

Storm Water Management Program for Joint Base San Antonio, Texas

TXR040068 - Lackland MS4

TXR040115 - Randolph MS4

TXR040409 - Fort Sam Houston MS4



December 2024

Submitted to:

Mr. Richard Trevino
502 CEG Director

Mr. Keith Kellner
802 CES Director

Ms. Sharon Jones
802 CES Environmental Compliance Chief
1555 Gott St, Bldg. 5595
JBSA-Lackland, TX 78236

December 2024 Revised by:

Ms. Samantha Bartholomew
802 CES Water Quality Program Manager
1555 Gott St, Bldg. 5595
JBSA-Lackland, Texas 78236

April 2020 Prepared by:

Environmental Quality Management, Inc. (EQM)
1800 Carillon Boulevard
Cincinnati, OH 45240
512-825-7500

Tetra Tech
711 Navarro St., Suite 560
San Antonio, Texas 78205
210-299-7900



Table of Contents

CERTIFICATION	viii
DOCUMENT CONTROL	ix
1.0 INTRODUCTION	1
1.1 PURPOSE	2
1.2 ORGANIZATION.....	2
1.3 PERMIT ELIGIBILITY AND DEFINITIONS	2
1.3.1 JBSA MS4 Definition and Categorization	2
1.3.2 Legal Authority and Enforcement Measures	3
1.3.3 Compliance with Water Quality Standards.....	3
1.3.4 Impaired Water Bodies and Total Maximum Daily Load.....	3
1.3.5 Discharges to the Edwards Aquifer Recharge Zone	5
1.3.6 Discharges to Specific Watersheds and Water Quality Areas.....	5
1.3.7 Protection of Streams and Watersheds by Home Rule Municipalities	5
1.3.8 Endangered Species Act.....	5
1.3.9 Allowable Non-Stormwater Discharges.....	5
2.0 JBSA MS4 COALITION OVERVIEW.....	7
2.1 JBSA-LAK Outfall and Receiving Water Description	7
2.2 JBSA-RND Outfall and Receiving Water Description.....	8
2.3 JBSA-FSH Outfall and Receiving Water Description.....	8
3.0 STORMWATER MANAGEMENT PROGRAM IMPLEMENTATION.....	8
3.1 MINIMUM CONTROL MEASURES AND BMPS	8
4.0 PUBLIC EDUCATION AND OUTREACH	9
4.1 PEO-1 INFORMATION ON THE MS4 OPERATOR’S WEBSITE.....	10
4.2 PEO-2 MAINTAIN OR MARK STORM DRAINS AND INLETS WITH “NO DUMPING – DRAINS TO CREEK” OR SIMILAR MESSAGE	10
4.3 PEO-3 MEDIA/ADVERTISING CAMPAIGN/PUBLIC SERVICE ANNOUNCEMENTS IN AREAS OF HIGH VISIBILITY	10
4.4 PEO-4 PUBLISH ARTICLES IN LOCAL NEWSPAPER OR NEWSLETTER, MAY BE ELECTRONIC.....	11
5.0 PUBLIC INVOLVEMENT/PARTICIPATION (PIP)	14
5.1 PIP-1 STREAM/LAKE/WATERSHED CLEANUP EVENTS	14

5.2	PIP-2 STORMWATER SURVEY.....	14
5.3	PIP-3 EDUCATIONAL DISPLAY/BOOTH.....	14
6.0	ILLCIT DISCHARGE DETECTION AND ELIMINATION	16
6.1	IDDE-1 MAINTAIN A CURRENT AND ACCURATE MS4 MAP	16
6.2	IDDE-2 PROVIDE TRAINING FOR ALL MS4 FIELD STAFF	16
6.3	IDDE-3 MAINTAIN AND FACILITATE A PUBLIC REPORTING METHOD	16
6.4	IDDE-4 DEVELOP AND MAINTAIN PROCEDURES FOR RESPONDING TO ILLICIT DISCHARGES, ILLEGAL DUMPING, AND SPILLS	17
6.5	IDDE-5 SOURCE INVESTIGATION AND ELIMINATION OF ILLICIT DISCHARGES AND ILLEGAL DUMPING	17
6.6	IDDE-6 CORRECTIVE ACTION TO ELIMINATE ILLICIT DISCHARGES AND ILLEGAL DUMPING.....	18
6.7	IDDE-7 INSPECTION PROCEDURES.....	18
6.8	IDDE-8 INSPECTIONS IN RESPONSE TO COMPLAINTS.....	18
6.9	IDDE-9 INSPECTIONS FOR SEWAGE HOLDING TANKS	19
7.0	CONSTRUCTION SITE STORMWATER RUNOFF CONTROL	23
7.1	CON-1 DEVELOP AND MAINTAIN AN ORDINANCE OR OTHER REGULATORY MECHANISM.....	23
7.2	CON-2 PROHIBIT DISCHARGES.....	23
7.3	CON-3 MAINTAIN AND IMPLEMENT SITE PLAN REVIEW PROCEDURES.....	24
7.4	CON-4 IMPLEMENT PROCEDURES FOR INSPECTING LARGE AND SMALL CONSTRUCTION PROJECTS	24
7.5	CON-5 CONDUCT CONSTRUCTION SITE INSPECTIONS	25
7.6	CON-6 DEVELOP, IMPLEMENT, AND MAINTAIN PROCEDURES FOR RECEIPT AND CONSIDERATION OF INFO SUBMITTED BY THE PUBLIC	25
7.7	CON-7 CONDUCT TRAINING FOR ALL MS4 STAFF WHOSE PRIMARY JOB DUTIES ARE RELATED TO IMPLEMENTING THE CONSTRUCTION STORMWATER PROGRAM	26
8.0	POST CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT	30
8.1	PC-1 DEVELOP AND MAINTAIN AN ORDINANCE OR OTHER REGULATORY MECHANISM.....	30
8.2	PC-2 DOCUMENT AND MAINTAIN RECORDS OF ENFORCEMENT ACTIONS.....	30
8.3	PC-3 ENSURE LONG TERM OPERATION AND MAINTENANCE OF STRUCTURAL STORMWATER CONTROL MEASURES	31

9.0	POLLUTION PREVENTION AND GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS	33
9.1	P2-1 PERMITTEE-OWNED FACILITIES AND CONTROL INVENTORY	33
9.2	P2-2 TRAINING AND EDUCATION	34
9.3	P2-3 DISPOSAL OF WASTE MATERIAL	34
9.4	P2-4 CONTRACTOR REQUIREMENTS AND OVERSIGHT	35
9.5	P2-5 ASSESSMENT OF PERMITTEE-OWNED OPERATIONS	35
9.6	P2-6 IDENTIFY POLLUTANTS OF CONCERN.....	35
9.7	P2-7 POLLUTION PREVENTION MEASURES	36
9.8	P2-8 INSPECTION OF POLLUTION PREVENTION MEASURES.....	36
9.9	P2-9 STRUCTURAL CONTROL MAINTENANCE	36
10.0	RECORDKEEPING AND REPORTING.....	41
10.1	ANNUAL REPORT	41
10.2	ADDITIONAL REPORTING REQUIREMENTS	42
10.3	FEES.....	43

APPENDICES

- Appendix A JBSA Overview, Receiving Waters, and Outfall Location Map
- Appendix B TPDES Permit No. TXR040000 General Permit for Small Municipal Separate Storm Sewer Systems
- Appendix C JBSA Notice of Intent
- Appendix D JBSA Annual Reports

LIST OF TABLES

Table 1 Public Education and Outreach BMPs, Descriptions, and Measurable Goals	12
Table 2 Public Involvement/Participation BMPs, Descriptions, and Measurable Goals.....	14
Table 3 Illicit Discharge Detection and Elimination BMPs, Descriptions, and Measurable Goals.....	21
Table 4 Construction Site Runoff Control BMPs, Descriptions, and Measurable Goals	26
Table 5 Post-Construction Stormwater Management BMPs, Descriptions, and Measurable Goals	30
Table 6 Pollution Prevention/Good Housekeeping BMPs, Descriptions, and Measurable Goals.....	36

LIST OF ACRONYMS

AFI	Air Force Instruction
AFMAN	Air Force Manual
BMP	Best Management Practice
CATEX	Categorical Exclusions
CEP	Civil Engineer Squadron Programming Flight
CGP	Construction General Permit
CON	Construction Site Stormwater Runoff Control
CWA	Clean Water Act
DoD	Department of Defense
EIAP	Environmental Impact Analysis Program
EPA	Environmental Protection Agency
ETL	Engineering Technical Letter
IAW	In Accordance With
IDE	Illicit Discharge Elimination
IDDE	Illicit Discharge Detection and Elimination
IP	Implementation Plan
IPMP	Integrated Pest Management Plan
ISWMP	Integrated Solid Waste Management Plan
JBSA-FSH	Joint Base-Fort Sam Houston
JBSA-LAK	Joint Base San Antonio-Lackland
JBSA-RND	Joint Base San Antonio-Randolph
LID	Low Impact Development
MCM	Minimum Control Measures
MEP	Maximum Extent Practicable
MS4	Municipal Separate Storm Sewer System
MSGP	Multi Sector General Permit
NEPA	National Environmental Policy Act
NLT	No Later Than
NOC	Notice of Change
NOI	Notice of Intent
NOT	Notice of Termination

NPDES	National Pollutant Discharge Elimination System
P2	Pollution Prevention and Good Housekeeping
PC	Post Construction
PCB	Polychlorinated Biphenyl
PEO	Public Education and Outreach
QAE	Quality Assurance Evaluator
SPCC	Spill Prevention Control and Countermeasure
SWMP	Stormwater Management Program
SWP3	Stormwater Pollution Prevention Plan
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
TMDL	Total Maximum Daily Load
TPDES	Texas Pollutant Discharge Elimination System
UA	Urbanized Area
UFC	Unified Facilities Criteria
UIF	Unfavorable Information File

CERTIFICATION


This section contains the certification, signed by the appropriate Responsible Official. Insert scanned document into this section, or insert the statement prescribed by the regulator below.

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 gathered and evaluated 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.

Responsible Official Certification

Printed Name: Keith Kellner, PE

Title: 802nd Civil Engineer Squadron Director

Signature: 

Date: 10 JAN 2025

Version Table – A new version of the plan is created when pen and ink changes are incorporated. Below is a list of all versions under the current permit.

Version Number	Description	Date

1.0 INTRODUCTION

Joint Base San Antonio (JBSA) is the largest Premier Joint Base in the United States Department of Defense (DoD), encompassing a total land area of 45,077 acres, located within and surrounding the San Antonio, Texas urban area. JBSA is comprised of three main operating bases: JBSA-Lackland (JBSA-LAK), JBSA-Randolph (JBSA-RND), and JBSA-Fort Sam Houston (JBSA-FSH) and eight geographically separated sites. JBSA installations are primarily surrounded by urban residential and industrial properties. JBSA's mission is to command, operate, and administer resources and provide support to assigned, attached, satellite, and tenant units.

JBSA personnel must comply with federal, state, and local regulations related to environmental protection while ensuring mission accomplishment. One of the primary environmental laws impacting JBSA is the federal Clean Water Act (CWA) and associated implementing regulations. The purpose of the CWA is to protect and restore the physical, chemical, and biological integrity of our nation's waterways by controlling and limiting discharges of pollutants to these waterways.

JBSA owns and operates stormwater conveyance systems at JBSA-LAK, JBSA-RND, and JBSA-FSH, which are located within the San Antonio Urbanized Area (UA) as defined by the United States Census Bureau. Based on the CWA implementing regulations and JBSA's proximity to an urbanized area, JBSA-LAK, JBSA-RND, and JBSA-FSH are regulated small municipal separate storm sewer systems (MS4). As such, JBSA is required to obtain coverage under the National Pollutant Discharge Elimination System (NPDES) for surface water discharges associated with municipal stormwater discharges. The State of Texas has been delegated authority from the U.S. Environmental Protection Agency (EPA) for implementing and enforcing the CWA and NPDES permit program within the State. On 15 August 2024, the Texas Commission on Environmental Quality (TCEQ) reissued Texas Pollutant Discharge Elimination System (TPDES) Municipal Separate Storm Sewer System (MS4) General Permit No. TXR040000 for stormwater discharges from small MS4s. As a regulated small MS4 within the State of Texas, JBSA is applicable for coverage under the MS4 Permit. Additional guidance used in preparation of this document includes:

- 2024 Texas Integrated Report - Index of Water Quality Impairments for CWA Sections 305(b) and 303(d), EPA approved on 13 November 2024.
- TCEQ Regulatory Guidance (RG) 646 *Stormwater Management Plan Template*
- 2020 JBSA-LAK, JBSA-RND, and JBSA-FSH Storm Water Management Plans
- T-EMP Department of the Air Force Storm Water Management Plan

In accordance with the MS4 Permit, JBSA must develop and implement a Stormwater Management Program (SWMP) designed to reduce the discharge of pollutants to the maximum extent practicable (MEP) and to meet applicable water quality requirements of the CWA. The SWMP identifies best management practices (BMPs) and measurable goals implemented for the following six Minimum Control Measures (MCMs):

1. Public Education and Outreach (PEO);
2. Public Involvement/Participation (PIP);
3. Illicit Discharge Detection and Elimination (IDDE);
4. Construction Site Stormwater Runoff Control (CON);
5. Post-Construction Stormwater Management in New Development and Redevelopment (PC); and
6. Pollution Prevention and Good Housekeeping for Municipal Operations (P2).

This document outlines the JBSA SWMP and identifies specific BMPs and measurable goals for each MCM. The SWMP contained herein details actions that will be implemented over the 5-year MS4 Permit term and will assist JBSA personnel with implementing, tracking, and documenting SWMP activities. The JBSA Water Quality Program Managers administer the SWMP and participate as a member of the MS4 Field Staff.

1.1 PURPOSE

This SWMP will serve as a framework for identifying, assigning, and implementing control measures and BMPs intended to eliminate or reduce the discharge of pollutants from the MS4 and protect downstream water quality. In addition to these primary objectives, the SWMP will:

- Serve as a planning and guidance document for JBSA organizations, contractors, and the JBSA community to minimize water quality impacts from municipal activities;
- Be dynamic and adaptively managed to address changes to MS4 Permit goals, organizational structure, responsibilities, and operations; and
- Define techniques and measurable goals for measuring BMP effectiveness.

1.2 ORGANIZATION

Section 1.0 introduces the background and requirements associated with JBSA MS4 Permits as well as summarizes the purpose of this SWMP; Section 2.0 provides an overview of JBSA, including a description of activities, drainage basins and receiving waterways; Section 3.0 describes SWMP implementation; and Sections 4.0 through 9.0 identify and describe the BMPs and associated measurable goals that will fulfill the requirements of the six applicable MCMs outlined in the MS4 Permit. Section 10.0 describes the recordkeeping and reporting requirements for JBSA.

1.3 PERMIT ELIGIBILITY AND DEFINITIONS

The MS4 Permit contains specific limitations and eligibility requirements to obtain coverage under the statewide general permit. The MS4 Permit also contains terms and conditions specific to different categories of MS4s. The following paragraphs discuss permit eligibility and definitions applicable to JBSA.

1.3.1 JBSA MS4 Definition and Categorization

JBSA is a non-traditional, Level 2b MS4 operator based on the following MS4 Permit definitions:

Non-traditional MS4:

*“A small MS4 that often cannot pass ordinances and may not have the enforcement authority like a traditional small MS4 would have to enforce the stormwater management program. Examples of non-traditional small MS4s include counties, transportation authorities, municipal utility districts, drainage districts, **military bases**, prisons and universities.”*

Level 2b MS4:

*“**Level 2b: Operators of all non-traditional small MS4s** such as counties, drainage districts, transportation entities, **military bases**, universities, colleges, correctional institutions, municipal utility districts, and other special districts regardless of population served within the “urban area with a population of at least 50,000 people”, unless the non-traditional MS4 can demonstrate that it meets the criteria for a waiver from permit coverage based on the population served.”*

This SWMP complies with the MS4 Permit requirements applicable to Non-Traditional, Level 2b MS4 Operators.

1.3.2 Legal Authority and Enforcement Measures

Part IV, Section C.3(b) of the MS4 Permit requires permitted entities to identify the legal authority for implementing and enforcing the SWMP. The MS4 Permit provides two options for demonstrating legal authority for Non-Traditional MS4s that lack the legal authority to pass and enforce ordinances. Option one is applicable to JBSA-LAK and states the following:

“Where the permittee lacks the authority to develop ordinances or to implement enforcement actions, the permittee shall exert enforcement authority as required by this general permit for its facilities, employees, contractors, and any other entity over which it has operational control within the portion of the UA with a population of at least 50,000 people under the jurisdiction of the permittee. For discharges from third party actions, the permittee shall perform inspections and exert enforcement authority to the MEP.”

Additionally, the MS4 Permit requires the following with respect to SWMP enforcement:

“Permittees with enforcement authority (i.e., traditional small MS4s) shall develop a standard operating procedure (SOP) to respond to violations to the extent allowable under state and local law. When the permittee does not have enforcement authority over the violator, and the violations continue after violator has been notified by the permittee, the permittee shall notify either the adjacent MS4 operator with enforcement authority or the appropriate TCEQ Regional Office.”

JBSA has established regulation, and commands full jurisdiction, fiscal authority and legal resources to implement its SWMP. As a military installation, personnel living and working on JBSA shall abide by Federal, State, and local laws as well as military, contractual, and JBSA specific regulations and policies. There are well established legal mechanisms to address SWMP enforcement on JBSA including, but not limited to, the Uniform Code of Military Justice, Federal Acquisition Regulations, and Office of Personnel Management regulations. Enforcement measures can include administrative and criminal penalties for installation employees, military members, housing residents, and contractors. JBSA Water Quality Program Managers oversee SWMP enforcement and coordination with appropriate enforcement agents.

1.3.3 Compliance with Water Quality Standards

MS4 discharges that would cause, have the reasonable potential to cause, or contribute to a violation of water quality standards are not eligible for coverage under the MS4 Permit. JBSA stormwater discharges to Lower Leon Creek (Segment 1906), Medio Creek (Segment 1912A), Cibolo Creek (Segment 1913), Salado Creek (Segment 1910), and Upper San Antonio River (Segment 1911). Discharges from JBSA are not expected to cause or contribute to a violation of water quality standards or fail to protect and maintain existing designated uses.

1.3.4 Impaired Water Bodies and Total Maximum Daily Load

MS4 discharges to impaired water bodies, for which there is an approved total maximum daily load (TMDL) are not eligible for coverage under the MS4 Permit unless the discharges are consistent with the approved TMDL. A water body is impaired for purposes of the permit if it has been identified, pursuant to the latest TCEQ and EPA approved CWA §303(d) list or the Texas Integrated Report of Surface Water Quality for CWA Sections 305(b) and 303(d), which lists the water bodies as not meeting Texas Surface Water Quality Standards.

On 13 November 2024, the EPA approved the State of Texas 2024 Texas Integrated Report of Surface Water Quality for Clean Water Act Section 303(d) List. The Texas Integrated Report summarizes the condition of the state’s surface waters, including concerns for public health, fitness for use by aquatic species and other wildlife, and specific pollutants and their possible sources. These are water-quality-limited estuaries, lakes, and streams that fall short of State Water Quality Stream Standards. Some of the approved 303(d) list water bodies have existing TMDLs, while other segments require the establishment of TMDLs by TCEQ assessment.

The 2024 MS4 General Permit maintains the requirement that states MS4 operators shall annually check, in conjunction with preparation of the annual report, if a water body has been added to the latest EPA approved CWA § 303(d) List or the *Texas Integrated Report of Surface Water Quality for CWA Sections 305(b) and 303(d)* which lists the category 4 and 5 water bodies (Permit Part III). Newly listed waters must be addressed in the SWMP within 2 years following the approval date of the new list(s). The permittee shall determine whether the small MS4 may be a source of the pollutant of concern, and if so, ensure the SWMP includes focused BMPs, along with corresponding measurable goals. The permit allows the MS4 operator to implement BMPs to address the pollutant of concern and identify any newly listed waters in the annual report, without submitting a notice of change (NOC).

JBSA discharges municipal stormwater into three impaired surface water bodies within the San Antonio River Basin:

JBSA-LAK – The segment of **Lower Leon Creek (Segment 1906_05)**, from the confluence with the Medina River in Bexar County to a point 100 meters (110 yards) upstream of SH 16, northwest of San Antonio, is classified in the *2024 Texas Integrated Report of Surface Water Quality for CWA Sections 305(b) and 303(d)* as an **impaired water body for Bacteria in water (Recreation Use), polychlorinated biphenyls (PCBs) in edible aquatic animal tissues, and PFAS in edible aquatic animal tissue**. TMDLs for Bacteria, PCBs, and PFAS in edible tissue are currently being developed. An Implementation Plan (I-Plan) has not been approved by the EPA and no waste load allocations have been imposed on JBSA-LAKs MS4 permit, at this time.

JBSA-FSH – The segment of **Salado Creek (1910_03)**, from the confluence with the San Antonio River in Bexar County to the confluence of Beitel Creek in Bexar County, is classified in the *2024 Texas Integrated Report of Surface Water Quality for CWA Sections 305(b) and 303(d)* as an **impaired water body and an established TMDLs for Bacteria in water (Recreation Use)**.

JBSA-FSH – The segment of **Upper San Antonio River (Segment 1911_09)**, from a point 600 meters downstream of FM 791 at Mays Crossing near Fals City in Karnes County to a point 100 meters upstream of Hildebrand Avenue at San Antonio in Bexar County, is classified in the *2024 Texas Integrated Report of Surface Water Quality for CWA Sections 305(b) and 303(d)* as an **impaired water body and an established TMDL for Bacteria in water (Recreation Use) and Impaired fish community in water**.

TMDLs for bacteria have been developed for Salado Creek (Segment 1910) and Upper San Antonio River (Segment 1911). On 6 April 2016, the EPA approved TCEQs Implementation Plan (IP) to address bacteria impairments in Salado Creek and Upper San Antonio River. In accordance with the MS4 Permit, JBSA has reviewed the IP and incorporated appropriate BMPs in this SWMP. Salado Creek is a tributary of the San Antonio River (Upper San Antonio River) in Bexar County. The upper portion is normally dry, flowing only after rain events within the watershed. The lower portion has well maintained parks and is an important recreational site for the City of San Antonio. Local organizations have taken action to preserve and enhance water quality in Salado Creek. Measures including the introduction of reuse water to supplement the base flow of the creek, rehabilitation of the sewage collection system within the watershed, establishment of a paved recreational trail and park areas along the creek, public education stations, and water quality monitoring.

The TMDLs for Salado Creek (Segment 1910) and Upper San Antonio River (Segment 1911) do not assign a waste load allocation (WLA) to the JBSA-FSH MS4. The TMDL does indicate that the City of San Antonio's MS4 is a significant point source contributor of bacteria to Salado Creek and the Upper San Antonio River. WLAs have been developed specifically for point sources associated with the City of San Antonio's MS4. Stormwater discharges from the JBSA-FSH MS4s are consistent with the established TMDL and no WLAs have been developed specifically for point sources from the JBSA-FSH MS4.

In reference to the document titled "*Three Total Maximum Daily Loads for Bacteria in San Antonio Area*" Table 10., JBSA-FSH adopts the benchmarks as the WLAs for Salado Creek and the Upper San

Antonio River. Those WLAs are **4,731,088 10⁶ org/day** for Salado Creek (Segment 1910) and **17,321,548 10⁶ org/day** for the Upper San Antonio River (Segment 1911).

JBSA has not been established by TCEQ as a majority contributor to Lower Leon Creek (Segment 1906_05), Salado Creek (Segment 1910_03), or Upper San Antonio River (Segment 1911_09). Additionally, the TCEQ Executive Director has not determined coverage under an individual permit is required based on consideration of an approved TMDL model and IP, anti-backsliding policy, history of substantive non-compliance or other regulatory considerations and requirements, or other site-specific considerations.

1.3.5 Discharges to the Edwards Aquifer Recharge Zone

The MS4 Permit contains additional requirements and approvals for MS4 discharges to the Edwards Aquifer Recharge Zone or Contributing Zone. Stormwater from the JBSA MS4 does not discharge to the Edwards Aquifer Recharge or Contributing Zones. As such, JBSA is not required to prepare a Water Pollution Abatement Plan or obtain additional approvals related to discharges from the JBSA MS4.

1.3.6 Discharges to Specific Watersheds and Water Quality Areas

Stormwater from JBSA does not discharge to a Watershed Protection area. Discharges prohibited by 30 Texas Administrative Code (TAC) Chapter 311 relating to Watershed Protection are not authorized by the MS4 Permit.

1.3.7 Protection of Streams and Watersheds by Home Rule Municipalities

Stormwater from JBSA does not discharge to a home-rule municipality designed area.

1.3.8 Endangered Species Act

Discharges that would adversely affect listed endangered or threatened species or critical habitat are not authorized by the MS4 Permit. No Federally listed endangered or threatened species have been identified within the confines of the JBSA MS4. Stormwater discharges from JBSA-LAK are not expected to impact threatened and/or endangered species or critical habitat.

1.3.9 Allowable Non-Stormwater Discharges

The following non-stormwater sources may be discharged from the JBSA MS4s and are not required to be addressed in the IDDE or other minimum control measures, unless determined by JBSA or TCEQ, to be significant contributors of pollutants to the small MS4, or they are otherwise prohibited by JBSA.

1. Water line flushing (excluding discharges of hyper chlorinated water, unless the water is first dechlorinated, and discharges are not expected to adversely affect aquatic life);
2. Runoff or return flow from landscape irrigation, lawn irrigation, and other irrigation utilizing potable water, groundwater, or surface water sources;
3. Discharges from potable water sources that do not violate Texas Surface Water Quality Standards;
4. Diverted stream flows;
5. Rising ground waters and springs;
6. Uncontaminated ground water infiltration;
7. Uncontaminated pumped ground water;
8. Foundation and footing drains;
9. Air conditioning condensation;
10. Water from crawl space pumps;
11. Individual residential vehicle washing;
12. Flows from wetlands and riparian habitats;

13. Dechlorinated swimming pool discharges that do not violate Texas Surface Water Quality Standards;
14. Street wash water excluding street sweeper wastewater;
15. Discharges or flows from emergency fire-fighting activities (emergency fire-fighting activities do not include washing of trucks, run-off water from training activities, test water from fire suppression systems, and similar activities);
16. Other allowable non-stormwater discharges listed in 40 CFR § 122.26(d)(2)(iv)(B)(1);
17. Non-stormwater discharges that are specifically listed in the TPDES Multi-Sector General Permit (MSGP) TXR050000 or the TPDES Construction General Permit (CGP) TXR150000;
18. Discharges that are authorized by a TPDES or NPDES permit or that are not required to be permitted; and
19. Other similar occasional incidental non-stormwater discharges such as spray park water, unless the TCEQ develops permits or regulations addressing these discharges.

2.0 JBSA MS4 COALITION OVERVIEW

JBSA-LAK (MS4 Permit TXR040068) is located in Bexar County, Texas, within city limits of San Antonio, Texas, encompassing a total land area of approximately 9,511 acres. JBSA-LAK is comprised of three adjacent military properties: JBSA-LAK Main Base (LAK), Kelly Field Annex (KFA), and Chapman Training Annex (CTA). JBSA-LAK operations include flight line operations, vehicle maintenance and storage yards, civil engineering operations, dormitories, lodging, schools and daycare facilities, shopping centers, gas stations, Wilford Hall Ambulatory Surgical Center (WHASC), landscaped physical training areas (golf course, parade fields, dog training areas, recreation), and open space. Diverse operations at JBSA-LAK include the operation and maintenance of roads, sanitary and storm sewer systems, building, offices, housing, dormitories, golf course, flight line, and other military training and operations.

JBSA-RND (Permit TXR040115) is located in Bexar County, Texas, approximately 17 miles northeast of San Antonio, Texas, encompassing a total land area of approximately 3,217 acres. JBSA-RND is primarily surrounded by urban residential and industrial properties. JBSA-RND provides training for pilots, pilot instructors, navigators, and mechanics. Diverse operations at JBSA-RND include the operation and maintenance of roads, sanitary and storm sewer systems, building, offices, housing, dormitories, golf course, flight line, and other military training and operations.

JBSA-FSH (Permit TXR040409) is located in Bexar County, Texas, within city limits of San Antonio, Texas, encompassing a total land area of approximately 2,998 acres. JBSA-FSH provides space for a major medical treatment facility, medical research and education activities, medical training and operational commands to support worldwide Army medical care for soldiers and their families. JBSA-FSH is the home of the US Army Medical Command, the Defense Health Agency Medical Education and Training Campus, and the San Antonio Army Medical Center (SAAMC). Diverse operations at JBSA-FSH include the operation and maintenance of roads, sanitary and storm sewer systems, building, offices, housing, dormitories, golf course, and other military training and operations.

2.1 JBSA-LAK Outfall and Receiving Water Description

Discharges from the regulated outfalls discharge to Lower Leon Creek (Segment 1906_05), Indian Creek (no assigned segment number), and Upper Medio Creek (Segment 1912A_01). All receiving waters are within the San Antonio River Basin and ultimately discharge to the Gulf of Mexico via the following paths:

- Lower Leon Creek (Segment 1906) flows into the Medina River (Segment 1903), thence to Upper San Antonio River (Segment 1911), thence to Lower San Antonio River (Segment 1901), thence to the Guadalupe River-Tidal (Segment 1801) before discharging into the San Antonio Bay, an intercoastal estuary within the Gulf of Mexico.
- Indian Creek (unclassified) flows into Kilroy Lake, thence to Lower Leon Creek (Segment 1906_02), thence to the Medina River (Segment 1903), thence to Upper San Antonio River (Segment 1911), thence to Lower San Antonio River (Segment 1901), thence to the Guadalupe River-Tidal (Segment 1801) before discharging into the San Antonio Bay, an intercoastal estuary within the Gulf of Mexico.
- Upper Medio Creek (Segment 1912A) flows through O.R. Mitchell Lake to Medio Creek (Segment 1912), thence to the Medina River (Segment 1903), thence to Upper San Antonio River (Segment 1911), thence to Lower San Antonio River (Segment 1901), thence to the Guadalupe River-Tidal (Segment 1801) before discharging into the San Antonio Bay, an intercoastal estuary within the Gulf of Mexico.

2.2 JBSA-RND Outfall and Receiving Water Description

Discharges from the regulated outfalls discharge to Mid Cibolo Creek (Segment 1913) and Woman Hollering Creek (unclassified). All receiving waters are within the San Antonio River Basin and ultimately discharge to the Gulf of Mexico via the following paths:

- Mid Cibolo Creek (Segment 1913) flows into Lower Cibolo Creek (Segment 1902), thence to Lower San Antonio River (Segment 1901), thence to the Guadalupe River-Tidal (Segment 1801) before discharging into the San Antonio Bay, an intercoastal estuary within the Gulf of Mexico.
- Woman Hollering Creek (Unclassified) flows into Martinez Creek (Segment 1902A), thence to Lower Cibolo Creek (Segment 1902), thence to Lower San Antonio River (Segment 1901), thence to the Guadalupe River-Tidal (Segment 1801) before discharging into the San Antonio Bay, an intercoastal estuary within the Gulf of Mexico.

2.3 JBSA-FSH Outfall and Receiving Water Description

Discharges from the regulated outfalls flow directly or indirectly into Salado Creek (Segment 1910_03) and various unnamed drainage ditch/conveyances to Upper San Antonio River (Segment 1911_09). All receiving waters are within the San Antonio River Basin and ultimately discharge to the Gulf of Mexico via the following paths:

- Salado Creek (Segment 1910) flows into the Upper San Antonio River (Segment 1911), thence to Lower San Antonio River (Segment 1901), thence to the Guadalupe River-Tidal (Segment 1801) before discharging into the San Antonio Bay, an intercoastal estuary within the Gulf of Mexico.
- Upper San Antonio River (Segment 1911) flows into the Lower San Antonio River (Segment 1901), thence to the Guadalupe River-Tidal (Segment 1801) before discharging into the San Antonio Bay, an estuary within the Gulf of Mexico.

3.0 STORMWATER MANAGEMENT PROGRAM IMPLEMENTATION

3.1 MINIMUM CONTROL MEASURES AND BMPS

Minimum Control Measures (MCMs) is the term used by TCEQ for the six MS4 program elements aimed at achieving improved water quality. The MS4 Permit specifies the SWMP must include BMPs and measurable goals to address each MCM. The six MCMs applicable to JBSA are:

1. Public Education and Outreach (PEO);
2. Public Involvement/Participation (PIP);
3. Illicit Discharge Detection and Elimination (IDDE);
4. Construction Site Stormwater Runoff Control (CON);
5. Post Construction Stormwater Management in New Development and Redevelopment (PC); and
6. Pollution Prevention and Good Housekeeping for Municipal Operations (P2).

Sections 4.0 through 10.0 of this SWMP present the BMPs, measurable goals, and implementation schedule for JBSA to address each of the MCMs. The MS4 Permit, for the most part, allows the permittee to evaluate, propose, schedule and implement BMPs; however, certain BMPs are prescribed by the permit. Unless otherwise identified in this SWMP, BMP implementation frequency is reflected in each MCM table as “Implementation Schedule”.

4.0 PUBLIC EDUCATION AND OUTREACH

The first of the six MCMs described in this SWMP is Public Education and Outreach (PEO). The goal of this MCM is to distribute educational materials to the community and conduct outreach about the impacts of stormwater discharges on water bodies and steps the public can take to reduce pollutants in stormwater runoff. At JBSA installations, the public shall include military personnel (and dependents) and employees (including contractors).

JBSA PEO program goals are to:

- Provide a consistent message for the length of time necessary to focus public behavior;
- Foster support for the purpose and goals of the SWMP;
- Specifically address potential sources of bacteria and activities/controls to reduce bacteria discharges from the JBSA installation MS4s;
- Change specific behaviors, which adversely affect stormwater quality; and
- Increase community awareness and understanding of the individual actions that can be taken to protect and improve the quality of surrounding water bodies.

The JBSA target audience and pollutants for the PEO MCM includes:

- Civilian and military personnel assigned to JBSA installations;
- Residents living on JBSA installations; and
- Contractors performing work on JBSA installations.

Target Audience	Target Pollutant(s)
Military personnel and civilians assigned to JBSA installations	(1) Grass Clippings and Leaf Litter (2) Fertilizer and Pesticides (3) Litter, Trash, and Balloon Releases (4) Dumping of Solid Waste (5) Illegal Disposal of Household Hazardous Waste (6) Pet Waste (7) Simming Pool Discharge (8) De-Icing/Rock Salt Usage/Storage (9) Oil, Grease, and Fluids from Vehicles (10) Sediment Runoff from Construction Activities (11) Unauthorized Discharge of Restaurant Waste (12) Vehicle Washing (13) Wash Water/Grey Water (14) Failing Septic Systems
Residents living on JBSA installations	(1) Grass Clippings and Leaf Litter (2) Fertilizer and Pesticides (3) Litter, Trash Containment, and Balloon Releases (4) Dumping of Solid Waste (5) Illegal Disposal of Household Hazardous Waste (6) Pet Waste (7) Oil, Grease, and Fluids from Vehicles (8) Vehicle Washing
Contractors performing work on JBSA installations	(1) Grass Clippings and Leaf Litter (2) Fertilizer and Pesticides (3) Litter, Trash, and Balloon Releases (4) Dumping of Solid Waste (6) Pet Waste (7) Simming Pool Discharge (8) De-Icing/Rock Salt Usage/Storage (9) Oil, Grease, and Fluids from Vehicles (10) Sediment Runoff from Construction Activities (11) Unauthorized Discharge of Restaurant Waste (12) Vehicle Washing (13) Wash Water/Grey Water

The following clear, specific, and measurable BMPs will be implemented by JBSA to satisfy the PEO MCM. Where appropriate, the selected BMPs will specifically address bacteria and other pollutants of concern. JBSA will utilize existing federal, state, and Air Force-developed stormwater education and outreach materials whenever possible. When necessary, new PEO materials will be created and distributed. When required, all federal, state, and local public notice requirements will be followed during implementation of this MCM. PEO BMPs are presented in the following subsections and are summarized in Table 1.

4.1 PEO-1 INFORMATION ON THE MS4 OPERATOR’S WEBSITE

Implementation Details

JBSA maintains a public website, JBSA.mil, which provides installation personnel with access to JBSA news, information, resources, and related announcements. The JBSA SWMP and MS4 Annual Report will be uploaded to the public website.

Measurable Goal

- The JBSA SWMP and MS4 Annual Reports will be uploaded to the website no later than (NLT) 30 days after the Notice of Intent (NOI)/Notice of Change (NOC) approval and due date, respectively. (Initial Upload NLT February 2025)
- At least annually, all links shall be checked and the page updated as needed. (Conduct Review NLT 31 December of each year)

4.2 PEO-2 MAINTAIN OR MARK STORM DRAINS AND INLETS WITH “NO DUMPING – DRAINS TO CREEK” OR SIMILAR MESSAGE

Implementation Details

Install and maintain storm drain decals on or nearby stormwater drain inlets to educate military personnel, civilians, dependents, contractors, and visitors that storm drains lead directly to receiving surface water bodies. Track decal installation to provide maintenance or replacement when needed.

Measurable Goals

- Each year, placard, stencil, or paint a minimum of 10% of all known SW inlets in high-impact areas identified by the MS4 Operator. (Placard 10% NLT 31 December of each year)
- Each year, where all known stormwater inlets have been marked, inspect and maintain the markers for a minimum of 15% of all known stormwater inlets in high-impact areas. (Inspect 15% NLT 31 December of each year)

4.3 PEO-3 MEDIA/ADVERTISING CAMPAIGN/PUBLIC SERVICE ANNOUNCEMENTS IN AREAS OF HIGH VISIBILITY

Implementation Details

Develop topics that address activities or pollutants of concern. Advertisements/Campaigns will be posted on JBSA marquees, billboards/poster, bus shelter/bench, radio/television/movie theater, bowling alley, JBSA Exchange, JBSA Commissary, or kiosk. Advertisements/Campaigns will be active for at least three (3) weeks each year.

Measurable Goals

- Annually, provide brochures with stormwater awareness topics to the Military Housing Office (MHO) for distribution to on base housing tenants and made available at housing offices. (Provide Brochure NLT 31 December of each year)
- At JBSA-LAK and JBSA-RND, utilize the entrance marquees to advertise a stormwater awareness message twice a year. (LAK/RND Marquee NLT June and December of each year)
- At least twice a year, develop and post an advertisement/campaign at a high visibility location at the installation. (SW Advert NLT June and December of each year)

**4.4 PEO-4 PUBLISH ARTICLES IN LOCAL NEWSPAPER OR NEWSLETTER,
MAY BE ELECTRONIC**

Implementation Details

At least twice a year, an article will be published in the JBSA website (JBSA.mil) newsletter to target audience groups. The article will be developed for one or more of JBSA's target audience groups and address activities or pollutants of concern at a seasonally appropriate time.

Measurable Goals

- At least twice a year, a stormwater article related to activities or pollutants of concern will be developed and published on the JBSA website to one or more of the JBSA MS4 target audience groups. (Publish Article NLT June and December of each year)

**Table 1
Public Education and Outreach BMPs, Descriptions, and Measurable Goals**

No.	Description	Measurable Goals	Responsible Party	Implementation Schedule
PEO-1	Information on the MS4 Operator’s Website	The JBSA SWMP and MS4 Annual Reports will be uploaded to the website NLT 30 days after the NOI/NOC approval and due date, respectively. At least annually, all links shall be checked and the page updated as needed.	JBSA Water Quality Program Managers	Initial Upload NLT February 2025 Conduct Review NLT 31 December of each year
PEO-2	Maintain/Mark Storm Drains and Inlets with, “No Dumping – Drains to Creek” or Similar Message	Placard, stencil, or paint a minimum of 10% of all known SW inlets in high-impact areas. Maintain storm drain decals on 15% of all storm water inlets.	JBSA Water Quality Program Manager	Annually by 31 December of each year
PEO-3	Media/Advertising Campaign/Public Service Announcements in Areas of High Visibility	Provide stormwater awareness brochures to the MHO for distribution to new residences.	MHO/ Privatized Housing Contractor/Water Quality Program Managers	Annually by 31 December of each year
		At least twice per year, advertise stormwater awareness message on installation marquee and document dates and message.	JBSA Water Quality Program Managers	Annually by 30 June and 31 December of each year
		At least twice a year, develop and post an advertisement/campaign at a high visibility location at the installation.	JBSA Water Quality Program Managers	Annually by 30 June and 31 December of each year

PEO-4	Publish Articles in Local Newspaper or Newsletter, May be Electronic	Publish two stormwater protection related articles per year.		Annually by 30 June and 31 December of each year
-------	--	--	--	--

5.0 PUBLIC INVOLVEMENT/PARTICIPATION (PIP)

Public Involvement/Participation (PIP) is necessary to foster interest and support for JBSA's stormwater program. A JBSA community involved in the SWMP implementation will ensure greater BMP effectiveness and compliance with the MS4 Permit. As members of the public become aware of what is expected of them and others in the community, they will be more likely to support the SWMP.

PIP BMPs are presented in the following subsections and then summarized in Table 2.

5.1 PIP-1 STREAM/LAKE/WATERSHED CLEANUP EVENTS

Implementation Details

Host or support at a minimum one event annually, that cleans at a minimum 2 acres, 400 yards of streambank or riparian are, or 2 miles of roadside. JBSA will continue organizing community outreach events such as Earth Day, Basura Bash, JBSA Beautification Week, or similar that promote environmental cleanliness.

Measurable Goal

- At least annually, JBSA Water Quality Program Managers will assist/support the organization of an Earth Day Event, Basura Bash, JBSA Beautification Week, or another applicable cleanup event. The Water Quality Program Managers will provide dates of events assisted/supported and the number of volunteers in the MS4 Annual Report each year (Hold Event NLT 31 December of each year)

5.2 PIP-2 STORMWATER SURVEY

Implementation Details

At least annually, provide a public survey for input on the stormwater program that reaches at least 75% of the intended audience.

Measurable Goal

- At least annually, a stormwater survey will be sent out to one or more of JBSA's target audience groups requesting input on the program. (Send Survey NLT 31 December of each year)

5.3 PIP-3 EDUCATIONAL DISPLAY/BOOTH

Implementation Details

Water Quality Program Managers will create at least one booth or display annually at a school, public event, or similar event that provides information or displays to improve public understanding of issues related to water quality. Water Quality Program Managers will staff the booth or display when the event is open to the public.

Measurable Goal

- At least annually, the Water Quality Program Managers will create a display and/or staff a booth at a school, public event, or similar event that provides information to improve public understanding of issues related to water quality. (WQ Booth NLT 31 December of each year)

**Table 2
Public Involvement/Participation BMPs, Descriptions, and Measurable Goals**

No.	Description	Measurable Goals	Responsible Party	Implementation Schedule
PIP-1	Stream/Lake/Watershed Cleanup Events	At least annually, JBSA Water Quality Program Managers will assist/support the organization of an Earth Day Event, Basura Bash, JBSA Beautification Week, or another applicable cleanup event. The Water Quality Program Managers will provide dates of events assisted/supported and the number of volunteers in the MS4 Annual Report each year	JBSA Water Quality Program Managers	Hold Event NLT 31 December of each year
PIP-2	Stormwater Survey	At least annually, a stormwater survey will be sent out to one or more of JBSA's target audience groups requesting input on the program.	JBSA Water Quality Program Managers	Send Survey NLT 31 December of each year
PIP-3	Educational Display/Booth	At least annually, the Water Quality Program Managers will create a display and/or staff a booth at a school, public event, or similar event that provides information to improve public understanding of issues related to water quality.	JBSA Water Quality Program Managers	WQ Booth NLT 31 December of each year

6.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

An illicit discharge is defined as “a point source discharge of pollutants to an MS4 which is not composed entirely of stormwater and not authorized by an NPDES permit.” Discharge sources must be controlled, and illegal behavior prohibited. The goal of the IDDE MCM is to prevent the discharge of pollutants to receiving waters by eliminating illicit discharges to JBSA’s stormwater conveyance systems. Sources of illicit discharges include sanitary wastewater, effluent from septic tanks, car wash wastewaters, improper waste disposal, roadway spills, and other uncontrolled wash/rinse waters.

IDDE BMPs are presented in the following subsections and then summarized in Table 3.

6.1 IDDE-1 MAINTAIN A CURRENT AND ACCURATE MS4 MAP

Implementation Details

At minimum, the MS4 map must include location of all outfalls operated by JBSA that discharge into Waters of the U.S., location and name of all surface waters receiving discharges from the outfalls, and date of last revision. JBSA has developed a map of each installation’s storm conveyance system that identifies storm drain inlets, manholes, culverts, pipes, outfalls, and receiving waters. As needed, this map will be updated to account for modifications of the system.

Measurable Goal

- At least annually, the MS4 Map will be reviewed and updated as needed, to include features which have been added, removed, or changed. (Conduct Review NLT 31 December of each year)

6.2 IDDE-2 PROVIDE TRAINING FOR ALL MS4 FIELD STAFF

Implementation Details

At least annually, conduct training for 100% of MS4 Field Staff that may come in contact with or observe illicit discharges, illegal dumping, or illicit connections during normal job duties or responsibilities. The JBSA MS4 Field Staff includes JBSA Water Quality Program Managers, Heavy Repair Element, and Plumbing Shop. Training may be in-person or self-paced materials such as videos or reading materials. Training program materials and attendance lists must be maintained onsite and made available for review by the TCEQ.

Measurable Goal

- At least annually, training will be provided for 100% of MS4 Field Staff. Maintain record of training attendees. (MS4 Training NLT 31 December of each year)

6.3 IDDE-3 MAINTAIN AND FACILITATE A PUBLIC REPORTING METHOD

Implementation Details

JBSA maintains a public website (JBSA.mil), an Environmental Hotline (hotline numbers listed below), and emails to the JBSA Water Quality Program Managers as methods for the public to ask questions or identify issues, including reporting illicit discharges and spills. The JBSA Environmental Hotline numbers and Water Quality Program Managers emails are advertised on stormwater related outreach materials.

JBSA-LAK Environmental Hotline: (210) 671-4844

JBSA-RND Environmental Hotline: (210) 652-4668

JBSA-FSH Environmental Hotline: (210) 221-1142

Measurable Goal

- Publicize Environmental Hotline numbers on public website (JBSA.mil) 100% of the time during the permit term.(Verify Hotline NLT 31 December of each year)

6.4 IDDE-4 DEVELOP AND MAINTAIN PROCEDURES FOR RESPONDING TO ILLICIT DISCHARGES, ILLEGAL DUMPING, AND SPILLS

Implementation Details

JBSA is committed to investigating and eliminating illicit discharges to its storm sewer systems. JBSA personnel recognize the impacts an illicit discharge can have on a public waterway and the importance of taking corrective actions in a timely manner. The primary method to detect illicit discharges is via MS4 Field Staff reporting, during structural control and facility inspections, and public complaints/reporting. JBSA utilizes the “Illicit Discharge Hotline Incident Tracking Sheet” from EPA’s *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments* and the “IDDE Inspection” form from TCEQ’s *RG-646 Stormwater Management Program Template for Phase II (Small) Level 1 and 2 MS4s*.

Measurable Goal

- At least annually, review IDDE procedures to address changes and make improvements to procedures when necessary. (IDDE Review NLT 31 December of each year)

6.5 IDDE-5 SOURCE INVESTIGATION AND ELIMINATION OF ILLICIT DISCHARGES AND ILLEGAL DUMPING

Implementation Details

Upon becoming aware of an illicit discharge, JBSA MS4 Field Staff will initiate an investigation to identify and locate the source of the illicit discharge, as soon as feasibly possible. Within 24 hours of discovery, JBSA will notify an adjacent MS4 Operator of an illegal connection discharging to the adjacent MS4. Source Investigations will be documented on the “Source Investigation and Elimination” form found in TCEQ’s *RG-646 Stormwater Management Program Template for Phase II (Small) Level 1 and 2 MS4s*. Respond to high priority discharges, such as sanitary sewer overflows (SSOs), within 24 hours of becoming aware. For illicit discharges or illegal dumping incidents where the MS4 does not have jurisdiction, the adjacent MS4 Operator or TCEQ San Antonio Region Office will be notified within 24 hours. TCEQ will be notified immediately of any illicit flows believed to be a threat to human health or the environment throughout the permit term.

**This BMP specifically addresses bacteria impairments.

Measurable Goal

- At least annually, review procedures of the IDDE Program and update, if necessary. (Conduct Review NLT 31 December of each year)
- Respond to 100% of any reported illicit discharges and illegal dumping incidents each year to investigate the source. JBSA will document number of illicit discharge and illegal dumping investigations/inspections in the MS4 Annual Report each year. (Insp Review NLT 31 December of each year)
- Conduct dry weather screens of all JBSA outfalls once per year. Document findings, any illicit discharges identified during screening, and corrective actions taken. (MS4 Screenings NLT 31 December of each year)
- Follow design review process and maintain 100% of comments with project folders. (NLT 31 December of each year)

6.6 IDDE-6 CORRECTIVE ACTION TO ELIMINATE ILLICIT DISCHARGES AND ILLEGAL DUMPING

Implementation Details

If/When a source for an illicit discharge has been determined, JBSA will ensure the responsible party performs corrective actions necessary to eliminate the illicit discharge. JBSA will immediately report all high priority discharges to TCEQ upon becoming aware. A high priority discharge is a discharge believed to be an immediate threat to human health or the environment. JBSA will conduct investigations in response to complaints, observations, and inspections, and conduct follow-up inspections as needed to ensure corrective actions have been completed by the responsible party. JBSA will track all investigations/inspections and document the date(s) of the illicit discharge, results of the investigation, corrective actions, and the date the investigation closed. JBSA utilizes the “Illicit Discharge Hotline Incident Tracking Sheet” from EPA’s *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments* and the “IDDE Inspection” form from TCEQ’s *RG-646 Stormwater Management Program Template for Phase II (Small) Level 1 and 2 MS4s*.

**This BMP specifically addresses bacteria impairments.

Measurable Goal

- The responsible party will be notified within 24 hours for 100% of illicit discharges or illegal dumping where a source has been determined.
- All illicit discharge identification, investigations, and elimination activities will be documented. Inspections will be conducted in response to complaints and follow-up inspections will be conducted to ensure corrective actions have been completed by the responsible party. The number of complaints received by the JBSA Water Quality Program Managers will be reported in the MS4 Annual Report each year.
- At least annually, review sanitary sewer overflows to evaluate trends. If trends in locations, maintenance, or other trends are identified, the MS4 Field Staff will coordinate the development of an improvement plan. Document the sanitary sewer overflow trend review and improvement plan, if needed. (Trend Review NLT 31 December of each year)

6.7 IDDE-7 INSPECTION PROCEDURES

Implementation Details

JBSA utilizes the “Illicit Discharge Hotline Incident Tracking Sheet” from EPA’s *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments* and the “IDDE Inspection” form from TCEQ’s *RG-646 Stormwater Management Program Template for Phase II (Small) Level 1 and 2 MS4s*.

Measurable Goal

- At least annually, inspection procedures will be reviewed and updated, as needed, to address changes and make improvements where applicable. (Conduct Review NLT 31 December of each year)

6.8 IDDE-8 INSPECTIONS IN RESPONSE TO COMPLAINTS

Implementation Details

JBSA Water Quality Program Managers will conduct inspections in response to 100% of complaints received each year according to established procedures. Follow-up inspections will be conducted for 100% of cases each year where necessary as defined in established JBSA procedure.

Measurable Goal

- JBSA Water Quality Program Managers will conduct an inspection in response to 100% of complaints received. JBSA will document the number of complaints received in the MS4 Annual Report each year. (NLT 31 December each year)
- JBSA Water Quality Program Managers will conduct follow-up inspections in response to 100% of cases each year, where necessary, as defined in the JBSA established procedures. (Follow-up inspection within 30 days of initial inspection)

6.9 IDDE-9 INSPECTIONS FOR SEWAGE HOLDING TANKS

Implementation Details

JBSA Water Quality Program Managers will conduct inspection of JBSA sewage holding tanks for the purposes of identifying and eliminating illicit discharges. An inspection form shall be developed and implemented for the inspection.

Measurable Goal

- JBSA Water Quality Program Manager will perform a visual inspection of JBSA sewage holding tanks and document the inspection on an inspection form. (NLT 31 December of each year)

**Table 3
Illicit Discharge Detection and Elimination BMPs, Descriptions, and Measurable Goals**

No.	Description	Measurable Goals	Responsible Party	Implementation Schedule
IDDE-1	<p>Maintain a Current and Accurate MS4 Map</p> <p>MS4 Permit Part IV.D.3(c)(1)</p>	<p>At least annually, the MS4 Map will be reviewed and updated as needed, to include features which have been added, removed, or changed.</p>	<p>JBSA Water Quality Program Managers</p>	<p>Conduct Review NLT 31 December of each year</p>
IDDE-2	<p>Provide Training for all MS4 Field Staff</p> <p>MS4 Permit Part IV.D.3(c)(2)</p>	<p>At least annually, training will be provided for MS4 Field Staff. Maintain records of attendees.</p>	<p>JBSA Water Quality Program Managers</p>	<p>MS4 Training NLT 31 December of each year</p>
IDDE-3	<p>Maintain and Facilitate a Public Reporting Method</p> <p>MS4 Permit Part IV.D.3(c)(3)</p>	<p>Publicize Environmental Hotline numbers on public website (JBSA.mil) 100% of the time during the permit term.</p> <p>Develop and implement a tracking system to estimate what percentage of the audience is reached for determining BMP effectiveness.</p>	<p>JBSA Water Quality Program Managers</p>	<p>Verify Hotline NLT 31 December of each year</p>
IDDE-4	<p>Develop and Maintain Procedures for Responding to Illicit Discharges, Illegal Dumping, and Spills</p> <p>MS4 Permit Part IV.D.3(c)(4)</p>	<p>At least annually, review IDDE procedures to address changes and make improvements to procedures when necessary.</p>	<p>JBSA Water Quality Program Managers</p>	<p>IDDE Review NLT 31 December of each year</p>
IDDE-5	<p>Source Investigation and Elimination of Illicit Discharges and Illegal Dumping</p> <p>MS4 Permit Part IV.D.3(c)(5)</p>	<p>At least annually, review procedures of the IDDE Program and update, if necessary.</p> <p>Respond to 100% of any reported illicit discharges and illegal dumping incidents each year to investigate the source. JBSA</p>	<p>JBSA Water Quality Program Managers</p>	<p>Conduct Review NLT 31 December of each year</p>

		<p>will document number of illicit discharge and illegal dumping investigations/inspections in the MS4 Annual Report each year.</p> <p>At least annually, JBSA Water Quality Program Managers will conduct dry weather screens of each MS4 outfall.</p>		<p>Insp Review NLT 31 December of each year</p> <p>MS4 Visuals NLT 31 December of each year</p>
IDDE-6	<p>Corrective Action to Eliminate Illicit Discharges and Illegal Dumping</p> <p>MS4 Permit Part IV.D.3(c)(5)</p>	<p>The responsible party will be notified within 24 hours for 100% of illicit discharges or illegal dumping where a source has been determined.</p> <p>All illicit discharge identification, investigations, and elimination activities will be documented. Inspections will be conducted in response to complaints and follow-up inspections will be conducted to ensure corrective actions have been completed by the responsible party. The number of complaints received by the JBSA Water Quality Program Managers will be reported in the MS4 Annual Report each year.</p> <p>At least annually, review sanitary sewer overflows to evaluate trends. If trends in locations, maintenance, or other trends are identified, the MS4 Field Staff will coordinate the development of an improvement plan. Document the sanitary sewer overflow trend review and improvement plan, if needed.</p>	JBSA Water Quality Program Managers	Trend Review NLT 31 December of each year
IDDE-7	<p>Inspection Procedures</p> <p>MS4 Permits Part IV.D.3(c)(6)</p>	<p>At least annually, inspection procedures will be reviewed and updated, as needed, to address changes and make improvements where applicable.</p>	JBSA Water Quality Program Managers	Conduct Review NLT 31 December of each year

IDDE-8	<p>Inspections in Response to Complaints</p> <p>Part IV.D.3(c)(6)</p>	<p>JBSA Water Quality Program Managers will conduct an inspection in response to 100% of complaints received. JBSA will document the number of complaints received in the MS4 Annual Report each year.</p> <p>JBSA Water Quality Program Managers will conduct follow-up inspections in response to 100% of cases each year, where necessary, as defined in the JBSA established procedures.</p>	JBSA Water Quality Program Managers	<p>Conduct initial inspections within 72 business hours of complaint received.</p> <p>Conduct follow-up inspections within 30 days of initial inspection.</p>
IDDE-9	Inspections for Sewage Holding Tanks	At least annually, JBSA Water Quality Program Managers will conduct visual inspections of JBSA Sewage holding tanks.	JBSA Water Quality Program Managers/ Civil Engineering Operations Flight	Conduct inspections NLT 31 December of each year

7.0 CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

The purpose of the Construction Site Stormwater Runoff Control (CON) MCM is to prevent soil/sediment, construction materials, and wastes from leaving the site and entering the stormwater collection system or otherwise discharge to Waters of the United States. Sediment is usually the primary pollutant of concern; during a short period of time, construction sites can contribute more sediment to waterways than can be deposited naturally over several decades. The resulting siltation, along with the contribution of other pollutants from construction sites, can cause physical, biological, and chemical harm to local waterways.

The following BMPs will be implemented by JBSA over the permit term to address the CON MCM. Pollutants of concern, specifically targeted by the BMPs established in this section, to include sediment, solid and sanitary wastes, oil and grease, concrete truck washout wastewater, construction materials/chemicals, and construction debris. CON BMPs are summarized in Table 4.

JBSA has elected to require all construction projects proposing to disturb one or more acres (defined as both “small” and “large” construction activities) to comply with TCEQ Construction General Permit (CGP) TXR150000. Prior to filing an NOI for CGP coverage, the construction site operator is required to develop a CGP compliant Stormwater Pollution Prevention Plan (SWP3). Also, JBSA requires erosion and sediment control for all construction sites larger than 1 acre, or smaller than one acre that are part of a larger development plan. As the day-to-day operator, the construction contractor is required to maintain a compliant field SWP3 documenting required CGP modifications; complete CGP required inspections; and ensure BMPs are installed and maintained in accordance with the CGP and site specific SWPPP. In the event a construction contractor is not complying with the mentioned SWP3 and TPDES requirements, the JBSA project manager can and will halt construction and enforce sanctions until compliance is obtained.

Proposed projects of less than one-acre are required to control stormwater runoff from disturbed areas, limiting erosion and sediment transport to Waters of the United States. Some BMPs discussed below assist in providing guidance for less than one-acre construction projects.

7.1 CON-1 DEVELOP AND MAINTAIN AN ORDINANCE OR OTHER REGULATORY MECHANISM

Implementation Details

Water quality protection and construction stormwater management goals must be considered at every step of the development and redevelopment process so solutions can be integrated early in the process. JBSA Water Quality Program Managers will perform an annual review of the Environmental Specification 01 57 20 and update, as necessary.

Measurable Goal

- At least annually, JBSA Water Quality Program Managers will review the Environmental Specification 01 57 20 and update to address changes and make improvements where applicable. (Conduct Review NLT 31 December of each year)

7.2 CON-2 PROHIBIT DISCHARGES

Implementation Details

In accordance with the MS4 Permit, the JBSA Environmental Specifications 01 57 20 include language stating that the following “construction related” discharges are prohibited from being discharged into the JBSA MS4:

- Wastewater from washout of concrete and wastewater from water well drilling operations, unless managed by an appropriate control;
- Wastewater from washout and cleanout of stucco, paint, from release oils, and other construction materials;

- Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;
- Soaps or solvents used in vehicle and equipment washing; and
- Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, unless managed by appropriate BMPs.

Measurable Goal

- JBSA Water Quality Program Managers will review and update the JBSA Environmental Specification 01 57 20 to address any changes and make improvements where applicable. (Conduct Review NLT 31 December of each year)

7.3 CON-3 MAINTAIN AND IMPLEMENT SITE PLAN REVIEW PROCEDURES

Implementation Details

As a federal facility, JBSA complies with requirements of the National Environmental Policy Act (NEPA) to review proposed actions for their environmental impact. The Air Force implements NEPA through the Environmental Impact Analysis Program (EIAP) as codified in 32 CFR 989. JBSA will maintain the existing NEPA review process for proposed federal actions. With comments/recommendations provided by the Water Quality Program Managers, the NEPA Program Managers will incorporate water quality discussion into appropriate NEPA documents.

The design review process at JBSA involves a multi-step level of review. Design reviews allow JBSA personnel the opportunity to identify and address construction issues prior to construction initiation. The installation design review process will be followed and comments documented in the 813 Tool and Project Managers project folders.

JBSA will establish procedures to review construction site SWP3s for projects disturbing greater than one acre of soil. The review process will be followed and the JBSA Water Quality Program Managers will maintain record of SWP3 comments provided to the Project Manager.

Measurable Goal

- Air Force 813 and 1391, Categorical Exclusions (CATEXs), Environmental Assessments, and Environmental Impact Statements will be maintained by the EIAP Managers and in project folders. (NEPA Reviews NLT 31 December of each year)
- Design review comments will be maintained in the JBSA Environmental files and Project Managers project folder. (Design Comments NLT 31 December of each year)
- SWP3 review comments will be maintained in the JBSA Water Quality Shared File and in the Project Managers project folder. (SWP3 Review NLT 31 December of each year)
- JBSA Water Quality Program Managers will evaluate review processes at least annually and update, as necessary, to address changes and make improvements where applicable. (Process Review NLT 31 December of each year)

7.4 CON-4 IMPLEMENT PROCEDURES FOR INSPECTING LARGE AND SMALL CONSTRUCTION PROJECTS

Implementation Details

Construction project oversight inspections are one of the key components of successful SWMP enforcement. Oversight inspections accomplish the following:

- Ensure detailed on-site knowledge of CGP/MS4 project permit(s) and compliance requirements.
- Allow JBSA additional opportunities to provide guidance and education regarding construction site runoff control.

- Enable JBSA to establish a relationship with construction personnel.
- Enable JBSA to provide timely feedback on construction site stormwater compliance issues.
- Enhance JBSA MS4 stormwater quality protection goals.
- Provide documentation of required corrective action.
- Ensure corrective action is completed and documented in a timely manner.

Measurable Goal

- At least annually, review construction site inspection procedures and update, as needed, to address changes and make improvements where applicable. (CON Review NLT 31 December of each year)

7.5 CON-5 CONDUCT CONSTRUCTION SITE INSPECTIONS

Implementation Details

JBSA construction sites disturbing greater than one acre of soil will be inspected for CGP compliance and MS4 Permit conformance at least once annually. JBSA Water Quality Program Managers will perform and document inspections. The JBSA Water Quality Program Managers will maintain inspection documentation, notify the Project Manager and/or 802 CES/CEN Site Lead of any issues observed at the time of the inspection, and conduct follow-up inspections to ensure corrective actions implemented. Repeat non-compliance with CGP at construction sites will be elevated to the Environmental Section Chief, Deputy Civil Engineer, and Contracting Officers.

Construction sites disturbing less than one acre of soil will be inspected as needed (by request/complaint, observed non-compliance, etc.)

Measurable Goal

- At least annually, JBSA Water Quality Program Managers will perform inspections of active JBSA construction sites disturbing greater than one acre of soil and regulated by the CGP. The number of sites inspected and number and names of construction sites requiring action will be documented. Construction corrective action reports will be submitted to the Environmental Section Chief, Deputy Civil Engineer, and Contracting Officers. Additional inspections will be conducted as result of complaints received, observed non-compliances, or by request. (CGP Insp NLT 31 December of each year)

7.6 CON-6 DEVELOP, IMPLEMENT, AND MAINTAIN PROCEDURES FOR RECEIPT AND CONSIDERATION OF INFO SUBMITTED BY THE PUBLIC

Implementation Details

JBSA maintains a public website (JBSA.mil), Environmental Hotline (hotline numbers listed below), and emails to the JBSA Water Quality Program Managers as methods for the public to submit complaints, ask questions, and provide information for consideration. The JBSA Environmental Hotline numbers and Water Quality Program Managers emails are advertised on Water Quality related outreach materials as well.

JBSA-LAK Environmental Hotline: (210) 671-4844

JBSA-RND Environmental Hotline: (210) 652-4668

JBSA-FSH Environmental Hotline: (210) 221-1142

Measurable Goal

- The Environmental Hotline numbers are publicized on the JBSA public website, JBSA.mil, throughout the permit term and JBSA Water Quality Program Manager emails are advertised in

Water Quality outreach and training materials. (Verify Hotline NLT 31 December of each year)

7.7 CON-7 CONDUCT TRAINING FOR ALL MS4 STAFF WHOSE PRIMARY JOB DUTIES ARE RELATED TO IMPLEMENTING THE CONSTRUCTION STORMWATER PROGRAM

Implementation Details

JBSA Water Quality Program Managers provide training, at least annually, and guidance, although responsibility for executing effective construction site BMPs resides with construction contractors. Primary responsibility for implementing the construction stormwater management program remains with the JBSA Water Quality Program Managers.

Oversight of stormwater compliance at these sites requires periodic training on stormwater compliance requirements to Project Managers and Quality Assurance Evaluators (QAEs). The Water Quality Program Manager will facilitate (provide training resources and other support) construction site stormwater training for construction Project Managers and QAEs at least annually.

Training will include permitting and compliance requirements for construction sites disturbing more than 1 acre (CGP permitted projects) and MS4 Permit requirements.

Measurable Goal

- JBSA Water Quality Program Managers will provide construction site stormwater training for Project Managers and QAEs at least annually and maintain training materials and roster of attendance. (CGP Train NLT 31 December of each year)

**Table 4
Construction Site Stormwater Runoff Control BMPs, Descriptions, and Measurable Goals**

No.	Description	Measurable Goals	Responsible Party	Implementation Schedule
CON-1	Develop and Maintain an ordinance or Other Regulatory Mechanism MS4 Permit Part IV.D.4(a)	At least annually, JBSA Water Quality Program Managers will review the Environmental Specification 01 57 20 and update to address changes and make improvements where applicable.	JBSA Water Quality Program Managers	Conduct Review NLT 31 December of each year
CON-2	Prohibit Discharges MS4 Permit Part IV.D.4(b)(2)	JBSA Water Quality Program Managers will review and update the JBSA Environmental Specification 01 57 20 to address any changes and make improvements where applicable.	JBSA Water Quality Program Managers	Conduct Review NLT 31 December of each year
CON-3	Maintain and Implement Site Plan Review Procedures MS4 Permit Part IV.D.4(b)(3)	Air Force 813 and 1391, Categorical Exclusions (CATEXs), Environmental Assessments, and Environmental Impact Statements will be maintained by the EIAP Managers and in Project Managers project folders. Design review comments will be maintained in the JBSA Environmental Files and Project Managers project folder. SWP3 review comments will be maintained in the JBSA Water Quality Shared File and in the Project Managers project folder. JBSA Water Quality Program Managers will evaluate review processes at least annually and update, as necessary, to address changes and make improvements where applicable.	JBSA Water Quality Program Managers/ Project Manager/ EIAP Managers	NEPA Reviews NLT 31 December of each year Design Comments NLT 31 December of each year SWP3 Review NLT 31 December of each year Process Review NLT 31 December of each year

CON-4	<p>Implement Procedures for Inspecting Large and Small Construction Projects</p> <p>MS4 Permit Part IV.D.4(b)(4)</p>	<p>At least annually, review construction site inspection procedures and update, as needed, to address changes and make improvements where applicable.</p>	<p>JBSA Water Quality Program Manager</p>	<p>CON Review NLT 31 December of each year</p>
CON-5	<p>Conduct Construction Site Inspections</p> <p>MS4 Permit Part IV.D.4(b)(5)</p>	<p>At least annually, JBSA Water Quality Program Managers will perform inspections of active JBSA construction sites disturbing greater than one acre of soil and regulated by the CGP. The number of sites inspected and number and names of construction sites requiring action will be documented. Corrective action reports will be submitted to the Environmental Section Chief, Deputy Civil Engineer, and Contracting Officers. Additional inspections will be conducted as result of complaints received, observed non-compliances, or by request.</p>	<p>JBSA Water Quality Program Managers</p>	<p>CGP Insp NLT 31 December of each year</p>
CON-6	<p>Develop, Implement, and Maintain Procedures for Receipt and Consideration of Info Submitted by the Public</p> <p>MS4 Permit Part IV.D.4(b)(5)</p>	<p>The Environmental Hotline numbers are publicized on the JBSA public website, JBSA.mil, throughout the permit term and JBSA Water Quality Program Manager emails are advertised in Water Quality outreach and training materials.</p>	<p>JBSA Water Quality Program Managers</p>	<p>CGP Train NLT 31 December of each year</p>
CON-7	<p>Conduct Training for All MS4 Staff Whose Primary Job Duties are Related to Implementing the Construction Stormwater Program</p> <p>MS4 Permit Part IV.D.4(b)(6)</p>	<p>JBSA Water Quality Program Managers will provide construction site stormwater training for Project Managers and QAEs at least annually and maintain training materials and roster of attendance.</p>	<p>JBSA Water Quality Program Managers</p>	<p>CGP Train NLT 31 December of each year</p>

8.0 POST CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT

One of the best opportunities to eliminate or reduce potential impacts to stormwater quality is through informed project planning, design, and construction for development and redevelopment projects. The Post Construction (PC) Stormwater Management MCM focuses on site and design considerations related to stormwater quality, which are most effective when addressed during the planning and design stages of project development.

The design review process managed by the JBSA Civil Engineering Flight provides JBSA Water Quality Program Managers an opportunity to evaluate anticipated stormwater controls and discharges from new development and redeveloped sites that enter the JBSA MS4s. Proposed projects that disturb one acre or more, including projects that disturb less than one acre that are part of a larger common plan of development or sale are evaluated for the inclusion of structural and non-structural post-construction BMPs. Specifically, the addition of impervious surface area can change localized hydrologic conditions, increasing runoff volume and velocity, which can promote erosion and sedimentation unless properly controlled. Post-construction stormwater BMPs must be inspected, maintained and replaced periodically to ensure proper function.

The following BMPs provided in Table 5, will be implemented by JBSA to meet the MS4 Permit requirements for the PC MCM.

8.1 PC-1 DEVELOP AND MAINTAIN AN ORDINANCE OR OTHER REGULATORY MECHANISM

Implementation Details

The JBSA Environmental Specification 01 57 20 addresses PC runoff from new development and redevelopment projects and specifically requires United Facilities Code (UFC) 3-210-10 *Low Impact Development* to be complied with. JBSA Water Quality Program Managers perform an annual review and update of the Environmental Specification 01 57 20 to address changes and make improvements as applicable.

Measurable Goal

- JBSA Water Quality Program Managers perform, at least annually, a review of the JBSA Environmental Specification 01 57 20 and maintain documentation of the annual review. (Conduct Review NLT 31 December of each year)

8.2 PC-2 DOCUMENT AND MAINTAIN RECORDS OF ENFORCEMENT ACTIONS

Implementation Details

JBSA will maintain existing PC non-compliance enforcement procedures. As a military installation, all personnel working, visiting, or otherwise having access to the installation are subject to specific laws, regulations, and policies while on JBSA. Enforcement procedures for non-compliance with laws, regulations, and policies are included in the Uniform Code of Military Justice, contracts subject to Federal Acquisition Regulations, Air Force Instruction (AFI) 51-202, Nonjudicial Punishment, AFI 36-704 Discipline and Adverse Actions, AFI 36-2907 Unfavorable Information File (UIF) Program among others. Enforcement procedures can vary based on specific situations. Military and civilian employees can receive verbal reprimands, written reprimands in employment records, demotions, loss of pay, and discharge from Federal service as examples.

Measurable Goal

- Document the number of enforcement actions elevated to leadership on the Annual Report. (Enf Actions NLT 31 December of each year)

8.3 PC-3 ENSURE LONG TERM OPERATION AND MAINTENANCE OF STRUCTURAL STORMWATER CONTROL MEASURES

Implementation Details

JBSA is the owner of all PC, permanent stormwater controls and responsible for long-term maintenance. Inspection and maintenance of these PC stormwater controls is critical in ensuring long-term operation and the protection of downstream stormwater quality. The JBSA Water Quality Program Managers will develop a list of major PC stormwater controls on JBSA MS4s. The stormwater controls list will include retention and detention facilities, infiltration facilities, and Low Impact Development (LID) stormwater treatment features/facilities. The JBSA Water Quality Program Managers will conduct annual inspections of structural stormwater controls and submit service requests/work tasks for controls in need of maintenance.

Measurable Goal

- At least annually, the structural PC BMPs inventory will be reviewed and updated if necessary. (Conduct Review NLT 31 December of each year)
- At least annually, JBSA Water Quality Program Managers will conduct visual inspections of PC BMPs. Inspections will be conducted in response to complaints and follow-up inspections to ensure corrective actions have been taken. (PC Inspections NLT 31 December of each year)
- JBSA Water Quality Program Managers will initiate BMP maintenance activities based on inspection results and document dates when maintenance has been completed. (PC Maintenance NLT 31 December of each year)

**Table 5
Post Construction BMPs, Descriptions, and Measurable Goals**

No.	Activity/BMP Description	Measurable Goals	Responsible Party	Implementation Schedule
PC-1	<p>Develop and Maintain an Ordinance or Other Regulatory Mechanism</p> <p>MS4 Permit Part IV.D.5(a)(2)</p>	<p>JBSA Water Quality Program Managers perform, at least annually, a review of the JBSA Environmental Specification 01 57 20 and maintains documentation of the annual review.</p>	<p>JBSA Water Quality Program Managers</p>	<p>Conduct Review NLT 31 December of each year</p>
PC-2	<p>Document and Maintain Records of Enforcement Actions and Make Them Available for Review by TCEQ</p> <p>MS4 Permit Part IV.D.5(b)(1)</p>	<p>Document the number of enforcement actions elevated to through leadership on the Annual Report</p>	<p>JBSA Water Quality Program Managers</p>	<p>Enf Actions NLT 31 December of each year</p>
PC-3	<p>Ensure the Long-Term Operation and Maintenance of Structural Stormwater Control Measures</p> <p>MS4 Permit Part IV.D.5(b)(2)</p>	<p>At least annually, the structural PC BMPs inventory will be reviewed and updated if necessary.</p> <p>At least annually, JBSA Water Quality Program Managers will conduct visual inspections of PC BMPs. Inspections will be conducted in response to complaints and follow-up inspections to ensure corrective actions have been taken.</p> <p>JBSA Water Quality Program Managers will initiate BMP maintenance activities based on inspection results and document dates when maintenance has been completed.</p>	<p>JBSA Water Quality Program Managers</p>	<p>Conduct Review NLT 31 December of each year</p> <p>PC Inspections NLT 31 December of each year</p> <p>PC Maintenance NLT 31 December of each year</p>

9.0 POLLUTION PREVENTION AND GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

The purpose of this MCM is to implement Pollution Prevention (P2) and Good Housekeeping practices to prevent or reduce pollutant runoff from JBSA municipal operations. P2 and good housekeeping practices cover a broad spectrum of BMPs related to various municipal activities and personnel habits.

Good housekeeping is similar to pollution prevention regarding everyday personal habits but is directly implemented by various mission support BMPs. For example, JBSA personnel implement a wide-variety of good housekeeping BMPs including proper materials storage, secondary containment, and minimizing vehicle and equipment maintenance outdoors. Other environmental regulatory and DoD requirements support implementation of this MCM at JBSA, including the TCEQ Multi Sector General Permit (MSGP) TXR050000's and 40 CFR Regulation Part 112 related to oil pollution control.

The MSGP regulates JBSA industrial stormwater discharges and requires the implementation of a SWP3. The SWP3 identifies BMPs to prevent releases of industrial stormwater pollutants to receiving waterways. The MSGP requires personnel training, BMP implementation, inspections and monitoring. Quarterly visual monitoring from qualifying precipitation events are required and include the following parameters: color, clarity, odor, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution. Analytical monitoring is also accomplished and reported to TCEQ. As stormwater discharges from JBSA industrial areas enter the MS4, implementation of the SWP3 and compliance with the MSGP supports the overall SWMP and JBSA MS4.

A Spill Prevention Control and Countermeasure (SPCC) Plan is required by the CWA when a facility exceeds certain storage thresholds for petroleum, oil and lubricants. The rule regulates containers 55-gallon or greater. JBSA is subject to SPCC requirements due to the amount of a regulated substance stored onsite. SPCC Plans have been developed and implemented at JBSA. These plans must be updated and modified when significant changes are made in storage and response operations. The SPCC rule and each JBSA SPCC Plan require personnel training, BMP implementation, and inspection to prevent releases of oil into the environment which supports this MCM.

JBSA implements several DoD specific plans and procedures that support P2 and good housekeeping practices. BMPs supporting the P2 and Good Housekeeping MCM are described in the following subsections and summarized in Table 6.

9.1 P2-1 PERMITTEE-OWNED FACILITIES AND CONTROL INVENTORY

Implementation Details

JBSA will develop and maintain an inventory of facilities and stormwater controls that it owns and operates within the regulated area of the JBSA MS4s. The inventory shall include applicable permit, registration, and authorization number for each facility or control. The inventory shall include, but is not limited to the following:

- Composting Facilities
- Equipment Storage and Maintenance Facilities
- Fuel Storage Facilities
- Hazardous Waste Handling and Transfer Facilities
- Material Storage Yards

- Pesticide Storage Facilities
- Parking Lots
- Golf Courses
- Swimming Pools
- Public Works Yards
- Recycling Facilities
- Salt Storage Facilities
- Solid Waste Handling and Transfer Facilities
- Street Repair and Maintenance Yards
- Structural Stormwater Controls
- Buildings, including schools, libraries, police stations, fire stations, and office buildings

As a regulated industrial facility, JBSA is required to accomplish a Comprehensive Site Compliance Inspection. This annual evaluation will serve as the primary industrial operations oversight program. The JBSA Water Quality Program Manager is responsible for ensuring this annual evaluation is accomplished. The JBSA Water Quality Program Manager is also responsible for tracking discrepancies and implementing corrective actions.

Measurable Goal

- Develop and maintain an inventory for 100% of the MS4 owned and operated facilities and stormwater controls in the area. (Update Inventory NLT June 2025)
- At least annually, review and update the inventory to address changes or additions. (Conduct Review NLT 31 December of each year)

9.2 P2-2 TRAINING AND EDUCATION

Implementation Details

The MS4 Field Staff will receive annual stormwater training. The training will cover illicit discharge detection, construction stormwater management, BMP inspection and maintenance, pollution prevention and documentation requirements. The Water Quality Program Manager is responsible for developing the MS4 Field Staff Training program.

Measurable Goal

- At least annually, provide training for 100% of MS4 Field Staff. Maintain training attendance list. (Provide Training NLT 31 December of each year)
- Environmental Specification 01 57 20 will be reviewed/updated at least annually to address language for implementing JBSA MS4 pollution prevention and good housekeeping practices. (Conduct Review NLT 31 December of each year)

9.3 P2-3 DISPOSAL OF WASTE MATERIAL

Implementation Details

JBSA's Integrated Solid Waste Management Plan (ISWMP) details waste and recycling management practices on the installation, including compliance with 30 TAC Chapters 330 or 335, as applicable.

Proper waste management practices protect stormwater by minimizing or eliminating improper disposal practices. The Solid Waste Program Manager will maintain this document and update as necessary.

Measurable Goal

- Maintain a current copy of the ISWMP, update as necessary. (Conduct Review NLT 31 December of each year)

9.4 P2-4 CONTRACTOR REQUIREMENTS AND OVERSIGHT

Implementation Details

Sediment and debris are removed from airfield surfaces at JBSA-LAK and JBSA-RND to support safe flying operations. These practices include sweeping sediment and magnetic pickup of ferrous objects. The Civil Engineer Operations Flight and/or Airfield Management will oversee this existing operation.

Measurable Goal

- At least annually, review JBSA’s Environmental Specification 01 57 20 and update as needed to address changes or improve stormwater control measures, good housekeeping practices, and facility-specific stormwater management operating procedures. (Conduct Review NLT 31 December of each year)
- Develop and implement oversight procedures to ensure JBSA personnel and contractors are using appropriate control measures and standard operating procedures. Records will be maintained on-site in the event TCEQ requests their review. (Develop Procedures NLT 30 September 2025)

9.5 P2-5 ASSESSMENT OF PERMITTEE-OWNED OPERATIONS

Implementation Details

The JBSA Water Quality Program Manager will conduct reviews of municipal operation and maintenance (O&M) activities for their potential to discharge pollutants in stormwater including but not limited to road and parking lot maintenance, bridge maintenance, cold weather operations, and right-of-way maintenance. The JBSA Water Quality Program Manager is responsible for performing and documenting the annual inspection.

Measurable Goal

- Through the EIAP, municipal operations and maintenance activities described in MS4 Permit Part IV.D.6(b)(5)(6) will be evaluated for their potential to discharge pollutants in stormwater. (O&M Review NLT 31 December of each year)

9.6 P2-6 IDENTIFY POLLUTANTS OF CONCERN

Implementation Details

JBSA Water Quality Program Managers will identify pollutants of concern associated with each O&M activity identified in P2-5.

Measurable Goal

- JBSA Water Quality Program Managers will maintain a list identifying pollutants of concern that could be discharged from all the O&M activities listed in P2-5. (Identify Pollutants NLT 31 December of each year)

- At least annually, review pollutants of concern list and update as needed to address changes or additions to the O&M activities. (Conduct Review NLT 31 December of each year)

9.7 P2-7 POLLUTION PREVENTION MEASURES

Implementation Details

JBSA shall develop and implement a set of pollution prevention measures that will reduce the discharge of pollutants in stormwater from the above activities. These pollution prevention measures will include the following:

- Replace at least 50% of the MS4's materials and chemicals with more environmentally friendly materials or methods by the end of the permit term;
- Use suspended tarps, booms, or vacuums to capture paint, solvents, rust, paint chips and other pollutants during 80% of regular bridge maintenance each year.

Measurable Goal

- 50% of the MS4's materials and chemicals of O&M activities will be substituted with more environmentally friendly materials, chemicals, or pollution prevention methods. (NLT 15 August 2029)
- 80% of regular bridge maintenance will use suspended tarps, booms, or vacuums to capture paint, solvents, rust, paint chips, and other pollutants. (NLT 31 December each year)

9.8 P2-8 INSPECTION OF POLLUTION PREVENTION MEASURES

Implementation Details

JBSA Water Quality Program Managers will visually inspect pollution prevention measures implemented at permittee-owned facilities to ensure they are working properly.

Measurable Goal

- Develop written procedures that describe the inspection frequency and how inspections will be conducted. At least annually, review inspection procedures and address changes as needed. (Insp Procedures NLT June 2025)
- At least annually, visually inspect 100% of pollution prevention measures implemented at permittee-owned facilities to ensure they are properly working. Maintain documentation of annual inspections and make available for review by TCEQ within 24 hours of a request. (Conduct Inspection NLT 31 December of each year)

9.9 P2-9 STRUCTURAL CONTROL MAINTENANCE

Implementation Details

If BMPs include structural controls, maintenance of the controls must be performed by the permittee and consistent with maintaining the effectiveness of the BMP. The permittee shall develop written procedures that define the frequency of inspection occurring at least one time annually and how they will be conducted.

Measurable Goal

- At least annually, review and update the maintenance procedures to address changes or additions to the pollution prevention measures. (Conduct Review NLT 31 December of each year)
- At least annually, JBSA will inspect each structural control, documenting the condition, and submit a service request for any structural control in need of maintenance or repair. At least annually, perform maintenance of 100% of the structural controls in need of maintenance. *JBSA will report the number of structural control inspections in the MS4 Annual Report.* (Conduct Inspections NLT 31 December of each year)

**Table 6
Pollution Prevention/Good Housekeeping BMPs, Descriptions, and Measurable Goals**

No.	Activity/BMP Description	Measurable Goals	Responsible Party	Implementation Schedule
P2-1	Inventory of Permittee-owned Facilities and Stormwater Controls. MS4 Permit Part IV.D.6(b)(1)	Develop and maintain an inventory for 100% of the MS4 owned and operated facilities and stormwater controls in the area. At least annually review and update the inventory to address changes or additions.	JBSA Water Quality Program Managers	Update Inventory NLT June 2025 Conduct Review NLT 31 December of each year
P2-2	Training and Education. MS4 Permit Part IV.D.6(b)(2)	At least annually, provide training for 100% of MS4 Field Staff involved in implementing pollution prevention and good housekeeping practices. Maintain training attendance list. Environmental Specification 01 57 20 will be reviewed/updated at least annually to address language for implementing JBSA MS4 pollution prevention and good housekeeping practices.	JBSA Water Quality Program Managers	Provide Training NLT 31 December of each year Conduct Review NLT 31 December of each year
P2-3	Disposal of Waste Material IAW 30 TAC 330 and 335 MS4 Permit Part IV.D.6(b)(3)	Maintain copy of Integrated Solid Waste Management Plan (ISWMP), update as necessary. JBSA will document the date of review in the MS4 Annual Report.	JBSA Pollution Prevention Program Manager	Conduct Review NLT 31 December of each year
P2-4	Contractor Requirements and Oversight MS4 Permit Part IV.D.6(b)(4)	At least annually, review JBSA’s Environmental Specification 01 57 20 and update as needed to address changes or improve stormwater control measures, good housekeeping practices, and facility-specific stormwater management operating procedures. JBSA will document the date of review in the MS4 Annual Report. Develop and implement oversight procedures to ensure JBSA personnel and contractors are using appropriate control measures and standard	JBSA Water Quality Program Managers	Conduct Review NLT 31 December of each year Develop Procedures NLT 30 September 2025

		operating procedures. Records will be maintained on-site in the event TCEQ requests their review.		
P2-5	Assessment of Permittee-Owned Operations MS4 Permit Part IV.6(b)(5)(a)	At least annually, evaluate 100% of O&M activities for their potential to discharge pollutants in stormwater.	JBSA Water Quality Program Managers	Evaluate O&M NLT 31 December of each year
P2-6	Identify Pollutants of Concern MS4 Permit Part IV.D.6(b)(5)(b)	Maintain a list identifying pollutants of concern that could be discharged from all O&M activities described in MS4 Permit Part IV.D.6(b)(5)(6). At least annually, review pollutants of concern list and address changes or additions to the O&M activities.	JBSA Water Quality Program Managers	Update Pollutants of Concern List NLT June 2025 Conduct Review NLT 31 December of each year
P2-7	Pollution Prevention Measures MS4 Permit Part IV.D.6(b)(5)(c)	Develop and implement a set of pollution prevention measures to reduce the discharge of pollutants in SW from the permittee-owned operations. Implement the following pollution prevention measures: <ul style="list-style-type: none"> • Replace at least 50% of the MS4’s materials and chemicals with more environmentally friendly materials or methods by the end of the permit term • Use suspended tarps, booms, or vacuums to capture paint, solvents, rust, paint chips and other pollutants during 80% of regular bridge maintenance each year 	JBSA Water Quality Program Managers	Replace materials NLT 15 August 2029 Implement deterrents NLT 31 December of each year
P2-8	Inspection of Pollution Prevention Measures MS4 Permit Part IV.D.6(b)(5)(d)	At least annually, visually inspect 100% of pollution prevention measures implemented at permittee-owned facilities to ensure they are properly working. Maintain documentation of annual inspections and make available for review by TCEQ within 24 hours of a request.	JBSA Water Quality Program Managers	Develop Inspection Procedures NLT June 2025 Conduct Inspections NLT 31 December of each year

		Develop written procedures that describe the inspection frequency and how inspections will be conducted. At least annually, review inspection procedures and address changes as needed.		
P2-9	Structural Control Maintenance MS4 Permit Part IV.D(b)(6)	At least annually, review and update the maintenance procedures to address changes or additions to the pollution prevention measures. At least annually, JBSA will inspect each structural control, documenting the condition, and submit a service request for any structural control in need of maintenance or repair. At least annually, perform maintenance of 100% of the structural controls in need of maintenance. JBSA will report the number of structural control inspections in the MS4 Annual Report.	JBSA Water Quality Program Managers	Conduct Review NLT 31 December of each year Conduct Inspections NLT 31 December of each year

10.0 RECORDKEEPING AND REPORTING

JBSA will retain a copy of the TCEQ MS4 General Permit No. TXR040000, records of all data used to complete the NOI, and documentation of public participation requirements for a period of at least three (3) years, or for the remainder of the term of the MS4 Permit, whichever is longer. The JBSA Water Quality Program Managers maintain the SWMP and will obtain supporting SWMP documentation from other JBSA organizations and responsible parties, as outlined in this SWMP, for recordkeeping and reporting purposes.

If JBSA becomes aware that any relevant facts or information provided in the NOI was incorrect, the correct information must be provided to the TCEQ Executive Director in a Notice of Change (NOC) within 30 days after discovery. If any information provided in the NOI changes, an NOC must be submitted within 30 days from the time JBSA becomes aware of the change. Changes that are made to the SWMP following TCEQ approval must be made using an NOC form, in accordance with Part II.F.7. of the MS4 Permit.

All NOI, NOC, Notice of Termination (NOT), and Waiver forms must be signed and certified consistent with 30 TAC Section 305.44. For a municipality, state, federal, or other public agency, the application shall be signed by either a principal executive officer or a ranking elected official. For purposes of this paragraph, a principal executive officer of a federal agency includes the chief executive officer of the agency, or a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., regional administrator of the EPA). For JBSA, the principal executive officer responsible for overall operations of the installation is the Commander, 502nd Air Base Wing. In accordance with the MS4 Permit and 30 TAC Section 305.44, all reports required by this permit, including the annual report, shall be signed by the principle executive officer or duly authorized representative in accordance with 30 TAC Section 305.44.

All NOI, NOC, NOT, Waivers, and reports must contain the following certification statement:

I, Keith Kellner, PE, 802nd Civil Engineer Squadron Director _____ *Typed or printed name, Title*, 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 there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that I am authorized under 30 Texas Administrative Code §305.44 to sign this document and can provide documentation in proof of such authorization upon request.

10.1 ANNUAL REPORT

JBSA is required to submit a concise Annual Report to TCEQ Executive Director and TCEQ Regional Office serving JBSA within 90 days of the end of each reporting year and address the previous reporting year. JBSA indicated on the NOI for permit coverage that reporting will be based on calendar year, so all annual reports from JBSA-LAK must be submitted to the TCEQ by 31 March of each year. The Annual Report will include appropriate TCEQ reporting forms as applicable, or as otherwise approved by TCEQ.

The Annual Report must include:

- The status of the compliance with permit conditions, an assessment of the appropriateness of the identified BMPs, progress towards achieving the statutory goal of reducing the discharge of pollutants to the MEP, the measurable goals for each of the MCMs, and an evaluation of the success of the implementation of the measurable goals;

- A summary of the results of information collected and analyzed, during the reporting period, including monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP;
- If applicable for receiving water bodies, a summary of any activities taken to address the discharge to impaired bodies, including a summary of the small MS4 BMPs used to address the pollutant of concern, and if sampling was conducted include the sampling results;
- If applicable, a summary of any activities taken to address the discharge to impaired water bodies, including any sampling results and a summary of the small MS4 BMPs used to address the pollutant of concern;
- A summary of the stormwater activities JBSA plans to undertake during the next reporting year;
- Proposed changes to the SWMP, including changes to any activities/BMPs or any identified measurable goals that apply to the program elements; and
- A description and schedule for implementation of additional activities/BMPs that may be necessary, based on monitoring results, to ensure compliance with applicable TMDLs and implementation plans. For water bodies that are listed as impaired after discharge authorization pursuant to Part III., include a list of such water bodies and the pollutant(s) causing the impairment, and a summary of any actions taken to comply with the requirements of Part III.

The annual report must be signed (in accordance with 30 TAC § 305.128 relating to Signatories to Reports) and submitted using the online electronic reporting system, NeT-MS4, available through the TCEQ website.

If permittees share a common SWMP (i.e., coalitions), they shall contribute to a single system-wide annual report for all participating members and the designated coalition participant shall submit the annual report. At a minimum, each permittee shall sign and certify the annual report in the NeT-MS4 electronic system in accordance with 30 TAC § 305.128 (relating to Signatories to Reports). If the coalition participant designated to submit the annual report changes during the permit term, all participating members must submit an NOC to update the designated member

10.2 ADDITIONAL REPORTING REQUIREMENTS

Noncompliance Notification

According to 30 TAC § 305.125(9), any noncompliance which may endanger human health or safety, or the environment, must be reported by JBSA to the TCEQ. Report of such information must be provided orally or by electronic facsimile transmission (FAX) to the TCEQ regional office (San Antonio) within 24 hours of becoming aware of the noncompliance. A written report must be provided by JBSA to the appropriate TCEQ regional office and to the TCEQ Enforcement Division (MC-224) within five working days of becoming aware of the noncompliance. The written report must contain:

- A description of the noncompliance and its cause;
- The potential danger to human health or safety, or the environment;
- The period of noncompliance, including exact dates and times;
- If the noncompliance has not been corrected, the anticipated time it is expected to continue; and
- Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.

When JBSA becomes aware that it either submitted incorrect information or failed to submit complete and accurate information requested in an NOI, NOT, or NOC, or any other report required by the MS4 Permit, JBSA shall promptly submit the facts or information to the executive director.

10.3 FEES

An application fee of \$100.00 must be submitted with the NOI application package. Additionally, under the MS4 Permit, JBSA must pay an annual Water Quality fee of \$100.

Appendix A

Appendix B

Appendix C

Appendix D