumulation.

3.6.12.1.4 Trash reduction-related education activities as a component of Part 3.6.1 of this permit.

3.6.12.1.5 Integration of trash reduction activities and monitoring to measure progress toward reducing trash discharges.

3.6.12.1.6 An implementation schedule with proposed compliance deadlines for reducing trash discharges from the MS4 by 50% and 100% from the baseline load. Final compliance deadline no more than 20 years following the completion of the Trash Reduction Plan.

3.6.12.1.7 Monitoring plan to measure progress in reaching targeted trash discharge reductions from the MS4 baseline loads. Such monitoring plan should include elements to guide future implementation of trash reduction activities by aiding in identifying sources and temporal and spatial patterns of trash discharges.

3.6.12.2 The Annual Report must include a summary of 1) trash reduction activities (control measures and best management practices) with information on the types of actions, locations and levels of implementation, the total trash loads and dominant types of trash removed by each action, and 2) progress towards meeting reduction targets, including applicable monitoring results.

3.6.12.3 The plan shall provide for compliance with targeted MS4 trash discharge reductions in the shortest practicable time frame.

3.6.13 Asset Management Plan (AMP)

3.6.13.1 The permittee must develop and implementation of an asset management plan (AMP) in order to establish intended levels of service for its MS4 consistent with the conditions of this permit. The AMP shall inventory and assess the condition of all critical hard and soft assets and evaluate costs required to achieve intended levels of service, linking those costs to funding sources. The plan must include, at a minimum, the following:

3.6.13.1.1 Inventory of MS4 Assets. The permittee must identify and inventory all critical components of the MS4 including hard assets such as the storm drain system, structural controls and equipment individually valued over $5000. The purchase date, purchase price and replacement costs for the hard assets must also be included. Incorporation of hard asset information into the GIS required by Part 3.3.2 of the permit is recommended. In addition, the inventory must include soft assets such as the personnel performing the inspections required by permit.

3.6.13.1.2 Required Level of Service. The plan must identify the level of performance required for each of the assets, in particular the performance required to comply with the MS4 permit. The AMP must also include the current performance, consequence of failure and the likelihood of failure of each of the assets in the inventory.

3.6.13.1.3 Maintenance Rehabilitation, and Replacement Plan (MRRP). The permittee must develop and implement a MRRP. The MRRP must evaluate data obtained through asset assessment in order to inform a strategy for prioritizing and scheduling maintenance of the MS4 and rehabilitation and replacement of inventoried assets. The MRRP must be re-assessed annually to address changing conditions and resources.

3.6.13.1.6 Forecasting Costs. The permittee must project costs necessary to meet the desired level of service, at least through the end of the term of this permit. The permittee must then compare these projections with available funding sources to determine the best manner in which to fund operation and maintenance, repair, rehabilitation, and replacement of assets to sustain

service and performance.

3.6.13.1.5 Climate Change Impacts. The permittee must identify new or increased threats to the MS4 resulting from climate change that may impact the desired levels of service in the next 50 years. The permittee must project upgrades to existing assets or new infrastructure projects, and associated costs, necessary to meet desired levels of service.

3.6.13.2 Annual Update. The permittee must re-evaluate its AMP on an annual basis and make the plan available to the permitting authority upon request.

3.6.14 Schedule of Compliance.

The permittee must implement all BMPs developed in the program in accordance with the Schedule of Compliance below.

Schedule of Compliance for Activities Required in Part 3.6:

Part	***Title***	***Compliance Deadline***	***Interim Milestones Required to Complete Activity***
3.6.10	Training and Education	*Begin 3.5 years after EDOP* and add additional material as new BMP requirements become effective*	
3.6.8	Flood Management	*4.5 years after EDOP*	
3.6.2	DPW Facility and Controls Inventory	*5.5 years after EDOP*	
3.6.3	Facility Assessment	*6.5 years after EDOP*	• 3.6.2 Facility and Controls Inventory – 5.5 years after EDOP
3.6.4	Development of Facility-Specific Stormwater Management SOPs and Implementation of Facility Stormwater Controls	*7.5 years after EDOP*	• 3.6.3 Facility Assessment – 6.5 years after EDOP
3.6.5.2	DPW Operation and Maintenance Activities	*8.5 years after EDOP*	• 3.6.4 Development of SOPs – 7.5 years after EDOP

3.6.5.1	MS4 Catch Basin Maintenance	*8.5 years after EDOP*	• 3.3.2 MS4 Initial Mapping – 4.5 years after EDOP • Complete initial inspection of High Priority catch basins and begin cleaning – 5.5 years after EDOP • Complete initial inspection of all CB and continue cleaning – 6.5 years after EDOP • Complete first cleaning of all Catch basins – 7.5 years after EDOP
3.6.9	Pesticide, Herbicide, and Fertilizer Application and Management	*9.5 years after EDOP*	• 3.6.4 Development of SOPs – 8.5 years after EDOP
3.6.13	Asset Management Plan (AMP)	*10.5 years after EDOP*	• 3.6.5.2 DPW O&M Activities – 8.5 years after EDOP • Pesticide, Herbicide, and Fertilizer Management – 9.5 years after EDOP
3.6.6	Street Sweeping and Cleaning	*11.5 years after EDOP*	• Determine High/Med/Low frequency streets and map – 4.5 years after EDOP • Determine # of sweepers required and request funding – 5.5 years after EDOP • Advertise procurement of Sweepers – 6.5 years after EDOP • Contract for of sweepers – 7.5 years after EDOP • Delivery of fist sweepers – 8.5 years after EDOP • Hiring and training of sweeper operators – 9.5 years after EDOP • Delivery of second batch of sweepers – 10.5 years after EDOP • Develop procedure for dewatering and disposal of waste material – 11.5 years after EDOP

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3.6.7	Maintenance of DPW-Owned and/or Maintained Structural Stormwater Controls	*12.5 years after EDOP*	• 3.6.2 Facility and Controls Inventory –5.5 years after EDOP • 3.6.3 Facility Assessment – 6.5 years after EDOP • Develop Equipment and manpower needs and secure funding – 7.5 years after EDOP • Advertise procurement for excavators and other equipment – 8.5 years after EDOP • Complete hiring and training of operators – 9.5 years after EDOP • Delivery of new equipment – 10.5 years after EDOP • Complete cleaning of 50% of existing ponding basins – 11.5 years after EDOP • Complete cleaning of all existing ponding basins and initiate permit requirements – 12.5 years after EDOP

* Effective Date of Permit

3.7 Industrial/Commercial Stormwater Sources

3.7.1 Program Development. The permittee must develop and implement a program to minimize pollutants discharges from industrial/commercial sources within the area covered by the permit. Within 5.5 years of the permit effective date, the permittee shall develop BMPs and measurable goals for the program. The permittee must implement all BMPs developed in the program at the start of the fifth year of the permit term. Written procedures for implementing this program, including the components described in Parts 3.7.2 – 3.7.6, must be incorporated into the SWMP document.

3.7.2 Facility Inventory. Beginning 3.5 years after the Permit effective date, the permittee must develop and maintain an inventory of all industrial and commercial sites/sources with new permitted connections to the MS4 (regardless of ownership) that could discharge pollutants in stormwater to the MS4. The inventory must be updated annually and available for review by the permitting authority upon request.

3.7.2.1 The inventory must include the following minimum information for each industrial and commercial site/source:

- Name
- Address

- Physical location of storm drain receiving discharge
- Name of receiving water
- Pollutants potentially generated by the site/source
- Identification of whether the site/source is (1) tributary to an impaired water body segment (i.e., whether it is listed under Section 303(d) of the Clean Water Act) and (2) whether it generates pollutants for which the water body segment is impaired
- A narrative description including standard industrial classification (SIC) codes, which best reflects the principal products or services provided by each facility.

Incorporation of facility information into the GIS required by Part 3.3.2 of the permit is recommended.

3.7.2.2 At a minimum, the following sites/sources must be included in the inventory:

3.7.2.2.1 Commercial Sites/Sources:

- Airplane repair, maintenance, fueling, or cleaning
- Animal facilities
- Automobile and other vehicle body repair or painting
- Automobile (or other vehicle) parking lots and storage facilities
- Automobile repair, maintenance, fueling, or cleaning
- Boat repair, maintenance, fueling, or cleaning
- Building material retailers and storage
- Cement mixing or cutting
- Construction equipment staging areas (not at a construction site)
- Eating or drinking establishments (e.g., restaurants), including food markets
- Equipment repair, maintenance, fueling, or cleaning
- Golf courses, parks and other recreational areas/facilities
- Hotels
- Landscaping
- Laundry facilities
- Marinas
- Masonry
- Medical facilities
- Mobile automobile or other vehicle washing
- Mobile carpet, drape or furniture cleaning
- Nurseries and greenhouses
- Painting and coating
- Pest control services
- Pool and fountain cleaning
- Portable sanitary services
- Power washing services
- Retail or wholesale fueling

3.7.2.2.2 Industrial Sites/Sources:

- Industrial Facilities, as defined at 40 CFR § 122.26(b)(14), including those subject to the Multi Sector General Permit or individual NPDES permit
- Facilities subject to Title III of the Superfund Amendments and Reauthorization Act (SARA)
- Hazardous waste treatment, disposal, storage and recovery facilities
- All other commercial or industrial sites/sources tributary to an impaired water body segment, where the site/source generates pollutants for which the water body segment is impaired
- All other commercial or industrial sites/sources that the permittee determines may contribute a significant pollutant load to the MS4

3.7.3 Industrial/Commercial Facility Stormwater Control Measures

3.7.3.1 The permittee must require industrial and commercial facilities included in the Part 3.7.2 inventory to select, install, implement, and maintain stormwater control measures. At a minimum, the permittee must require industrial/commercial facilities to:

3.7.3.1.1 Minimize Exposure. Minimize the exposure of manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) to rain and runoff by either locating these industrial materials and activities inside or protecting them with storm resistant coverings (although significant enlargement of impervious surface area is not recommended). The facilities must consider, where appropriate:

3.7.3.1.1.1 Using grading, berming, or curbing to prevent runoff of contaminated flows and divert run-on away from these areas

3.7.3.1.1.2 Locating materials, equipment, and activities so that leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone vehicles and equipment awaiting maintenance to protected areas)

3.7.3.1.1.3 Cleaning up spills and leaks promptly using dry methods (e.g., absorbents) to prevent the discharge of pollutants

3.7.3.1.1.4 Using drip pans and absorbents under or around leaky vehicles and equipment or store indoors where feasible

3.7.3.1.1.5 Using spill/overflow protection equipment

3.7.3.1.1.6 Draining fluids from equipment and vehicles prior to on-site storage or disposal

3.7.3.1.1.7 Performing all cleaning operations indoors, under cover, or in bermed areas that prevent runoff and run-on and also that capture any overspray

3.7.3.1.1.8 Ensuring that all wash water drains to a proper collection system (i.e., not the stormwater drainage system)

3.7.3.1.2 Follow Good Housekeeping Practices. Keep clean all exposed areas that are potential sources of pollutants, using such measures as sweeping at regular intervals, keeping materials orderly and labeled, and storing materials in appropriate containers.

3.7.3.1.3 Conduct Maintenance. Regularly inspect, test, maintain, and repair all industrial equipment and systems to avoid situations that may result in leaks, spills, and other releases of pollutants in stormwater discharged to receiving waters.

3.7.3.1.4 Implement Spill Prevention and Response Procedures. Minimize the potential for leaks, spills and other releases that may be exposed to stormwater and develop plans for effective response to such spills if or when they occur. At a minimum, the facilities must implement:

3.7.3.1.4.1 Procedures for plainly labeling containers (e.g., "Used Oil," "Spent Solvents," "Fertilizers and Pesticides,") that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur

3.7.3.1.4.2 Preventative measures such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling

3.7.3.1.4.3 Procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases. Employees who may cause, detect, or respond to a spill or leak must be trained in these procedures and have necessary spill response equipment available.

3.7.3.1.4.4 Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies.

3.7.3.1.5 Implement Erosion and Sediment Controls. Stabilize exposed areas and contain runoff using structural and/or non-structural control measures to minimize onsite erosion and sedimentation, and the resulting discharge of pollutants.

3.7.3.1.6 Manage Runoff. Divert, infiltrate, reuse, contain, or otherwise reduce stormwater runoff, to minimize pollutants in discharges.

3.7.3.1.7 Conduct Employee Training. All facility employees who work in areas where industrial materials or activities are exposed to stormwater, or who are responsible for implementing activities necessary to manage stormwater must be trained. Training must be conducted at least annually.

3.7.3.1.8 Address Non-Stormwater Discharges. Eliminate non-stormwater discharges not authorized by an applicable NPDES permit.

3.7.3.1.9 Control Waste, Garbage and Floatable Debris. Facilities must ensure that waste,

garbage, and floatable debris are not discharged to receiving waters by keeping exposed areas free of such materials or by intercepting them before they are discharged.

3.7.3.1.10 Control Dust Generation and Vehicle Tracking of Industrial Materials. Minimize generation of dust and off-site tracking of raw, final, or waste materials.

3.7.3.2 Within 5.5 years of permit effective date, the permittee must notify the owner/operator of each industrial and commercial site/source of the stormwater requirements for control measures in Part 3.7.3.1.

3.7.3.3 As necessary to minimize any pollutants causing the applicable receiving waterbody to be listed as impaired, the permittee must require implementation of additional controls for industrial and commercial sites/sources that are tributary to the impaired water body segments and that are likely to generate such impairment pollutants.

3.7.4 Industrial and Commercial Facility Inspections

3.7.4.1 Industrial and Commercial Site Inspection Program. The permittee must implement a program to inspect all commercial and industrial facilities included in its Part 3.7.2 inventory. The permittee must describe how this will occur in the SWMP. The inspection program must:

3.7.4.1.1 Prioritize all facilities into high, medium, and low categories on the basis of the potential for water quality impact using criteria such as pollutant sources on site, pollutants of concern, proximity to a water body, and violation history of the facility. The different priority categories will be assigned different inspection frequencies, with the highest priority facilities receiving more frequent inspections. Describe the process for prioritizing inspections and frequency of inspections. If any geographical areas are to be targeted for inspections due to high potential for stormwater pollution, these areas must be listed in the Inspection Plan.

3.7.4.1.2 Explain how the priority assigned to any one facility may be modified based on the site inspection findings and the facility's potential to discharge pollutants.

3.7.4.2 Minimum Inspection Requirements

3.7.4.2.1 Inspection Frequency. The permittee is required to conduct inspections at the following frequencies, at a minimum:

3.7.4.2.1.1 Facilities with high potential for water quality impact must be inspected annually.

3.7.4.2.1.2 Facilities with medium potential for water quality impact must be inspected at least twice during the term of the permit.

3.7.4.2.1.3 Facilities with low potential for water quality impact must be inspected at least once every 5 years.

3.7.4.2.1.4 Facilities with either a written violation occurring in the previous year must be inspected at least annually until compliance is achieved.

3.7.4.3. Scope of Inspection. Inspections must at a minimum:

3.7.4.3.1 Evaluate the facility's compliance with the Part 3.7.3 requirement to select, design, install, and implement stormwater control measures.

3.7.4.3.2 Conduct a visual observation for evidence of unauthorized discharges, illicit connections, and potential discharge of pollutants to stormwater.

3.7.4.3.3 Verify whether the facility is required to be authorized under the multi-sector general industrial stormwater permit, and whether the facility has in fact obtained such permit coverage.

3.7.4.3.4 Evaluate the facility's compliance with any other relevant local stormwater requirements.

3.7.4.4 Documentation Requirements. At a minimum, the permittee must document the following for each inspection:

- The inspection date and time;
- The name(s) and signature(s) of the inspector(s);
- Weather information and a description of any discharges occurring at the time of the inspection;
- Any previously unidentified discharges of pollutants from the site;
- Any control measures needing maintenance or repairs;
- Any failed control measures that need replacement;
- Any incidents of noncompliance observed; and
- Any additional control measures needed to comply with the permit requirements.

3.7.4.5 Track Inspections. Inspection findings must be tracked to ensure inspections are conducted at the frequency specified in Part 3.7.4.2.1, highlight and document the recidivism of noncompliant facilities, and aid follow up and enforcement activities (electronic tracking is recommended).

3.7.5 Enforcement. The permittee must ensure that all necessary follow up and enforcement activities are conducted as necessary to require necessary implementation and maintenance of the control measures described in Part 3.7.3. The permittee is required to utilize the ERP for all enforcement actions.

3.7.6 Staff Training. The permittee must ensure that all staff whose primary job duties are implementing the industrial/commercial stormwater program is trained to conduct facility inspections. The training must cover what is required under this permit in terms of stormwater control measures, the requirements of other applicable stormwater general or individual permits or other related local requirements, the permittee's site inspection and documentation protocols,

and enforcement procedures. Follow-up training must be provided every other year to address changes in procedures, techniques, or staffing. Permittees must document and maintain records of the training provided and the staff trained.

4 Special Conditions

4.1 Total Maximum Daily Load (TMDL) Requirements

4.1.1 Requirements Related to the Twenty-Five Guam Beaches and Northern Watershed Bacteria TMDL.

Table 2 – Effluent Limitations Based on Wasteload Allocations for the Twenty-Five Guam Beaches and Northern Watershed Bacteria TMDLs

Pollutant	Effluent Limitations (#/100 ml)	
	Geometric Mean	Instantaneous Max
Enterococcus (M-2 Beaches)*	35	104
Enterococcus (M-3 Beaches)*	35	276

*Based on 2001 Guam Water Quality Standards (GAR GEPA, Division II - Water Control, Chapter 5), see Appendix D for a map of the M-2 and M-3 areas.

The wasteload allocation (WLA)-based effluent limitations contained in Table 2 shall become effective 5.5 years after the permit effective date (unless the permit is modified as described below to incorporate a compliance schedule with an alternate compliance deadline).

If the permittee believes additional time is needed to comply with the effluent limitations in Table 2, the permittee may within 5.5 years of the effective date of this permit, submit to Region 9 a plan, including an implementation schedule, for achieving compliance with these effluent limitations. The plan must achieve compliance as soon as practicable. If the permittee proposes a schedule that extends beyond one year, the plan must include interim dates and milestones and meet the requirements of 40 CFR 122.47. If such a plan is submitted, EPA may reopen and modify the permit pursuant to 40 CFR 122.62 and 122.47 to incorporate a compliance schedule. The plan must include, at a minimum, the following:

4.1.1.1 Detailed information on the BMPs proposed to be implemented and a schedule for their implementation, including (at a minimum) annual interim milestones and dates that illustrate the steps necessary to implement BMP actions necessary to comply.

4.1.1.2 A detailed and quantitative analysis which demonstrates that the proposed BMPs would ensure compliance with the WLAs.

4.1.1.3 A monitoring plan that identifies representative outfalls to be monitored to verify compliance with the WLAs.

4.1.1.4 A justification explaining why the additional time is needed and demonstrating that the requested schedule will result in compliance as soon as possible.

4.1.2 Requirements Related to the Ugum Watershed Sediment TMDL

Table 3 – Effluent Limitations Based on Wasteload Allocations for the Ugum Watershed Sediment TMDL

Subwatershed	Road Effluent Limitations for Sediment (Tons/year)
Bubulao	700
Ugum	700
Upper Ugum	800
Atate	150
North Bubulao	300
Total	2,650

The wasteload allocation (WLA)-based effluent limitations contained in Table 3 shall become effective 5.5 years after the permit effective date (unless the permit is modified as described below to incorporate a compliance schedule with an alternate compliance deadline).

If the permittee believes additional time is needed to comply with the effluent limitations in Table 3, the permittee may within 5.5 years of the effective date of this permit, submit to Region 9 a plan, including an implementation schedule, for achieving compliance with these effluent limitations. The plan must achieve compliance as soon as practicable. If the permittee proposes a schedule that extends beyond one year, the plan must include interim dates and milestones and meet the requirements of 40 CFR 122.47. If such a plan is submitted, EPA may reopen and modify the permit pursuant to 40 CFR 122.62 and 122.47 to incorporate a compliance schedule. The plan must include, at a minimum, the following:

4.1.2.1 Detailed information on the BMPs proposed to be implemented and a schedule for their implementation, including (at a minimum) annual interim milestones and dates that illustrate the steps necessary to implement BMP actions necessary to comply.

4.1.2.2 A detailed and quantitative analysis which demonstrates that the proposed BMPs would ensure compliance with the WLAs.

4.1.2.3 A monitoring plan that identifies representative outfalls to be monitored to verify compliance with the WLAs.

4.1.2.4 A justification explaining why the additional time is needed and demonstrating that the requested schedule will result in compliance as soon as possible.

4.1.3 Permit Reopener for New TMDLs. Pursuant to 40 CFR 122.62, this permit may be reopened and modified to include requirements of TMDLs approved by EPA during the term of this permit with wasteload applications applicable to the permittee. Monitoring of discharges may also be required to ensure compliance with the TMDL.

4.2 General Water-Quality Based Effluent Limits. For parameters other than enterococcus and sediment discharges addressed in Part 4.1 above, the permittee must protect water quality by ensuring that no discharges cause or contribute to an exceedance of applicable water quality standards as set forth in Guam Water Quality Standards (GAR GEPA, Division II - Water Control, Chapter 5).

4.3 Endangered Species Act Requirements. This permit does not authorize nor require the construction of any particular structural stormwater quality control device that could adversely affect listed or proposed threatened or endangered species.

4.4 Historic Preservation. For all construction projects involving surface disturbance of one or more acres undertaken by the permittee to ensure compliance with this permit, the permittee must ensure that one least one of the eligibility criteria of Appendix E of EPA's 2012 Construction General Permit[5] has been met prior to commencement of discharges from the project. For projects less than one acre, the permittee must ensure that at least one of the eligibility criteria of Appendix F of EPA's 2015 Multi-Sector General Permit[6] has been met prior to commencement of discharges from the project.

4.5 Guam EPA CWA Section 401 Certification Requirements

4.5.1 Compliance with 22 Guam Administrative Rules. All conditions and requirements set forth in the 22 Guam Administrative Rules and Regulations (GAR), Division II, Water Control, Chapter 10, Guam Soil Erosion and Sediment Control Regulations shall be enforced.

4.5.2 Submittal of SWMP to Guam EPA. The Permittee must submit its comprehensive Stormwater Management Program to Guam EPA. The Program shall include the identification, implementation and management for the reduction of pollutants being discharged from Guam DPW's MS4 to safeguard water quality, for compliance with the Clean Water Act and Guam Water Quality Standards.

4.5.3 Erosion Control Requirements. All operators/owners of any property development or earth moving activities shall comply with the erosion control pre-construction and post-construction Best Management Practices design performance standards and criteria set forth in the 2006 CNMI and Guam Stormwater Management Manual.

4.5.4 Water Quality Monitoring Program. The permittee shall develop and implement a

[5] Available at: http://water.epa.gov/polwaste/npdes/stormwater/EPA-Construction-General-Permit.cfm
[6] Available at: http://water.epa.gov/polwaste/npdes/stormwater/EPA-Multi-Sector-General-Permit-MSGP.cfm

comprehensive Water Quality Monitoring Program and must be submitted to Guam EPA for review and approval prior to implementation date. All standards and requirements set forth in 22 GAR, Division II, Water Control, Chapter 5, Guam Water Quality Standards (GWQS) 2015 Revisions, must be complied with to include reporting GWQS exceedance to Guam EPA.

4.5.5 Development of Monitoring Program. The Permittee must seek Guam EPA's involvement in the development of a comprehensive monitoring and assessment program during the authorized 3.5 years after the effective date of this permit, to develop and implement a comprehensive monitoring and assessment program that will meet the objectives of the permit.

4.5.6 Constituents to be Analyzed. The permittee shall analyze for the following constituents: ammonia, conductivity, surfactants, pH and enterococcus for significant discharges ensuring that no discharges cause of contribute to an exceedance of applicable water quality standards as set forth in Guam Water Quality Standards (GAR GEPA, Division II – Water Control, Chapter 5). Guam EPA reserves the right to add supplementary constituents to the subject list.

4.5.7 Dewatering Activities. All conditions and requirements regarding dewatering activities set for in 22 GAR Chapter 7, Water Resources Development and Operating Regulations must be complied with. The permittee shall secure a Dewatering Permit for Guam EPA prior to the implementation date.

4.5.8 Quarterly Reporting. As per Guam WQS, Section 5104.A.12, permitted facility discharging effluent to the waters of Guam shall submit quarterly operating reports to the Agency at a minimum. Hard copies of all reports, shall be submitted to Guam EPA prior to the electronic submittal to USEPA. All reports will be submitted to: Administrator, Guam Environmental Protection Agency, 17-3304 Mariner Avenue, Barrigada, Guam 96913-1617.

4.5.9 Corrective Actions. The permittee shall take immediate corrective actions or engineering measures to address non-compliance with water quality standards and/or environmental protection requirements and notify the Agency within 24 hours from time the permittee becomes aware of the non-compliance.

4.5.10 Submittals to Guam EPA. The Permittee shall assure that all written/electronic submittals to USEPA Region IX must also be submitted to Guam EPA.

4.5.11 Construction Permit Conditions. The permittee shall be aware of requirements reflected within the General Construction NPDES Permit Conditions.

4.5.12 Reserved for Any Additional CWA Section 401 Requirements

5. Monitoring, Recordkeeping and Reporting Requirements

5.1 Consolidated Information Tracking System. Within 3.5 years of the permit effective date, the permittee must develop a tracking system to track the information required in the permit

as well as the information required to be reported in the annual report (see Part 5.4). Electronic tracking is recommended.

5.2 Development of a Comprehensive Monitoring & Assessment Program

5.2.1 Within 3.5 years of the effective date of this permit, the permittee must develop and implement a comprehensive monitoring and assessment program. A description of this program must be included in the SWMP document. The monitoring and assessment program must be designed to meet the following objectives:

- Assess compliance with this permit;
- Measure the effectiveness of the permittee's SWMP;
- Assess the impacts to receiving waters resulting from stormwater discharges;
- Characterize stormwater discharges;
- Identify sources of specific pollutants;
- Detect and eliminate illicit discharges and illegal connections to the MS4; and
- Assess the overall health and evaluate long-term trends in receiving water quality.

5.2.2 The program must, at a minimum, include the following:

5.2.2.1 Monitoring locations. The permittee must select at least five outfalls from the MS4 covered by the permit that are representative of land uses within the jurisdiction of the permittee, including industrial, commercial and residential areas.

5.2.2.2 Monitoring Requirements. The parameters in Table 3 below must be monitored once/year at each selected outfall.

Table 4 – Monitoring Requirements

Parameter	Units	Frequency	Sample Type
Flow	Gallons	Once/year	Estimate
Conventional Pollutants			
Chemical Oxygen Demand	mg/l	Once/year	Composite
Biochemical Oxygen Demand (5-day)	mg/l	Once/year	Composite
Oil and Grease	mg/l	Once/year	Grab
pH	s.u.	Once/year	Grab
Total Suspended Solids	mg/l	Once/year	Composite
Priority Pollutants			
Arsenic, Total Recoverable	mg/l	Once/year	Composite
Cadmium, Total Recoverable	mg/l	Once/year	Composite
Copper, Total Recoverable	mg/l	Once/year	Composite
Lead, Total Recoverable	mg/l	Once/year	Composite

Mercury, Total Recoverable	mg/l	Once/year	Composite
Nickel, Total Recoverable	mg/l	Once/year	Composite
Selenium, Total Recoverable	mg/l	Once/year	Composite
Zinc, Total Recoverable	mg/l	Once/year	Composite
PCBs	mg/l	Once/year	Composite
Non-Conventional Pollutants			
Aluminum, Total Recoverable	mg/l	Once/year	Composite
Iron, Total Recoverable	mg/l	Once/year	Composite
Magnesium, Total Recoverable	mg/l	Once/year	Composite
Nitrate+Nitrite Nitrogen	mg/l	Once/year	Composite
Phosphorus, Total	mg/l	Once/year	Composite
Orthophosphorus	mg/l	Once/year	Composite
Dissolved Oxygen	mg/l and % sat.	Once/year	Grab
Enterococcus	CFU/100 ml	Once/quarter	Grab
E. Coli	CFU/100 ml	Once/year	Grab
Chronic Toxicity	Pass/Fail	Once/year	Composite
Other pollutants*	mg/l	Once/year	Composite

*The permitttee must develop a list of additional pollutants of concern that may be present in the discharges and include such pollutants in the monitoring program. The list must be based on the source assessment requirements found elsewhere in this permit (e.g., Parts 3.6.3.11, 3.6.9.1 and 3.7.2). If a pollutant is not detected for two successive samples, the sampling may be discontinued, but restarted if circumstances change such that the pollutant is again of concern.

**Monitoring shall be conducted twice/year during the first two years of the monitoring program implementation; during these first two years, sampling shall be conducted once during the wet season (July through November) and once during the dry season (December through June).

5.2.2.3 Whole Effluent Toxicity (WET) Requirements

5.2.2.3.1 Monitoring Frequency and Test Species. The permittee must conduct annual static non-renewal toxicity tests (using composite effluent samples) with the purple sea urchin, *Strongylocentrotus purpuratus* (Fertilization Test Method 1008.0). A split of each sample must also be analyzed for all other monitoring parameters specified in Table 1 above.

5.2.2.3.2 WET Test Methods. Species and short-term test methods for estimating the chronic toxicity of NPDES effluents are found in the first edition of *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136, 1995)

5.2.2.3.3. Chronic WET Permit Trigger

5.2.2.3.3.1 There are no chronic toxicity effluent limits for this discharge. The chronic WET permit trigger is any one WET test (either biological endpoint of survival or sublethal) where a test result is *Fail* at the chronic in-stream waste concentration (IWC). For this discharge, the IWC is 100 percent effluent.

To calculate either a Pass or Fail of the multiple-effluent concentration chronic toxicity test at the IWC, follow the instructions in Appendix A in the *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA/833-R-10-003). A Pass result indicates no toxicity at the IWC, and a Fail result indicates toxicity at the IWC. The permittee must report either a Pass or a Fail on the DMR form.
If a test result is reported as "Fail", then the permittee shall follow the Accelerated Toxicity Testing and TRE/TIE Process, below, of this permit. If a result is reported as Fail, the permittee must also follow Part 5.2.2.3.9 (Reporting of Chronic Toxicity Monitoring Results) of this permit.

5.2.2.3.4. Quality Assurance

5.2.2.3.4.1 Quality assurance measures, instructions, and other recommendations and requirements are found in the *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* referenced above. Additional requirements are specified below.

5.2.2.3.4.2 This discharge is subject to a determination of "Pass" or "Fail" from a single-effluent concentration chronic toxicity test at the IWC (for statistical flowchart and procedures, see *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document*, Appendix A, Figure A-1).

5.2.2.3.4.3 Effluent dilution water and control water should be prepared and used as specified in the test methods manual *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms (EPA/600/R-95/136, 1995).* If the dilution water is different from test organism culture water, then a second control using culture water shall also be used. If the use of artificial sea salts is considered provisional in the test method, then artificial sea salts shall not be used to increase the salinity of the effluent sample prior to toxicity testing without written approval by the EPA.

5.2.2.3.4.4 If organisms are not cultured in-house, then concurrent testing with a reference toxicant shall be conducted. If organisms are cultured in-house, then monthly reference toxicant testing is sufficient. Reference toxicant tests and effluent toxicity tests shall be conducted using the same test conditions (e.g., same test duration, etc.).

5.2.2.3.4.5 All multi-concentration reference toxicant test results must be reviewed and reported according to EPA guidance on the evaluation of concentration-response relationships found in *Method Guidance and Recommendations for Whole Effluent Toxicity (WET) Testing (40 CFR*

136) (EPA 821-B-00-004, 2000).

5.2.2.3.4.6 If either the reference toxicant or effluent toxicity tests do not meet all test acceptability criteria in *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* , then the permittee shall resample and retest within 14 days.

5.2.2.3.4.7 If the discharged effluent is chlorinated, then chlorine shall not be removed from the effluent sample prior to toxicity testing without written approval by the permitting authority

5.2.2.3.5 Initial Investigation TRE Work Plan. This plan shall include steps the permittee intends to follow if toxicity is measured above the WET permit trigger and should include the following, at minimum:

5.2.2.3.5.1 A description of the investigation and evaluation techniques that will be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.

5.2.2.3.5.2 A description of methods for maximizing in-house treatment system efficiency, good housekeeping practices, and a list of all chemicals used in operations at the facility.

5.2.2.3.5.3 If a Toxicity Identification Evaluation (TIE) is necessary, an indication of who will conduct the TIEs (i.e., an in-house expert or outside contractor).

5.2.2.3.5.4 The permittee may initiate a TIE as part of a TRE to identify the causes of toxicity using the same species and test method and the following EPA manuals: *Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures* (EPA/600/6-91/003, 1991); *Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/080, 1993); *Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/081, 1993); and *Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document* (EPA/600/R-96-054, 1996).

5.2.2.3.6 Accelerated Toxicity Testing and TRE/TIE Process

5.2.2.3.6.1 If the WET permit trigger is exceeded and the source of toxicity is known (e.g., a temporary plant upset), then the permittee shall conduct one additional toxicity test using the same species and test method. This toxicity test shall begin within 14 days of receipt of a test result exceeding the chronic WET permit trigger. If the additional toxicity test does not exceed the chronic WET permit trigger, then the permittee may return to the regular testing frequency.

5.2.2.3.6.2 If the WET permit trigger is exceeded and the source of toxicity is not known, then the permittee shall conduct six additional toxicity tests using the same species and test method, approximately every two weeks, over a 12-week period. This testing shall begin within 14 days

of receipt of a test result exceeding the chronic WET permit trigger. If none of the additional toxicity tests exceed the chronic WET permit trigger, then the permittee may return to the regular testing frequency.

5.2.2.3.7 If one of the additional toxicity tests (in paragraphs 5.2.2..3.6.1 or 5.2.2.3.6.2) exceeds the WET permit trigger, then, within 14 days of receipt of this test result, the permittee shall initiate a TRE using, according to the type of treatment facility, EPA manual Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants (EPA/833/B-99/002, 1999) or EPA manual Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations (EPA/600/2-88/070, 1989).

5.2.2.3.8 In conjunction, the permittee shall develop and implement a Detailed TRE Work Plan which shall include the following: further actions undertaken by the permittee to investigate, identify, and correct the causes of toxicity; actions the permittee will take to mitigate the effects of the discharge and prevent the recurrence of toxicity; and a schedule for these actions.

5.2.2.3.9 Reporting of Toxicity Monitoring Results

5.2.2.3.9.1 The permittee shall submit a full laboratory report for all toxicity testing as an attachment to the DMR for the month in which the toxicity test was conducted. The laboratory report shall contain: the toxicity test results; the dates of sample collection and initiation of each toxicity test; all results for effluent parameters monitored concurrently with the toxicity test(s); and progress reports on TRE/TIE investigations.

5.2.2.3.9.2 The permittee shall provide the actual test endpoint responses for the control (i.e., the control mean) and the IWC (i.e., the IWC mean) for each toxicity test to facilitate the review of test results and determination of reasonable potential for chronic WET by the permitting authority.

5.2.2.3.9.3 The permittee shall notify the permitting authority in writing within 14 days of exceedance of the chronic WET permit trigger. This notification shall describe actions the permittee has taken or will take to investigate, identify, and correct the causes of toxicity; the status of actions required by this permit; and schedule for actions not yet completed; or reason(s) that no action has been taken.

5.2.2.3.10 Permit Reopener for Chronic Toxicity. In accordance with 40 CFR Parts 122 and 124, this permit may be modified to include effluent limitations or permit conditions to address chronic toxicity in the effluent or receiving waterbody, as a result of the discharge; or to implement new, revised, or newly interpreted water quality standards applicable to toxicity.

5.2.3 General Monitoring and Reporting

5.2.3.1 All monitoring shall be conducted in accordance with 40 CFR 136 test methods, unless otherwise specified in this permit. For effluent analyses required in Table 3 of this permit, the permittee shall use 40 CFR 136 test methods with Method Detection Limits (MDLs) and

Minimum Levels (MLs) that are lower than the effluent limits in Table 3 of this permit and the water quality criteria concentrations in the National Recommended Water Quality Criteria. If all MDLs or MLs are higher than these effluent limits or criteria concentrations, then the permittee shall use the test method with the lowest MDL or ML available. If all published MDLs are higher than the effluent limitations (or applicable criteria concentrations), the permittee shall utilize the EPA-approved analytical method with the lowest published MDL. The permittee is not required to use "ultra low methods" unless specifically required by the permit.

5.2.3.2 The permittee shall ensure that the laboratory uses a standard calibration where the lowest standard point is equal to or less than the ML. Influent and effluent analyses for metals shall measure "total recoverable metal," except as provided under 40 CFR 122.45(c).

5.2.3.3 As an attachment to the first annual report, the permittee shall submit for all parameters with monitoring requirements specified in Table 3 of this permit:

5.2.3.3.1 The test method number or title and published MDL or ML;

5.2.3.3.2 The preparation procedure used by the laboratory;

5.2.3.3.3 The laboratory's MDL for the test method computed in accordance with Appendix B of 40 CFR 136;

5.2.3.3.4 The standard deviation (S) from the laboratory's MDL study;

5.2.3.3.5 The number of replicate analyses (n) used to compute the laboratory's MDL; and

5.2.3.3.6 The laboratory's lowest calibration standard.

As part of each annual report submittal, the permittee shall certify that there are no changes to the laboratory's test methods, MDLs, MLs, or calibration standards. If there are any changes to the laboratory's test methods, MDLs, MLs, or calibration standards, these changes shall be summarized in an attachment to the subsequent annual submittal.

5.2.3.4 The permittee shall develop a Quality Assurance ("QA") Manual for the field collection and laboratory analysis of samples. The purpose of the QA Manual is to assist in planning for the collection and analysis of samples and explaining data anomalies if they occur. At a minimum, the QA Manual shall include the following:

5.2.3.4.1 Identification of project management and a description of the roles and responsibilities of the participants; purpose of sample collection; matrix to be sampled; the analytes or compounds being measured; applicable technical, regulatory, or program-specific action criteria; personnel qualification requirements for collecting samples;

5.2.3.4.2 Description of sample collection procedures; equipment used; the type and number of samples to be collected including QA/Quality Control ("QC") samples; preservatives and

holding times for the samples (see 40 CFR 136.3); and chain of custody procedures;
5.2.3.4.3 Identification of the laboratory used to analyze the samples; provisions for any proficiency demonstration that will be required by the laboratory before or after contract award such as passing a performance evaluation sample; analytical method to be used; MDL and ML to be reported; required QC results to be reported (e.g., matrix spike recoveries, duplicate relative percent differences, blank contamination, laboratory control sample recoveries, surrogate spike recoveries, etc.) and acceptance criteria; and corrective actions to be taken in response to problems identified during QC checks; and

5.2.3.4.4 Discussion of how the permittee will perform data review and reporting of results to EPA and Guam EPA and how the permittee will resolve data quality issues and identify limits on the use of data.

5.2.3.5 Throughout all field collection and laboratory analyses of samples, the permittee shall use the QA/QC procedures documented in its QA Manual. If samples are tested by a contract laboratory, the permittee shall ensure that the laboratory has the permittee's QA Manual on file. A copy of the permittee's QA Manual shall be retained on the permittee's premises and available for review upon request. The permittee shall review its QA Manual annually and revise it, as appropriate.

5.2.3.6 Samples collected during each month of the reporting period must be reported, as follows:

5.2.3.6.1 For a *maximum daily* permit limit or monitoring requirement when one or more samples are collected during the month, report either: The *maximum value*, if the maximum value of all analytical results is greater than or equal to the ML; or *NODI (Q)*, "No Discharge No Data Information" if the maximum value of all analytical results is greater than or equal to the laboratory's MDL, but less than the ML; or *NODI (B)*, if the maximum value of all analytical results is less than the laboratory's MDL.

5.2.3.6.2 For an *average weekly* or *average monthly* permit limit or monitoring requirement when only one sample is collected during the week or month, report either: The *maximum value*, if the maximum value of all analytical results is greater than or equal to the ML; or *NODI (Q)*, if the maximum value of all analytical results is greater than or equal to the laboratory's MDL, but less than the ML; or *NODI (B)*, if the maximum value of all analytical results is less than the laboratory's MDL.

5.2.3.6.3 For an *average weekly* or *average monthly* permit limit or monitoring requirement when more than one sample is collected during the week or month, report: The *average value* of all analytical results where 0 (zero) is substituted for *NODI (B)* and the laboratory's MDL is substituted for *NODI (Q)*.

5.2.3.7 All monitoring results shall be submitted in such a format as to allow direct comparison with the effluent limits, monitoring requirements, and conditions of this permit. Influent and effluent monitoring results are to be reported on EPA Form 3320-1, a pre-printed DMR provided

by the EPA Region 9 DMR Coordinator for NPDES. A DMR form must be submitted for the reporting period even if there was not any discharge. DMR forms shall be submitted by the 28th day of the month following the previous annual reporting period. Duplicate signed copies of these, and all other reports required herein, shall be submitted to EPA and Guam EPA at the following addresses, unless otherwise specified in this permit:

U.S. EPA Region 9
Enforcement Division DMR (ENF-4-1)
75 Hawthorne Street
San Francisco, CA 94105

Administrator
Guam EPA
P.O. Box 22439 GMF
Barrigada, GU 96921

The discharger has the option to submit all monitoring results in the electronic reporting format approved by EPA. The Discharger may submit DMRs electronically using EPA's NetDMR application. NetDMR is a national tool for regulated Clean Water Act permittees to submit DMRs electronically via a secure Internet application to EPA. By using NetDMR, dischargers can discontinue mailing hard copy forms under 40 CFR 122.41 and 403.12.

5.3 Evaluation of Overall Program Effectiveness

5.3.1 Annual Effectiveness Assessment. The annual effectiveness assessment must:

5.3.1.1 Use the monitoring and assessment data described in Part 5.2 to specifically assess the effectiveness of each of the following:

5.3.1.1.1 Each significant activity/control measures or type of activity/control measure implemented;

5.3.1.1.2 Implementation of each major component of the Stormwater Management Program (public education/involvement, illicit discharges, construction, post-construction, good housekeeping, industrial/commercial facilities); and

5.3.1.1.3 Implementation of the SWMP as a whole.

5.3.1.2 Identify and use measurable goals, assessment indicators, and assessment methods for each of the items listed in Part 5.3.1.1 above.

5.3.1.3 Document the permittee's compliance with permit conditions.

5.3.2 Based on the results of the effectiveness assessment, the permittee must annually review its activities or control measures to identify modifications and improvements needed to

maximize SWMP effectiveness, as necessary to achieve compliance with this permit. The permittee must develop and implement a plan and schedule to address the identified modifications and improvements. DPW activities/control measures that are ineffective or less effective than other comparable municipal activities/control measures must be replaced or improved upon by implementation of more effective municipal activities/control measures.

5.3.3 As part of its Annual Reports, the permittee must report on its SWMP effectiveness assessment as implemented under Part 5.3.1 above.

5.4 Requirements for Annual Reporting of MS4 Activities

5.4.1 Annual Report Deadline. The permittee must submit annual reports on or before March 31st for the preceding October 1st to September 30 reporting period reporting period.

5.4.2 Annual Report Requirements. The Permittee must submit a detailed annual report that addresses, for the activities described in the SWMP document required in Part 2.2, including the following:

- A summary of past year activities, including where available, specific quantities achieved and summaries of enforcement actions.
- A description of the effectiveness of each SWMP program component or activity (see Part 5.3);
- Monitoring data collected during the reporting period;
- Planned activities and changes for the next reporting period, for each SWMP program component or activity; and
- Detailed fiscal analysis described in Part 2.5.2.

5.4.3 The Annual Report must clearly refer to the permit requirements, and describe in quantifiable terms, the status of activities undertaken to comply with each requirement.

5.4.4 Beginning no later than December 21, 2020, annual reports shall be submitted to EPA using NeT, a web-based tool that allows permittees to electronically submit required reports via a secure internet connection. By using NeT, the permittee will no longer be required to submit hard copies of annual reports to EPA under 40 CFR 122.34(g)(3). Hard copies of annual reports submitted to EPA prior to electronic submittal using NeT shall be submitted to: Water Enforcement Section II (ENF-3-2), EPA Region 9, 75 Hawthorne Street, San Francisco, CA 94105.

5.5 Summary of Deadlines

Table 5 – Summary of Deadlines

Deadline	Description of Requirement	Permit Citation	Page Number
Permit effective date	Begin implementation of permit requirements, including existing local construction and post-construction requirements	Part 2.1, 3.4.1 and 3.5.1	Pages 7, 20, and 26
Three years after permit effective date	Review legal authority	Part 2.3.1	Page 8
	Progress report for the SWMP	Part 2.2	Page 8
3.5 years after permit effective date	Develop SWMP consistent with permit requirements for 3.5 years	Part 2.2	Page 8
	Develop enforcement response plan	Part 2.4.1	Page 11
	Develop public education program	Part 3.1.1	Page 13
	Develop public participation program	Part 3.2.1	Page 14
	Develop information tracking system	Part 5.1	Page 51
	Develop monitoring plan	Part 5.2.1	Page 51
4.5 years after permit effective date	Notification of industrial/ commercial facilities of program requirements	Part 3.7.3.2	Page 45
	Assess effectiveness of public education program	Part 3.1.3	Part 14
	Update existing construction site controls program to be consistent with permit	Part 3.4.1	Page 20
	Training for construction inspectors and plan reviewers	Parts 3.4.5.1.1.1 and 3.4.5.1.3.1	Pages 24/25
5.5 years after permit effective date	Develop TMDL compliance plan and implementation schedule (if appropriate); otherwise TMDL requirements take effect 5.5 years after permit effective date	Part 4.1.1/4.1.2	Pages 47/48
	Identify Priority Outfalls		
	Training for general field staff regarding IDDE program	Part 3.3.7.2	Page 20
	Develop program for industrial/	Part 3.7.1	Page 42

	commercial sources		
	Develop IDDE program	Part 3.3.1	Page 14
	Update existing new development/redevelopment controls program to be consistent with permit	Part 3.5.1	Page 26
90 days after end of each annual reporting period	Submit annual report	Part 5.4.1	Page 60
Within 6 months of permit expiration	Permit reapplication	Appendix B, Section 1	Page 66
6 years after permit effective date	Complete MS4 map	Part 3.3.2	Page 15
	Develop retrofit plan	Part 3.5.7	Page 28
	Develop trash reduction plan	Part 3.6.12	Page 38
As soon as practicable but not to exceed 20 years from completion of trash reduction plan	Compliance with trash reduction requirements	Part 3.6.12.1.6 and Part 3.6.12.3	Pages 38/39
As soon as practicable (if permit is modified to add a compliance schedule)	Compliance with TMDL requirements	Parts 4.1.1 and 4.1.2	Pages 47/48
As soon as practicable	Address deficiencies in legal authority, where needed	Part 2.3.1	Page 9
Included in Part 3.6.14 Schedule of Compliance	Implement pollution prevention plan for DPW operations	Part 3.6.5.2.1.4	Page 35
	Develop asset management plan	Part 3.6.13	Page 39

Appendix A – Definitions and Acronyms

1. "Best Management Practices" (BMPs) refer to schedules of activities, prohibition of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

2. "Composite sample" means a combined sample that is formed by combining a series of individual discrete samples of specific volumes at specific intervals. Samples must be collected during the first 3 hours of the stormwater discharge or for the entire discharge if it is less than 3 hours. The composite sample must be flow-weighted using a continuous sampler, or it must be taken as a combination of a minimum of 3 sample aliquots, taken in each hour of discharge, with each aliquot being separated by a minimum of 15 minutes, and with each aliquot volume being proportional to the flow at the time of the sampling.

3. "CWA" means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub. L. 92-500, as amended by Pub. L. 95-217, Pub. L. 95-576, Pub. L. 95-483 and Pub. L. 97-117, 33 U.S.C. 1251 et seq.

4. "Director" means the Regional Administrator of EPA Region 9 or an authorized representative.

5. "Grab" or "discrete" sample means a discrete, individual sample collected from a single location within a short period of time (less than 15 minutes).

6. "Illicit Discharge" means any discharge to a municipal separate storm sewer system that is not composed entirely of stormwater except discharges pursuant to an NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges from firefighting activities.

7. "MEP" means maximum extent practicable, the technology-based discharge standard for municipal separate storm sewer systems to reduce pollutants in stormwater discharges. A discussion of MEP as it applies to small MS4s is found at 40 CFR 122.34. CWA section 402(p)(3)(B)(iii) requires that a municipal permit "shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system design, and engineering methods, and other provisions such as the Administrator or the State determines appropriate for the control of such pollutants."

8. "Measurable Goal" means a quantitative measure of progress in implementing a component of a stormwater management program.

9. "Municipal Separate Storm Sewer" means a conveyance, or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

   (i) owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal or sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to water of the United States;
   (ii) designed or used for collecting of conveying stormwater;
   (iii) which is not a combined sewer; and
   (iv) which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

10. "Outfall" means a point source where a municipal separate storm sewer discharges to water of the United States and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other waters of the United States and are used to convey waters of the United States.

11. "Permittee" means the Guam Department of Public Works.

12. "Point Source" means any discernible, confined and discrete conveyance, including but not limited to , any pipe, ditch, channel tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged.

13. "Representative Storm" means a storm event of greater than 0.1" of rainfall and at least 72 hours after the previously measurable (greater than 0.1" rainfall) storm event. Where feasible, the variance in the duration of the event and the total rainfall of the event should not exceed 50 percent from the average or median rainfall event in the area.

14. "Small Municipal Separate Storm Sewer System" means all separate storm sewers that are:

   (a) Owned or operated by the United States, a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States.

(b) Not defined as "large" or "medium" municipal separate storm sewer systems in accordance with this permit.
(c) This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.

15. "Stormwater" means stormwater runoff, snow melt runoff, and surface runoff and drainage.

16. "Trash" means discarded, used or leftover solid materials, including but not limited to garbage, rubbish, refuse, paper, containers, bulky metallic waste, packing or construction materials or carcasses of dead animals.

17. "Urbanized Area of the Island of Guam" means the geographic area on the Island of Guam which is considered to be urbanized by the U.S. Census Bureau based on the 2010 census.

18. "Waters of the United States" means:

(a) all waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
(b) all interstate waters, including interstate "wetlands;"
(c) all other waters such as intrastate lakes, rivers, streams (including intermittent streams, mudflats, sandflats, "wetlands," sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
    (i) which are or could be used by interstate or foreign travelers for recreational or other purposes;
    (ii) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
    (iii) which are used or could be used for industrial purposes by industries in interstate commerce;
(d) all impoundments of waters otherwise defined as waters of the United States under this definition;
(e) tributaries of waters identified in paragraphs (a) through (d) of this definition;
(f) the territory sea; and
(g) wetlands adjacent to areas (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States. This exclusion applies only to man-made bodies of water which neither were originally created in waters of the United

States (such as disposal area in wetlands) nor resulted from the impoundment of waters of the United States.

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Appendix B - EPA REGION 9 STANDARD FEDERAL NPDES PERMIT CONDITIONS
(Revised for Municipal Stormwater Permits, May 24, 1996)

1. Duty to Reapply [40 CFR 122.21(b)]

The permittee shall submit a new application 180 days before the existing permit expires.

2. Applications [40 CFR 122.22]

a. All permit applications shall be signed as follows:

(1) For a municipality, State, Federal, or other public agency. By either a principal executive officer or ranking elected official.

b. All reports required by permits and other information requested by the Director shall be signed by a person described in paragraph (a) of this section, or by a duly authorized representative or representatives of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described in paragraph (a) of this Section;
(2) The authorization specified either an individual or a position having responsibility for the overall operation of the regulated activity or a portion of the regulated activity, or an individual or position having overall responsibility for environmental matters for the municipality. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
(3) The written authorization is submitted to the Director.

c. Changes to authorization. If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or a portion of the facility, a new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

d. Certification. Any person signing a document under paragraph (a) or (b) of this section shall make the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate,

and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

3. Duty to Comply [40 CFR 122.41(a)]

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

a. The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

b. The Clean Water Act provides that:

(1) Any person who causes a violation of any condition in this permit is subject to a civil penalty not to exceed $25,000 per day of each violation. Any person who negligently causes a violation of any condition in this permit is subject to a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than one year, or both for a first conviction. For a second conviction, such a person is subject to a fine of not more than $50,000 per day of violation, or by imprisonment for not more than two years, or both. [Updated pursuant to the Water Quality Act of 1987]

(2) Any person who knowingly causes violation of any condition of this permit is subject to fine of not less than $5,000 nor more than $50,000 per day of violation, or by imprisonment for not more than three years, or by both for a first conviction. For a second conviction, such a person is subject to a fine of not more than $100,000 per day of violation, or by imprisonment of not more than six years, or both. [Updated pursuant to the Water Quality Act of 1987]

(3) Any person who knowingly causes a violation of any condition of this permit and, by so doing, knows at that time that he thereby places another in imminent danger of death or serious bodily injury shall be subject to a fine or not more than $250,000, or imprisonment of not more than 15 years, or both. A person who is an organization and violates this provision shall be subject to a fine or not more than $1,000,000 for a first conviction. For a second conviction under this provision, the maximum fine and imprisonment shall be doubled. [Updated pursuant to the Water Quality Act of 1987]

4. Duty to Mitigate [40 CFR 122.41(d)]

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

5. Proper Operation and Maintenance [40 CFR 122.41(e)]

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

6. Permit Actions [40 CFR 122.41(f)]

The permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

7. Property Rights [40 CFR 122.41 (g)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

8. Duty to Provide Information [40 CFR 122.41(h)]

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Director upon request, copies of records required to be kept by this permit.

9. Inspection and Entry [40 CFR 122.41(i)]

The permittee shall allow the Director, or an authorized representative, upon the presentation of credential and other documents as may be required by law, to:

a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

10. Monitoring and Records [40 CFR 122.41(j)]

a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

b. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

c. The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained in this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than two years per violation, or by both for a first conviction. For a second conviction, such a person is subject to a fine of not more than $20,000 per day of violation, or imprisonment for not more than four years, or both. [Updated pursuant to the Water Quality Act of 1987]

11. Signatory requirement[40 CFR 122.41(k)]

a. All applications, reports or information submitted to the Director shall be signed and certified. (See 40 CFR 122.22)

b. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record other document submitted or required to be maintained under this permit, including monitoring reports of compliance or noncompliance shall, upon conviction, be punished by a fine or not more than $10,000 per violation, or by imprisonment for not more than two years per violation, or by both for a first conviction. For a second conviction, such a person is subject to fine of not more than $20,000 per day of violation, or imprisonment

of not more than four years, or both. [Updated pursuant to the Water Quality Act of 1987]

12. Reporting requirements [40 CFR 122.41(l)]

a. Anticipated noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility of activity which may result in noncompliance with the permit requirements.

b. Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.

(1) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Director for reporting results of monitoring of sludge use or disposal practices.

(2) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR Part 136, then the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.

(3) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.

c. Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

d. Twenty-four hour reporting.

(1) The permittee shall report any noncompliance which may endanger public health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned in order to reduce, eliminate, and prevent reoccurrence of the noncompliance.

(2) The following shall be included as information which must be reported within 24 hours under this paragraph.

(i) Any unanticipated bypass which exceeds any effluent limitation in the permit. [See 40 CFR 122.41(g).]

(ii) Any upset which exceeds any effluent limitation in the permit.

(3) The Director may waive the written report on a case-by-case basis for reports under paragraph (d)(2) of this section if the oral report has been received within 24 hours. Reports during normal business hours (8:00 am to 4:30 pm) should be made to the Compliance Section at telephone #415-972-3505. Twenty-four hour reporting can be made at telephone #415-947-4400.

e. Other noncompliance. The permittee shall report all instances of noncompliance not reported under the above paragraphs (c) and (d) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed paragraph (d) of this section.

f. Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

13. Bypass [40 CFR 122.41(m)]

a. Definitions

(1) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. However, diversions of stormwater which are consistent with the normal operation of the municipal storm sewer system shall not be considered bypasses.

(2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. Bypass not Exceeding Limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (c) and (d) of this section.

c. Notice.

(1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, of possible at least ten days before the date of the bypass.

(2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph (f) of section (13) (24-hour notice).

d. Prohibition of bypass.

(1) Bypasses are prohibited, and the Director may take enforcement action against a permittee for a bypass, unless:

(i) A bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
(ii) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance, and
(iii) The permittee submitted notices as required under paragraph c of this section.

(2) The Director may approve an anticipated bypass, after considering its adverse effects, if the director determines it will meet the three conditions listed above in paragraph (d) of this section.

14. Upset [40 CFR 122.41(n)]

a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirement of paragraph (c) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and that the permittee can identify the cause(s) of the upset;
(2) The permitted facility was at the time being properly operated; and
(3) The permittee submitted notice of the upset as required in paragraph 13(f) (24-hour notice).
(4) The permittee complied with any remedial measures required under 40 CFR 122.41(d).

d. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

15. Termination of permits [40 CFR 122.64]

The following are causes for terminating a permit during its term, or for denying a permit renewal application:

a. Noncompliance by the permittee with any condition of the permit;

b. The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time;

c. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or

d. A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge controlled by the permit (for example, plant closure or termination of discharge by connection to a POTW).

16. Availability of Reports [Pursuant to Clean Water Act Section 308]

Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Regional Administrator. As required by the Act, permit applications, permits, and effluent data shall not be considered confidential.

17. Removed Substances [Pursuant to Clean Water Act Section 301]

Solids, sludges, filter backwash, or other pollutants removed in the course of maintenance of the MS4 shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.

18. Severability [Pursuant to Clean Water Act Section 512]

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and remainder of the permit, shall not be affected thereby.

19. Civil and Criminal Liability [Pursuant to Clean Water Act Section 309]

Except as provided in permit conditions on "Bypass" (Section 14) and "Upset" (Section 15), nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

20. Oil and Hazardous Substance Liability [Pursuant to Clean Water Act Section 311]

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.

21. State or Tribal Law [Pursuant to Clean Water Act Section 510]

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the operator from any legal action or relieve the operator from any responsibilities, liabilities, or penalties established pursuant to any applicable State or Tribal law or regulation under authority preserved by Section 510 of the Clean Water Act.

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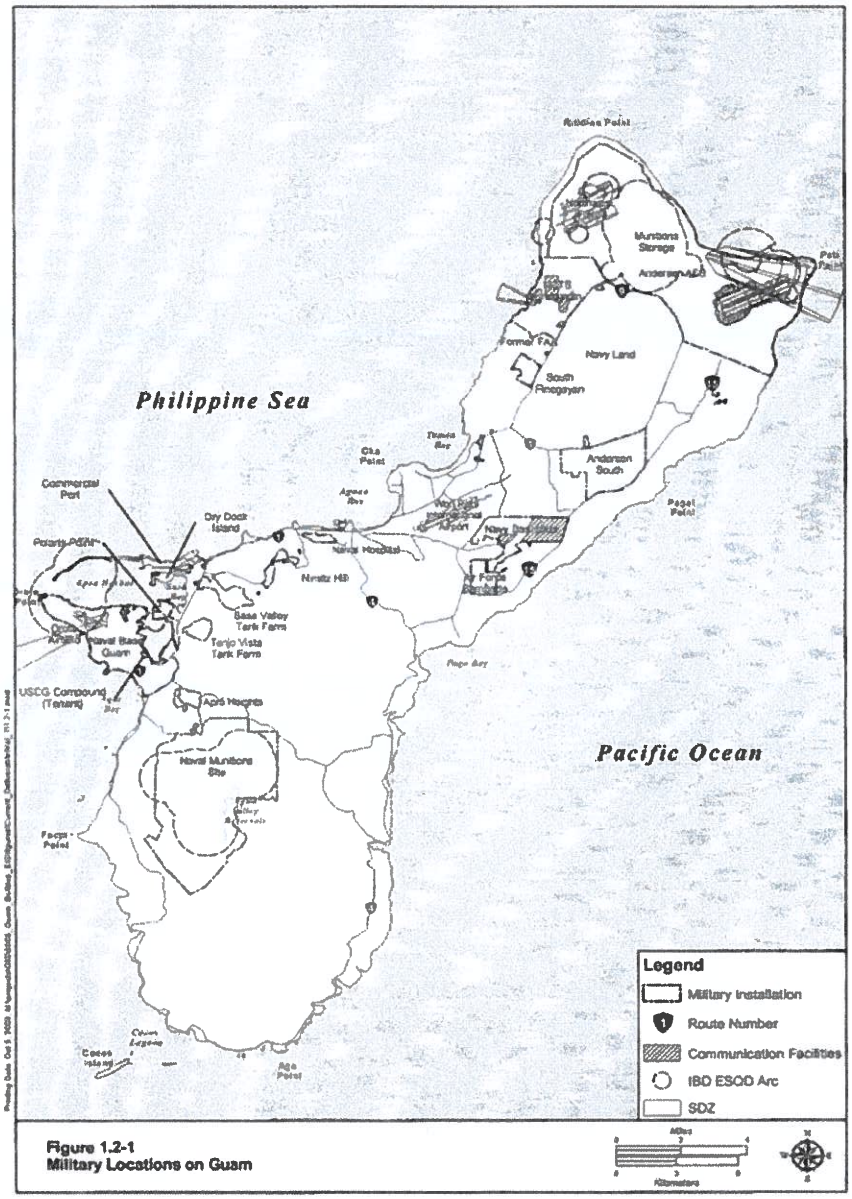
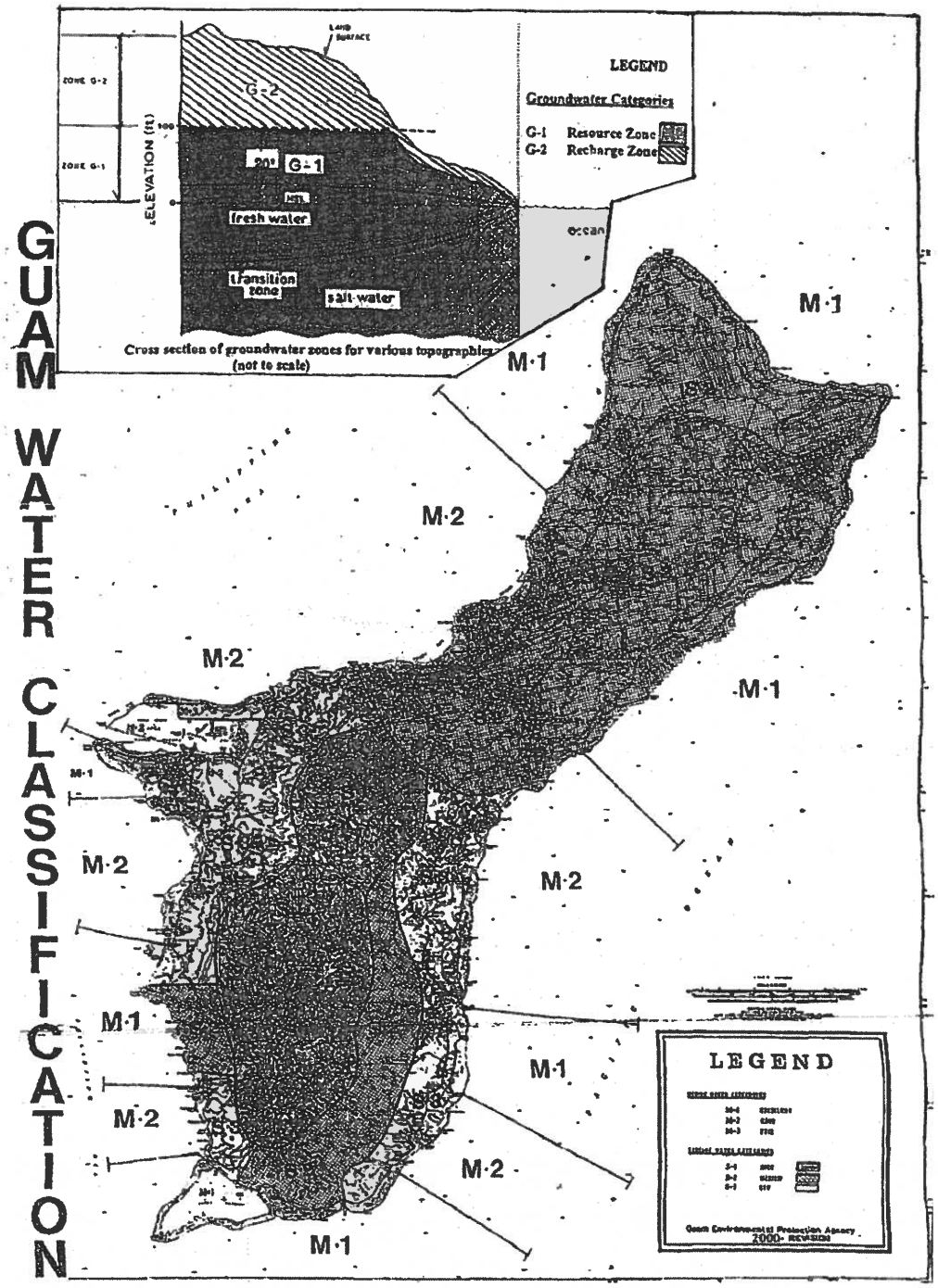
Appendix C – Map of Military Areas on Guam



The DPW permit covers the entire Island of Guam, except for the areas under the jurisdiction of the military shown above.

Appendix D – M-2 and M-3 Areas on Guam