7.0 INDUSTRIAL COMPONENT

7.1 INTRODUCTION

This section addresses the Industrial Permit requirements, Provision E.5 (Existing Development Management) of the Municipal Permit as it pertains to industrial facilities, and relevant strategies for industrial discharges outlined in the San Diego Bay WQIP.

Many sources were consulted in preparing this section, including Authority plans and regulations and state and federal plans and permits. Authority regulations used include the SAN Rules and Regulations and the Authority's Storm Water Code. The state and federal permits, plans, and regulations consulted include the 2012 Water Quality Control Plan for the San Diego Basin (Basin Plan), the California 2010 Integrated Report 303(d) List/305(b) Report, hazardous waste regulations and permits, and air quality regulations and permits.

In general, Section 7.0 addresses most of the requirements outlined in the Industrial Permit for industrial dischargers. Additional information is included in Appendix A, Appendix B, Appendix D.1, Appendix E, Figures 3 through 7, and other sections of the SWMP as noted in this section. As listed below, the sections of the Industrial Permit require the Authority to:

- II—Obtain coverage under the Industrial Permit by submitting all Permit Required Documents through SMARTS. As a facility discharging storm water associated with industrial activity to San Diego Bay, a water body of the United States, SAN had to certify and submit a NOI by July 1, 2015. All changes or terminations of Industrial Permit coverage and required reports will be submitted through SMARTS. Facilities previously operating at SAN under a separate WDID number have been integrated into the SAN SWPPP through SWPPP Amendment No.2. The appropriate Change of Information (COI) has been submitted through SMARTS, and the affected tenants have submitted their NOT documents. Section 7.2 has been prepared to address this requirement.
- III—Prohibit all discharges of storm water to waters of the United States, except as authorized by the Industrial Permit or the Municipal Permit. All NSWDs are prohibited, except those designated as authorized by the NPDES permits. Both storm water discharges and NSWDs are prohibited if they contain pollutants that cause or threaten to cause pollution, contamination, or nuisance. Other discharge prohibitions, including those stated in regional or statewide water quality control plans and federal regulations, are also enforced. Section 7.5.1 has been prepared to address this requirement.
- IV—Prohibit NSWDs, except for certain authorized classes, provided that these authorized NSWDs (1) do not otherwise violate regional or statewide water quality control plans or the Authority's Storm Water Code or Rules and Regulations; (2) have appropriate BMPs in place, as outlined in this document; (3) are visually inspected monthly; and (4) are reported by the Authority in the industrial Annual Report. Section 7.5.2 has been prepared to address this requirement.
- V—Implement BMPs using BAT and BCT to reduce or prevent discharge of pollutants in industrial storm water runoff. The Authority will comply with any applicable Federal Storm Water Effluent Limitation Guidelines (ELGs) outlined in USEPA regulations in 40 CFR Chapter I Subchapter N (Subchapter N). The Authority will comply with any applicable total maximum daily loads (TMDLs). Section 7.5.3 has been prepared to address this requirement.
- VI—Ensure that industrial storm water discharges and NSWDs do not cause or contribute to the exceedance of a water quality standard in the receiving water (San Diego Bay), do not adversely affect human health or the environment, and do not contain pollutants in quantities that threaten to cause pollution or public nuisance. Section 7.5.4 has been prepared to address this requirement.

- VII—Comply with any incorporated TMDL-specific requirements once the Industrial Permit is amended to incorporate any TMDLs applicable to the Authority. New dischargers applying for coverage under the Industrial Permit are also required to comply with special regulations associated with 303(d)-listed impairments in the receiving water. However, the Authority is not classified as a new discharger. Section 7.5.3 has been prepared to address this requirement.
- VIII—If discharging to the ocean, comply with the California Ocean Plan. According to the definitions in the California Ocean Plan, the Authority discharges to an enclosed bay; therefore, the California Ocean Plan requirements are not applicable. Section VIII is not addressed in this plan.
- IX—Ensure appropriate training. Section 7.6 has been prepared to address this requirement.
- X—Prepare a SWPPP. This section of the Authority's SWMP (Section 7.0), and other applicable sections or appendices, as indicated in this section, comprise the Authority's SWPPP as required by the Industrial Permit. Required components of the SWPPP include (1) facility name and contact information; (2) a site map; (3) a list of industrial materials; (4) a description of potential pollutant sources; (5) an assessment of potential pollutant sources; (6) minimum BMPs; (7) advanced BMPs, if applicable; (8) a monitoring implementation plan; (9) an Annual Comprehensive Facility Compliance Evaluation (Annual Evaluation); and (10) the date that the SWPPP was initially prepared and date of each subsequent revision. A copy of this SWPPP will be maintained with P&EAD and is available on the Authority's webpage. The locations of required SWPPP elements are provided in Appendix A. Most of the SWPPP requirements are addressed in Section 7.7.
- XI—Conduct monitoring, including monthly dry weather visual observations of each drainage area, wet weather visual observations during each wet weather sampling event, and wet weather sampling four times per year during qualifying storm events (QSEs). Sampling results will be compared with NALs as outlined in the Industrial Permit. Sections 7.8.3 and 7.8.4 and Appendix D-1 have been prepared to address this requirement.
- XII—Respond to NAL exceedances in a given year by escalating to a Level 1 status and conducting a Level 1 Exceedance Response Action (ERA) evaluation and report. The evaluation and report will be completed by or with the assistance of a Qualified Industrial Storm Water Practitioner (QISP). Respond to continuing NAL exceedances by escalating to Level 2 status and completing a Level 2 ERA Action Plan. This Action Plan will be followed by a Level 2 ERA Technical Report the following year. Section 7.15 has been prepared to address this requirement.
- XIII—Comply with regulations for inactive mining operations. This section does not apply to the Authority and is not addressed in this plan.
- XIV—Choose to form a Compliance Group with other dischargers of the same industry type. The Authority has elected not to join a Compliance Group, and Section XIV is not addressed in this plan.
- XV—Complete an Annual Evaluation. Section 7.16.1 has been prepared to address this requirement.
- XVI—Complete an Annual Report and submit via SMARTS. Section 7.16.2 has been prepared to address this requirement.
- XVII—File for a conditional exclusion to the Industrial Permit if there is no storm water exposure to industrial activities. The Authority does not intend to file for a conditional exclusion because of no exposure, and so Section XVII is not addressed in this plan. The new RCC operated by Conrac Solutions (Conrac) had applied for and received approval for an NEC (because their industrial operations are conducted indoors/undercover). However, the RCC has now been incorporated into the Authority's SWPPP and no longer requires an NEC.
- XVIII—Comply with additional regulations applicable to facilities handling plastic materials. The Authority does not handle plastic materials as described in Section XVIII, and therefore this section is not addressed in this plan.

- XIX—Recognize the RWQCB's authority to review and enforce the Authority's compliance with the Industrial Permit.
- XX and XXI—Be subject to various special and standard conditions. Violations of the Industrial Permit are subject to a civil penalty not to exceed $37,500 per calendar day of such violation.

The Municipal Permit requires that the Authority, as a Copermittee, establish, maintain, and enforce its legal authority to manage existing developments within its jurisdiction, including industrial developments. For enforcement, the Authority considers existing industrial leaseholders to be existing development. Per Provision E.5 of the Municipal Permit, the Authority will inventory and track all industrial developments, designate a minimum set of BMPs for all inventoried industrial developments, and inspect all industrial developments at a minimum of once every 5 years. The monthly inspections required by the Industrial Permit will supersede this municipal inspection requirement. The Authority will also retrofit and rehabilitate areas of existing development that are identified sources of pollutants or stressors that contribute to the focused priority water quality condition for the Authority jurisdiction. This is discussed in Section 6.0. The Municipal Permit requirements pertaining to industrial discharges are generally addressed in Section 7.7.

7.2 OBTAINING PERMIT COVERAGE

The Authority maintains coverage for industrial activities and industrial tenants under both the Industrial Permit and the Municipal Permit. The Authority has elected to assume a lead role concerning the Industrial Permit. Airport tenants that conduct industrial activities are also subject to the Industrial Permit requirements and must comply with the Authority's direction regarding storm water management at SAN. This approach (1) conforms to federal regulations, (2) was the preferred option of the SWRCB, and (3) allows for the implementation of consistent storm water pollution prevention measures throughout the entire airport site. This approach provides consistency in the programs that the Authority has developed and implemented to comply with the requirements of both the Industrial Permit and the Municipal Permit.

7.2.1 OBTAINING INDUSTRIAL PERMIT COVERAGE

The Authority obtained regulatory coverage under the 2014 Industrial Permit by filing an NOI through SMARTS by July 1, 2015. All Permit Required Documents for the NOI were certified and submitted by the Vice President of Development, Jeffrey Woodson, as the Legally Responsible Person (LRP) at the time. The LRP is now Sjohnna Knack, Director of Planning and Environmental Affairs. The NOI submittal included:

1) The NOI, signed Electronic Authorization Form, and signed certification statement;
2) A site map (provided in Figure 3);
3) This document as the SWPPP; and
4) Annual fees for coverage (established through regulation adopted by the SWRCB and subject to change).

The complete requirements of the NOI are described in Attachment D of the Industrial Permit. All future documents related to the Industrial Permit required to be submitted via SMARTS will be certified and submitted by the LRP or their DAR.

7.3 SWPPP AVAILABILITY AND IMPLEMENTATION

The SWPPP, as part of the SWMP, will be available to all Authority employees, tenants, contractors, and vendors during all hours of facility operation through the Authority's internal electronic network (Intranet) and/or on the Authority's webpage.

The SWPPP was implemented on July 1, 2015. Additional amendments have been developed and implemented as follows: Amendment No.1 – January 24, 2016, Amendment No. 2 – November 15, 2016,

Amendment No. 3 – March 17, 2017, Amendment No.4 – December 27, 2017, Amendment No. 5 – January 26, 2019, Amendment No. 6 – December 27, 2019, Amendment No. 7 – December 31, 2020, Amendment No. 8 – February 7, 2022, Amendment No. 9 – January 31, 2023.

7.4 POLLUTION PREVENTION TEAM

The Authority's Pollution Prevention Team is primarily composed of members of P&EAD and FMD, as well as their designated outside consultants. A full list of staff responsible for implementing the SWPPP is provided in Table 7-1. Figure 8 presents the Authority's organizational chart. The following key roles within the Authority perform essential roles in SWPPP implementation and monitoring:

- Director of Planning and Environmental Affairs: is the LRP for implementing the SWPPP. The LRP certifies and submits all reports on the SMARTS website. The LRP is responsible for signing and certifying all permit-related documents and managing the day-to-day implementation of the SWPPP. In the event of the LRP's extended absence, the DAR within P&EAD manages the industrial storm water program.
- Manager, P&EAD: The P&EAD Manager serves as the DAR and is responsible for managing the day-to-day implementation of the SWPPP. Duties include conducting meetings with and training appropriate stakeholders, ensuring proper implementation of required BMPs, directing staff and consultants in performance of wet and dry season monitoring and wet weather storm water sampling, overseeing annual facility inspections of all industrial areas and activities, preparing Annual Reports for submittal to the RWQCB, submitting monitoring results onto SMARTS, and revising and updating the SWMP as necessary.
- Staff, P&EAD: All members of P&EAD, from Senior Environmental Specialist to Environmental Assistant levels, are responsible for implementation of the SWPPP. Staff-level individuals are responsible for performing inspections, implementing training programs, observing, recording implementing required BMPs daily, requiring corrective actions for BMP deficiencies, developing or directing the development of reports, and enforcing BMP implementation. All members of P&EAD are tasked to recognize and report tenant and staff failures to implement required BMPs.
- FMD: The Authority's FMD is responsible for implementing minimum BMPs in common areas and Authority property not otherwise covered under another leasehold. Department supervisors are responsible for remediating any BMP deficiencies identified in common use and Authority areas during inspections and recording corrective actions taken.
- A&TO, Security, and Public Safety Departments: The Authority A&TO Department is generally the first point of contact for tenant and staff reporting of spills. The A&TO Department generates a daily log of any reported spills, leaks, and other actual and potential discharges; this log is included in the Authority's Web-based database so that the records are available immediately upon request.
- Tenant Environmental Program Managers: All tenants are required to implement minimum BMPs to prevent storm water pollution as a condition of their leasehold. Tenant environmental managers are responsible for remediating any BMP deficiencies identified in their tenant areas during inspections and recording corrective actions. The managers in charge of environmental program implementation are identified in the Tenant Summary Sheets in Appendix E.
- ADC Department and P&EAD: These two departments are generally responsible for project planning, design, and approval. ADC and P&EAD are responsible for the design of Industrial Permit and Municipal Permit-compliant treatment control BMPs.
- A&TO Department and Revenue Generation and Partnership Development Departments: These two departments, in collaboration with P&EAD, are generally responsible for helping tenants properly implement the BMPs required in this SWMP. Both departments may be consulted if escalated enforcement of BMPs is required.

Table 7-1. Authority Key Personnel Responsible for SWMP Implementation

Department	Title	Responsible Individual
Planning and Environmental Affairs	Director	Sjohnna Knack
	Manager	Cara Nager
	Manager	Chad Reese
	Manager	Ralph Redman
	Manager	Ted Anasis
Facilities Management	Director	Stephen Mosca
	Facilities Management Manager	Cogan Semler
	Fleet Manager	Simon Garcia
Airside & Terminal Operations (A&TO)	Director	Jeff Rasor
	Manager, Airside Operations	Dean Robbins
	Duty Managers	Mark Hander
		Steve Duboce
		Jimmy Aguire
		Mario Caldera
		Mark Chewiwie
		Joel Hughey
		Mark Taylor
		Rodrigo Rendon
		Eric Smith
		Matt Hall
		Jimmy Vazques
		Doug Liska
		Wayne Thomas
	Manager, Terminal Operations	Amiel Porta
	Customer Relations Manager	Maggie Hartnett
	Customer Service Coordinator	
	Senior Terminal Operations Coordinator	Scott La Rocco
	Terminal Operations Coordinators	Francois Kovakou
		Eric Van Pelt
		Nadya Vedepo
		Chantal Bedikian
		Ellie Ambler
	Construction Project Coordinator	Brittany Kahaiali'i
	Airport Properties Operations Coordinator	Suzanne Roybal

Table 7-1. Authority Key Personnel Responsible for SWMP Implementation (continued)

Department	Title	Responsible Individual
Aviation Security & Public Safety	Director	Clint Welch
	Manager, Emergency Preparedness & Public Safety	Susie Preiser
	Manager, Aviation Security & Law Enforcement	Cameron Burkel
Airport Design & Construction	Director	Bob Bolton
	Senior Program Manager	Chris George
	Program Manager	Ajay Babla
	Program Manager	Shohreh Belardi
Revenue Generation and Partnership Development	Director	Deanna Zachrisson
	Program Managers	Susan Diekman
		Dominique Sheck
Operational Readiness, Activation and Transition	Senior Director, Operational Planning & Readiness	Brendan Reed
	Program Manager	Kim Sheredy

7.5 STORM WATER AND AUTHORIZED NON-STORM WATER DISCHARGE REQUIREMENTS

In general terms, any discharge of materials other than storm water is prohibited under both the Industrial Permit and the Municipal Permit. Section 7.5.1 discusses these discharge prohibitions in more detail, and Section 7.5.2 lists those classes of NSWDs that are authorized. Storm water and authorized NSWDs are subject to effluent limitations. These limitations can be either technology based, requiring the discharger to implement a certain minimum technology to control pollutants, or water quality based, requiring discharges to meet either numeric or narrative receiving water quality standards. Technology-based effluent limitations are discussed in Section 7.5.3. Receiving water limitations and water quality standards are discussed in Section 7.5.4.

7.5.1 DISCHARGE PROHIBITIONS

The following storm water discharges or NSWDs are always prohibited:

- Discharges that cause or threaten to cause pollution, contamination, or nuisance as defined in Section 13050 of the Water Code are prohibited;
- Discharges that violate discharge prohibitions contained in the San Diego Basin Plan are prohibited; and
- Discharges that contain hazardous substances equal to or in excess of a reportable quantity listed in 40 CFR Sections 110.6, 117.21, or 302.6 are prohibited.

7.5.2 INDUSTRIAL NON-STORM WATER DISCHARGES

The Municipal Permit effectively prohibits all NSWDs through implementation of the IDDE Program discussed in Section 3.2 (presented in Attachment 1 of the SWPPP) unless they are authorized through another NPDES permit. The following NSWDs are prohibited unless authorized by a separate NPDES

permit, or they must be addressed pursuant to the requirements from the Municipal Permit Provision E.2 as identified in Section 3.1.1 and 3.1.2:

- Fire prevention system flushing/testing;
- Potable water sources and system flushing/testing;
- Drinking water fountains;
- Air conditioning, refrigeration, and compressor condensate;
- Uncontaminated natural springs, groundwater, and foundation and footing drainage;
- Tidal intrusion; and
- Incidental windblown mist from cooling towers.

Further discussion of NSWDs and their associated BMPs is provided in Section 3.0 (presented in Attachment 1 of the SWPPP).

7.5.3 INDUSTRIAL EFFLUENT LIMITATIONS

The Authority meets the Industrial Permit Section V effluent limitations by using BMPs that meet the BAT and BCT standard, as appropriate. The BAT standard generally applies to industrial discharges of toxic and nonconventional pollutants, while the BCT standard applies to conventional pollutants, including biological oxygen demand (BOD), total suspended solids, fecal coliform, pH, and oil and grease. The Authority's required BMPs are further outlined in Section 7.10 and in Appendix B.

The Authority is not subject to storm water ELGs in Subchapter N because no pavement deicing occurs at SAN and because the Authority is not a new discharger.

Additionally, there are no TMDLs applicable to the Authority, so the Authority is not subject to any TMDL-specific requirements. If the Authority does become named in a TMDL, this SWPPP will be amended to incorporate the TMDL.

7.5.4 RECEIVING WATER LIMITATIONS FOR INDUSTRIAL DISCHARGES

The Authority's storm water discharges and NSWDs will not cause or contribute to an exceedance of any applicable water quality standard in San Diego Bay, including standards set forth in the Basin Plan. Industrial storm water discharges and NSWDs will not adversely affect human health or the environment or contain pollutants in quantities that threaten to cause pollution or public nuisance.

7.6 TRAINING QUALIFICATIONS

Per 2014 Industrial Permit requirements, the Authority designated a QISP to complete an approved SWRCB training course and register as a QISP in SMARTS, following QISP training development by the SWRCB when the Authority entered Level 1 discharger status, as described in Section 7.15. The QISP trained appropriate team members and performed the duties related to ERAs, as described in Section 7.15. The SWPPP was modified to reflect this designation. Whenever the Authority is in baseline status (i.e., no NAL exceedances), additional training by a QISP will not be required.

All engineering work subject to the Professional Engineer's Act (California Business and Professions Code Sections 6700–6799) and required by the Industrial Permit will be performed by a California licensed professional engineer. A professional engineer will certify hydrologic calculations for any new volume-based treatment control BMPs installed at SAN after July 1, 2015, per Section X.H.6.a of the Industrial Permit. Additionally, according to Provision E.3.d of the 2013 Municipal Permit, compliance with the BMP

Design Manual is also required. The BMP Design Manual addresses onsite post-construction storm water requirements for Standard Projects and PDPs and provides updated procedures for planning, preliminary design, selection, and design of permanent storm water BMPs based on the performance standards presented in the Municipal Permit (see Appendix C).

7.7 STORM WATER POLLUTION PREVENTION PLAN COMPONENTS

7.7.1 BACKGROUND

As an industrial discharger, the Authority has developed Section 7.0 and other associated sections or appendices of the SWMP as its SWPPP. Per Section X.A of the Industrial Permit, the Authority's SWPPP contains the following elements:

- Facility name and contact information;
- Site map;
- List of industrial materials;
- Description of potential pollutant sources;
- Assessment of potential pollutant sources;
- Minimum BMPs;
- Advanced BMPs, if applicable;
- Monitoring Implementation Plan;
- Annual Evaluation; and
- Date that the SWPPP was initially prepared and the date of each SWPPP amendment.

A checklist of required SWPPP elements and their locations is provided in Appendix A. Section 7.0 contains most of the required SWPPP elements.

The Municipal Permit also requires identifying and describing existing industrial facilities or areas as part of the Authority's JRMP. Most of the elements required under the Municipal Permit are already provided as a requirement of the SWPPP under the Industrial Permit. Specifically, Provision E.5.a of the Municipal Permit states that the JRMP must include the following elements for industrial facilities:

- Name and location, including hydrologic subarea and address, if applicable;
- Status of facility or area as active or inactive;
- Identification if a business is a mobile business;
- Standard Industrial Classification (SIC) code or North American Industry Classification System (NAICS) code, if applicable;
- Industrial Permit NOI and/or WDID number, if applicable;
- Identification of pollutants generated and potentially generated by the facility or area;
- Whether the facility or area is adjacent to an ESA;

- Whether the facility or area is tributary to and within the same hydrologic subarea as a water body segment listed as impaired on the 303(d) list and generates pollutants for which the water body segment is impaired; and
- An annually updated map showing the location of inventoried existing development, watershed boundaries, and water bodies.

Table 7-4 presents an inventory of industrial sites and sources at SAN. Based on this inventory of existing facilities, the Municipal Permit calls for prioritizing known or suspected sources of pollutants contributing to the highest or focused priority water quality conditions identified in the San Diego Bay WQIP. The WQIP identifies metals as the focused priority water quality condition in the Authority jurisdiction, and both Industrial Tenant Operational Areas and Industrial Airport Operational Areas (i.e., runways and taxiways) are identified as high-priority sources of metals (Responsible Parties, 2019). Strategies identified in the WQIP to address industrial sources of metals include enhanced tenant inspections, optimization of runway rubber removal, and increased frequency of sweeping runways, taxiways, and ramp areas.

Per Provision E.1.a of the Municipal Permit, the Authority must establish legal authority to control pollutant contributions in discharges from industrial facilities within its jurisdiction, including those with existing coverage under the Industrial Permit. The Authority has legal authority over all land uses within its jurisdiction through property leases or use agreements. A complete discussion of the Authority's legal authority is provided in Section 2.2 (presented in Attachment 1 of the SWPPP).

7.7.2 FACILITY INFORMATION

SAN is owned and operated by the Authority. The primary economic activity of SAN is as an airport; therefore, the primary SIC Code is 4581. Other secondary SIC codes associated with the activities of SAN and its industrial tenants include the following:

- 4512 Air Transportation, Scheduled;
- 4513 Air Courier Services;
- 4522 Air Transportation, Non-scheduled;
- 5171 Petroleum Bulk Stations and Terminals; and
- 4173 Terminal and Service Facilities for Motor Vehicle Passenger Transportation.

SAN covers approximately 663 acres and is located in the Pueblo Hydrologic Unit (HU 908.00), San Diego Mesa Hydrologic Area (HA 908.20), and Lindbergh Hydrologic Subarea (HSA 908.21). Storm water from SAN drains to San Diego Bay, designated as an ESA, with portions contained in the 303(d) list. Certain areas of San Diego Bay are subject to TMDLs; however, SAN does not directly drain to these areas. A complete discussion of the facility drainage is provided in Section 7.7.2.2 of this plan and can be viewed on the site map (Figure 3).

Table 7-2 provides the basic facility information for SAN, including name, address, contact information, SIC code, HSA, and WDID number.

Table 7-2. SAN Industrial Facility and Facility Discharge Information

Industrial Facility Information	
Facility Name	San Diego International Airport (SAN)
Facility Operator	San Diego County Regional Airport Authority
Facility Address	3225 N. Harbor Dr., San Diego, CA 92101
Facility Mailing Address	PO Box 82776, San Diego, CA 92138
Latitude	32.7337
Longitude	-117.1933
Legally Responsible Person (LRP)	Sjohnna Knack, Director of Planning and Environmental Affairs
Facility Contact	Cara Nager
Contact Email	cnager@san.org
Contact Telephone	(619) 400-2790
Qualified Industrial Storm Water Practitioners (QISPs)	Amanda Archenhold, Nancy Phu
Scheduled Facility Operating Hours	6:30 a.m.-11:30 p.m., 365 days per year
Industrial Facility Discharge Information	
Primary Standard Industrial Classification (SIC) Code	4581 (Airports, Flying Fields, and Airport Terminal Services)
Waste Discharge Identification (WDID)	9 37I018035
Hydrologic Unit (HU)	908 (Pueblo)
Hydrologic Subarea (HSA)	908.21 (Lindbergh)
Receiving Water Body	San Diego Bay
Facility Status	Active
Mobile Discharger?	No
Discharges to Environmentally Sensitive Area (ESA)?	Yes (San Diego Bay)

7.7.2.1 Facility Operations

The primary operation of SAN is as a domestic and international commercial airport. Airport operations at SAN currently include two main airline terminals, an FBO facility, one main runway area, taxiways, ancillary support facilities (including an aircraft fuel storage facility, a west refueling facility, air cargo facilities, ground support facilities, and operations areas), one wash rack (operated by the Authority; the wash rack operated by the tenant Menzies was removed in 2021), overnight airplane parking areas, and the ARFF.

7.7.2.2 Descriptions of Drainage Areas and Existing Drainage

The storm water conveyance system at SAN consists of 15 drainage basins. To be consistent with historical naming conventions at SAN, these drainage basins are named Drainage Basins 1 through 15. In 2018, Drainage Basin 2 was removed and Drainage Basin 5a was added. Of the 15 drainage basins at SAN, 9 contain industrial activities, namely Drainage Basins 1, 3, 5, 5a, 6, 8, 12, 13, and 15. A full description of the drainage areas is provided in Section 1.4 (presented in Attachment 1 of the SWPPP).

Storm water from SAN drains to San Diego Bay, portions of which are currently 303(d) listed for impacts from PCBs, PAHs, chlordane, lindane, indicator bacteria, and metals, as well as benthic community effects and sediment toxicity. The 2010 303(d) list includes copper as a pollutant impacting water quality in the marinas along Harbor Island and bacteria impacting water quality at Spanish Landing. Runoff from the airport commingles with runoff from other sources and discharges into Harbor Island waters, including near Spanish Landing. In its entirety, San Diego Bay is also 303(d) listed as impacted by PCBs.

There are two TMDLs established in San Diego Bay, namely dissolved copper impacting Shelter Island Yacht Basin and indicator bacteria impacting Shelter Island Shoreline Park. Runoff from SAN does not discharge in proximity to these areas of San Diego Bay.

There are four Toxic Hot Spots in San Diego Bay, one of which (namely, the Laurel Hawthorn Central Embayment) is located near outfalls associated with runoff commingled from SAN and other sources. Several technical investigations prompted by Investigative Orders issued by the RWQCB are currently being conducted to determine the source of pollution in this area. The SWRCB has designated San Diego Bay in its entirety as having RARE beneficial use in the Basin Plan (2011 update). Both the Sweetwater Marsh National Wildlife Refuge and the South Bay Unit of the San Diego National Wildlife Refuge are considered ASBS, but neither is within proximity to SAN.

7.7.2.3 Storm Water Run-On from Off-Site Areas and Non-Industrial Areas

Drainage Basins 1, 3, 4, 5, 6, 8, 12, and 13 have been identified as potentially receiving run-on from offsite areas. Drainage Basins 1, 3, and 4 receive storm water run-on from adjacent properties south and east of SAN. Drainage Basins 5, 6, 8, 12, and 13 receive storm water run-on from adjacent properties north and west of SAN.

There are no identified areas of run-on from non-industrial drainage basins within SAN to industrial drainage basins. There are, however, identified areas of run-on from non-industrial source areas within the industrial drainage basins. Drainage Basins 3, 4, 5, 6, 8, 12, and 13 contain areas of natural soil and fill that are exposed to rainwater. Runoff from these areas may reach the storm drains in the corresponding drainage areas. These areas are outlined in Figure 3. Drainage Basins 3, 6, 7, 8, and 15 contain non-industrial roof runoff that comingles with industrial runoff before reaching the storm drains. Drainage Basins 1, 3, 4, 5, 5a, 6, 8, 12, 13, and 15 contain portions of the vehicle perimeter road or vehicle parking areas; runoff from these areas may comingle with industrial runoff. As of September 2023, there is active construction in Drainage Basins 4, 5, 5a, 6, 7, 8, 9, 10, and 14. Construction runoff is addressed in Section 5.0.

7.7.2.4 Geology and Groundwater

Approximately 90 percent of SAN property is covered by impervious surfaces consisting mainly of buildings and paved areas. The soils underlying SAN are generally undifferentiated bay deposits and hydraulic fill material originating from San Diego Bay. The soil is described as undetermined in the Soil Hydrologic Groups map in the San Diego County Hydrology Manual. The elevation of SAN ranges from approximately 10 to 25 feet above mean sea level.

7.7.3 POTENTIAL POLLUTANT SOURCES

Entities conducting industrial activities as listed in Attachment A of the Industrial Permit are subject to the Industrial Permit and Provision E.5 of the Municipal Permit. There are 26 tenants conducting industrial activities, plus the Authority itself as operator of SAN and the ARFF (the Authority includes the ARFF facility, which is the airport's firefighting facility and is indicated separately to assign its particular activity), for a total of 28 entities conducting industrial activities that could contribute a significant pollutant load to the storm drain system. These 28 entities and the type of industrial activity into which they have been categorized are listed in Table 7-3. The location of these 28 entities is shown in Figure 3 and Figures 5 through 7.

The Authority site maps shown in Figure 3 and Figures 5 through 7 depict the facility boundaries; the outline of all storm water drainage basins within the facility boundaries; portions of the drainage basins impacted by run-on from surrounding areas; direction of flow within each drainage basin; nearby surface water bodies; and areas of soil erosion. The site maps identify San Diego Bay as the receiving water into which storm water from SAN discharges. The site maps also show the storm water drainage system at the airport; associated inlets and points of discharge; any structural control measures (e.g., OWSs); compliance sampling locations; an outline of all impervious areas of the facility, including paved areas, buildings, covered storage areas, and other roofed structures; locations where materials are directly exposed to precipitation; locations where significant spills or leaks have occurred; areas of industrial activity, including the locations of all storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage/maintenance areas, material handling and processing areas, waste treatment and disposal areas, dust- or particulate-generating areas, and cleaning and rinsing areas; and other areas of industrial activity that are potential pollutant sources.

The Municipal Permit requires that Copermittees identify and prioritize their industrial sources of pollutants contributing to the focused priority water quality conditions in the Authority's jurisdiction. The process implemented by the Authority for determining the potential threat of those operations conducting industrial activities is described Section 7.7.3.1. Per the WQIP source prioritization, all Industrial Tenant Operational Areas and Industrial Airport Operational Areas are designated as high-priority sources Responsible Parties, 2019).

7.7.3.1 Description of Potential Pollutant Sources

Under the Industrial Permit, commercial passenger air carriers, cargo air carriers, FBOs (of which there is only one at SAN), fuel vendors, aircraft refuelers, aircraft and airport services, and maintenance providers, and all airfield/airport-related activities are defined as industrial operations. The Authority used information from site visits, annual inspections, and storm water sampling, including information regarding industrial materials handled and stored at the airport, descriptions of those industrial activities that may be sources of pollutants, and pollutants detected in prior sampling events, to determine their potential pollutant sources and areas. This information is presented in Tables 7-3 and 7-4.

Using the information on hand, the Authority has determined that all the activities listed in Tables 7-3 and 7-4, and therefore all 28 entities conducting industrial activities at SAN, are considered high-priority threats to water quality.

The Municipal Permit requires the Authority to maintain an inventory of industrial and commercial sites and sources and update it annually. These industrial and commercial sites and sources were prioritized as part of the WQIP process. The results of the commercial prioritization are presented in Section 6.0. The current prioritization results for industrial activities are included in Tables 7-3 and 7-4, as discussed above. Some of the entities conduct multiple industrial activities and may be listed more than once in Table 7-3. Table 7-4 provides the more detailed minimum information required by the Municipal Permit for each industrial site or source, specifically name, address, pollutants potentially generated by the site/source (and identification of whether the site/source is tributary to a 303(d)-listed water body segment and generates pollutants for which the water body segment is impaired), and a narrative description, including SIC codes that best reflect the principal products or services provided by each site/source/facility. The Municipal Permit also requires identification of mobile businesses and the status of businesses as active or inactive; all 28 industrial entities are active and stationary.

Table 7-3. Overview of Inventory of Industrial Sites/Sources

Land Use and Activity	Water Quality Threat Priority	Entity
Passenger Carrier	High	Air Canada Alaska Airlines Allegiant Air American Airlines British Airways Airlines Delta Airlines Frontier Airlines Hawaiian Airlines Japan Airlines JetBlue Airways Lufthansa Southwest Airlines Spirit Airlines Sun Country Airlines United Airlines WestJet Airlines
Cargo Carrier	High	DHL Airways Federal Express Corporation (FedEx) United Parcel Service Co. (UPS)
Cargo Handling	High	American Airlines Bradford Delta Airlines FedEx Southwest Airlines United Airlines UPS
Corporate General Aviation/ Fixed-Base Operations	High	Signature
Fuel Vendor	High	Menzies Menzies Fuel Farm
Aircraft Fueler	High	Menzies Signature
Aircraft and General Services Equipment and Maintenance	High	American Airlines United Airlines Delta Airlines
Jetway and Baggage Maintenance	High	Siemens
Airport Terminal and Janitorial Services	High	FlagShip
Firefighting	High	Aircraft Rescue and Firefighting Facility (ARFF)
Airport/Facilities Maintenance	High	San Diego County Regional Airport Authority (Authority)
Terminal and Service Facilities for Motor Vehicle Passenger Transportation	High	Conrac Solutions

Table 7-4. Inventory of Industrial Sites/Sources

Facility Name	Address Number	Suite Number	Street Name	City	State	Zip Code	SIC Code	NAICS Code	Principal Products/ Services	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Tributary	Threat
Air Canada	3665	#223	North Harbor Dr.	San Diego	CA	92101	4512, 4522	481111, 487990	Passenger Carrier	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes
Alaska	3665	#228	North Harbor Dr.	San Diego	CA	92101	4512, 4522	481111, 487990	Passenger Carrier	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes
Allegiant	3707	T2E	North Harbor Dr.	San Diego	CA	92101	4512, 4522	481111, 487990	Passenger Carrier	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes
American	3707	#103	North Harbor Dr.	San Diego	CA	92101	4512, 4522	481111, 487990	Passenger Carrier	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes
ARFF	3698	N/A	Pacific Hwy.	San Diego	CA	92102	9224	922160	Airport Rescue & Firefighting	No	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes
Authority	3835	N/A	North Harbor Dr.	San Diego	CA	92101	4581	488111	Facility Maintenance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bradford	2247	N/A	West Washington St.	San Diego	CA	92101	4581	488190	Cargo Handling	Yes	No	No	Yes	Yes	No	No	No	Yes	Yes
British Airways	3707	#117	North Harbor Dr.	San Diego	CA	92101	4512, 4522	481111, 487990	Passenger Carrier	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes
Conrac	3355	#Q228	Admiral Boland Way	San Diego	CA	92101	4173	532111	Rental Car Center	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No
Delta	3835	#107	North Harbor Dr.	San Diego	CA	92101	4512, 4522	481111, 487990	Passenger Carrier	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes
DHL	225	N/A	Washington St.	San Diego	CA	92101	4513	492110	Air & Ground Freight	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes
FedEx	2221	N/A	West Washington St.	San Diego	CA	92110	4513	492110	Cargo Handling	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes
FlagShip	3835	#130	North Harbor Dr.	San Diego	CA	92101	4581	561720	Janitorial	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Frontier	3707	#105	North Harbor Dr.	San Diego	CA	92101	4512, 4522	481111, 487990	Passenger Carrier	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes
Hawaiian	3707	T2	North Harbor Dr.	San Diego	CA	92101	4512, 4522	481111, 487990	Passenger Carrier	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes

Table 7-4. Inventory of Industrial Sites/Sources (continued)

Facility Name	Address Number	Suite Number	Street Name	City	State	Zip Code	SIC Code	NAICS Code	Principal Products/ Services	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Tributary	Threat
Japan Airlines	3707	#123	North Harbor Dr.	San Diego	CA	92101	4512	481111	Passenger Carrier	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes
JetBlue	3835	#108	North Harbor Dr.	San Diego	CA	92101	4512, 4522	481111, 487990	Passenger Carrier	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes
Lufthansa	3835	#134	North Harbor Dr.	San Diego	CA	92101	4512, 4522	481111, 487990	Passenger Carrier	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes
Menzies	2235	N/A	W Washington St	San Diego	CA	92101	4581	488190	Fueling Services	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes
Menzies Fuel Farm	3698	#C	Pacific Hwy.	San Diego	CA	92101	5171	424710	Fuel Storage	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Siemens	3225	N/A	North Harbor Dr.	San Diego	CA	92101	4581	488111	Facility Maintenance and Maintenance (Boarding Bridges & Conveyors)	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes
Signature	2904	N/A	Pacific Hwy.	San Diego	CA	92101	4512, 4522	481111, 487990	Corporate General Aviation	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes
Southwest	3665	T1	North Harbor Dr.	San Diego	CA	92101	4512, 4522	481111, 487990	Passenger Carrier	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes
Spirit	3707	#227	North Harbor Dr.	San Diego	CA	92101	4512, 4581	481111, 488111	Passenger Carrier	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes
Sun Country	3835	#107	North Harbor Dr.	San Diego	CA	92101	4512, 4522	481111, 487990	Passenger Carrier	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes
United	3855	#115	North Harbor Dr.	San Diego	CA	92101	4512, 4522	481111, 487990	Passenger Carrier	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes
UPS	3140	#G105	E Jurupa St.	Ontario	CA	91761	4513	492110	Cargo Handling	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes
West Jet	3707	T2E	North Harbor Dr.	San Diego	CA	92101	4512, 4522	481111, 487990	Passenger Carrier	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes

7.8 INDUSTRIAL MATERIALS AS POTENTIAL POLLUTANT SOURCES

Industrial materials associated with industrial activities at SAN could be potential pollutants consisting primarily of metals, petroleum products (such as fuels, oil, and greases), solvents, soap/cleaning fluids, and trash. Lesser amounts of other potential pollutants also present at the airport include lavatory chemicals and waste, paints, used batteries and battery acid, anti-freeze, hazardous wastes (mostly oils), metals, deicing chemicals, herbicides and pesticides, adhesives, rust preventers, AFFF and other fire suppression chemicals, and sealants (see list below for more details). These pollutants can be transported to the storm water system from direct spills, contact with rainfall runoff, or apron or ramp scrubbing, if not completely contained. Appendix E lists potential pollutants for each industrial tenant. Also described in Appendix E are material storage areas, lists of materials stored in quantities over 55 gallons, and shipping and receiving information if available.

In general, the industrial materials that could be potential sources of pollutants at SAN include the following:

- Acetic acid
- Acetone
- Adhesives
- Antifreeze
- Asphalt debris
- Battery acid
- Brake cleaners
- Brake fluid
- Bulk auto gas and diesel
- Carburetor cleaner
- Caulking
- Cleaning solutions
- Coolant
- Deicing/anti-icing fluids
- Degreasers (citrus based)
- Diesel
- Dumpster wastes
- Fertilizers
- Firefighting foam
- Fuel
- Fuel hydraulic fluids
- Galvanizing compound
- Herbicides
- Hydraulic fluids
- Hydraulic fluid (Skydrol)
- Jet fuel
- Lavatory chemicals
- Landscape waste
- Lavatory wastes
- Lubricants
- Metals
- Oil and grease
- Paints
- Pesticides
- Purple K (fire suppression chemical)
- Radioactive goods
- Recyclable paper/cardboard
- Rubber particulates
- Rust preventer
- Sealant
- Sediment
- Solvents
- Sump fuel
- Transmission fluid
- Trash
- Turpentine

7.8.1 INDUSTRIAL ACTIVITIES AS POTENTIAL POLLUTANT SOURCES

In and of themselves, the industrial activities conducted by both the Authority and tenants have the potential to impact water quality. As described above, the information gathered indicates that the potential pollutant-generating activities/operations consist primarily of specific airport-industry processes, material handling and storage, and spills and leaks. To a lesser extent, pollutants may also potentially result from dust- and

particulate-generating activities, soil erosion, and NSWDs. There may be pollutant sources related to commercial activities conducted within industrial drainage basins, such as commercial parking lots management and vehicle storage, food service, and janitorial service. These commercial activities are addressed in Section 6.0 (presented in Attachment 1 of the SWPPP).

7.8.1.1 Aircraft Deicing/Anti-icing

Deicing and anti-icing chemicals are generally used on aircraft to eliminate or minimize the ice buildup on the aircraft wings and fuselage. These activities are uncommon at SAN. Only one tenant conducts deicing. Deicing can be performed using deicing fluids (typically, ethylene glycol and/or propylene glycol), water, or air. The deicing fluids are typically stored in drums or large plastic containers. Deicing fluid is generally applied by spraying the aircraft with a mixture of (hot) water and a glycol-based fluid. The spray drains from the aircraft onto the ramp area and could potentially result in an illicit discharge or transport other surface contaminants, thereby impacting storm water quality. Airlines typically use scrubbers, vacuums, or absorbents to clean up and properly dispose of residual chemicals. Mixing of deicing chemicals occurs in the SAN liquid waste facility, which drains to the sanitary sewer.

Facilities performing deicing activities with aircraft deicing fluids may be subject to the requirements and storm water ELGs in Subchapter N. ELGs for existing airports apply only to airports conducting pavement deicing. However, neither the Authority nor any industrial tenants at SAN perform airfield pavement deicing. Therefore, SAN is not currently subject to the Subchapter N ELGs.

Because deicing is fairly uncommon at SAN, it is not considered a significant non-storm water TTWQ. On average, deicing is performed on one to two aircraft per day during the 7-month "deicing season" from October to April. The Authority does require the use of BMPs to address deicing activities. Deicing activities are authorized on the paved ramp in areas that are (1) sufficiently far enough from the nearest storm drains to allow for capture and cleanup of the residual deicing fluids whenever chemical deicers are used;
(2) sufficiently far enough from the nearest storm drains to allow for the liquid to be captured and cleaned up to prevent the transport of surface contaminants whenever air or water are used as deicing agents; or
(3) sufficiently far enough from the nearest storm drains to allow for the water to evaporate prior to reaching the storm drain system whenever air or water are used as deicing agents. These areas are depicted in the figure attached to the Aircraft Deicing/Anti-icing BMP (SC05) description in Appendix B. In general, BMP SC05 can be implemented effectively at the gates, although pushing an aircraft back away from the terminal on the ramp area around Terminal 1 allows for additional distance between the deicing activity and the storm drain system. Tenants are responsible for properly implementing BMP SC05 at all times, including during inclement weather.

7.8.1.2 Aircraft, Vehicle, and Equipment Fueling

Fueling activities occur daily. Aircraft fueling activities are conducted on paved surfaces such as concrete ramps or at the gates. Approximately 450,000 gallons of jet fuel are brought to Terminals 1 and 2 ramp areas daily by tanker and loaded by positive lock hose into aircraft. Vehicle and GSE fueling is conducted at the gates or in maintenance areas. For the Authority, fueling activities also occur at all generators, light towers, and truck bays in the ARFF facility. Menzies maintains a fleet of trucks for fueling aircraft and three trucks for fueling GSE. Aircraft refueling trucks with a capacity of 10,000 and 15,000 gallons are loaded at the WRF. Fuel is delivered to the WRF from the FSF via a single 10-inch underground pipe. Both the WRF and the FSF are maintained and operated by Menzies Fuel Farm. The FSF has a 12,000-gallon OWS and an 8,000-gallon holding tank. The four FBO aircraft refueling trucks take on fuel at the WRF and less frequently at the FSF. Fueling operations are performed onsite at the FBO.

The concrete pad at the WRF loading islands is steam cleaned periodically, and the discharge enters the 24,000 gallon containment basin. After a visual inspection has been made to ensure there is no visible

contamination, this wastewater is then pumped to the WRF's 300-gallon aboveground OWS and carbon filtration for treatment; the treated water is then discharged to the storm drain.

Most tenant vehicles or equipment are fueled onsite, although some perform vehicle or equipment fueling offsite. Conrac fuels rental cars indoors in their quick turn-around (QTA) area. Fuel is stored onsite in their service yard northwest of the parking garage structure. This fuel farm houses three 25,000-gallon USTs of regular unleaded gasoline. Fuel is delivered to the indoor QTA area, where fueling occurs, from the fuel farm where the fuel is stored onsite via an underground pipe. Fuel is provided by Western Pump. Four OWS are connected to the sanitary sewer line as a part of Conrac's drainage system to contain any discharged gasoline.

The industrial materials or potential pollutants from fueling activities are jet fuel, diesel fuel, and gasoline. Absorbent materials, inflatable pools carried by fueling trucks, and facility-specific spill containment areas (such as OWSs/tanks at the WRF, FSF, and Conrac facility) are used to contain fuel spills. The Authority procedures for spill reporting and response are outlined in Sections 3.5.3.2 and 3.5.3.3 (presented in Attachment 1 of the SWPPP). Tenants may also have additional spill procedures highlighted in their own SPCC plans, and environmental response contractors for spill response.

7.8.1.3 Aircraft, Vehicle, and Equipment Maintenance

Most industrial tenants at SAN maintain aircraft, equipment, and/or vehicles, although no major aircraft maintenance is performed onsite. Maintenance activities are performed both indoors and outdoors. Based on the nature of maintenance activities at airports, materials such as lubricating oils, hydraulic oils, degreasers, and other cleaning products are commonly used during maintenance activities. At tenant and Authority waste accumulation areas, waste oils, lubricants, oil filters, antifreeze, transmission fluids, and used absorbent materials are stored prior to transport to recycling or waste disposal facilities. Small leaks or spills of some of these fluids can occur during maintenance activities. Tenants respond to these leaks and spills using absorbent socks, dry absorbent materials, rags, and mops, and request for service by the Authority's portable truck-mounted vacuum when needed. Many tenants use drip pans during maintenance activities in areas where a drip pan is unlikely to become FOD. Maintenance activities occur daily but tend to involve minor maintenance and industrial materials in small quantities. Where possible, maintenance activities are conducted indoors or under cover and generally represent a low potential for significant pollutant discharge.

Some tenants have floor drains in maintenance areas. At some of these facilities, the runoff entering the floor drain is conveyed to an OWS before entering the sanitary sewer system. The runoff that discharges through the floor drains discharges directly to the sanitary sewer at a few facilities. Tenants are required to confirm that there are no illicit connections from these drains to the storm drain system at their leaseholds.

7.8.1.4 Electric Vehicle Charging and Maintenance

. The Authority is committed to clean air and emission reductions and is encouraging electric vehicle charging for passenger vehicles and ground support equipment (GSE). The Authority has a goal to transition all eligible GSE to alternative fuels by July 1, 2024. The California Air Resources Board State Implementation strategies has a potential implementation date of 2023, in which P&EAD inventoried the age, fuel types, and GSE types in its GSE database. In addition to the State Implementation Plan, the Authority in January 2010 agreed to the specific measures identified in the *Memorandum of Understanding Between the Attorney General of the State of California and the Authority Regarding the San Diego International Airport Master Plan* that encourages replacing all GSEs with electric or alternative fuel GSEs. In 2023, 64 percent of GSE was alternatively fueled.

Multiple tenants use electric vehicles as part of their daily operations. These tenants charge the vehicles onsite. During charging and maintenance, electric vehicles' batteries have the potential to leak or spill materials such as acid or water containing heavy metals, particularly if the batteries are over-charged or

over-filled with electrolyte solution. Tenants are responsible for maintaining good housekeeping at charging stations, monitoring for and preventing spills and leaks, and responding to spills and leaks by applying neutralizing materials (e.g., sodium bicarbonate/baking soda) or using dry absorbent materials, absorbent socks, rags, and mops. The Authority also recommends that tenants use sealed or maintenance-free batteries whenever economically feasible. Charging occurs daily in many tenant areas but generally represents a low potential for significant pollutant discharge because of the small volume of most leaks and spills.

7.8.1.5 Aircraft, Vehicle, and Equipment Washing

Several tenants at SAN conduct aircraft, vehicle, and equipment washing, with many using dry methods for cleaning the aircraft and others using water. In all but one instance, as described below, all aircraft, vehicle, and equipment washing conducted at SAN must be authorized in writing by P&EAD. To obtain approval, P&EAD requires the submittal of a wash plan that identifies the tenant contact details; location where washing is performed; location of storm drains; equipment to be used and its storage location; quantity of wastewater to be generated; frequency of washing activities; water collection/retrieval/reclamation processes; water disposal/elimination processes; chemicals to be used, if any, and the relevant material safety data sheets; washing methods; and BMPs used to control potential pollutants related to the activity. Where possible, tenants are encouraged to use reclaimed water from potable water flushing or air conditioning condensate as wash water. Upon satisfactory review of the wash plan, the Authority provides written approval to conduct washing activities in the manner described in the plan. In general, the approved wash plans indicate that the washing is performed as far away from storm drains as possible, and temporary berms are used to block off nearby storm drains to prevent runoff to the storm drain system. Wash water is then vacuumed up and properly disposed of through the Authority's dewatering bin (where solids are removed) in Drainage Basin 6 or at the Authority wash rack in Drainage Basin 8 (see Figure F-1). Any equipment degreasing is conducted indoors, and washing activities are prohibited in areas that do not provide a wash rack, OWS, or area to deploy proper containment. The lone exception to obtaining this approval involves using a properly-designed wash rack connected to a dead-end sump and/or the sanitary sewer.. The Authority operates a wash rack on the southside of the airport near Gate P-16. It is a covered, two-sided facility that can be used for tenant and Authority vehicles and equipment washing. The wash rack sends wash water to the sanitary sewer since it coexists with the Airport's triturator operations.

In addition to the one wash rack, the RCC has 13 wash bays, 5 on floors 2 and 3 of their parking garage, and 3 on the garage's first floor where the rental cars are washed inside. All the car wash drains lead to OWSs. Water is recycled and kept in a reclaimed water tank that can hold up to 4,500 gallons; this water is used again to wash cars. For the car wash's final spray, water from an onsite reverse osmosis system is used.

Because of previous drought conditions, tenants must use a hand-held hose with a positive shut-off nozzle to wash vehicles.

7.8.1.6 Outdoor Washdown/Sweeping

General Outdoor Washdown/Sweeping: Atmospheric deposition, vehicle and aircraft use and emissions, breakdown of asphalt and concrete surfaces, and peeling or crumbling paint from structures and runway surfaces can all introduce particulates into the storm drain system at SAN. The physical removal of particulates and attached fine pollutant particles (in particular, heavy metals) from outdoor surfaces at SAN prevents or eliminates the pollutant load that may be transferred to San Diego Bay. The Authority requires the use of the Outdoor Washdown and Sweeping BMP (SC12) in Appendix B to address pollutants associated with washing and sweeping activities. Aircraft and vehicle washing activities are discussed separately above, and power washing is considered separately below.

Ramp Sweeping: The Authority has a comprehensive program to reduce pollutant discharges to its MS4s from ramp and airfield industrial areas. The ramp sweeping program conducted by the Authority is further described in Section 7.12.2. This program differs from the Authority's roadway sweeping program described

in Section 6.3 (presented in Attachment 1 of the SWPPP). All terminal ramp areas are swept at least every 2 weeks and upon request by tenants using two regenerative air sweepers. Potential pollutant sources that can be mitigated by sweeping practices in ramp areas are trash and debris (FOD), sediment, particulates, and other associated pollutants such as metals. Loading and unloading trash, cargo, and catering supplies from aircraft can lead to FOD on the ramp areas. Any uncovered dumpsters or trash cans can be potential sources of FOD, as can littering by staff, tenants, or the public. All Authority staff and tenants are aware of the potential hazards of FOD at the airport and conduct daily FOD walks to check for any trash, so the source from tenants and staff tends to be minimal. Every individual working on the ramp is trained to remove FOD immediately when observed and to place it in covered FOD bins in each tenant gate area and throughout the airport. Some tenants also perform manual sweeping of their operational areas. The Outdoor Washdown and Sweeping (SC12) and Housekeeping (SC18) BMPs are required to be implemented during ramp sweeping activities.

Power Washing: Both the Authority and the airport janitorial services provider conduct power washing--the Authority on an as-needed basis and the janitorial services provider on a routine basis. Portions of the sidewalk areas in front of the terminals and the pedestrian bridges leading from the parking lots to the terminals are power washed by the janitorial services provider almost daily using high-pressure water only. Wastewater from power washing may contain and transport contaminants on the ground surface to the storm drain system if not properly contained and collected. The primary pollutants associated with power washing at the airport are particulates and associated pollutants, trash, and debris. Both the Authority and the janitorial services provider use power-washing equipment designed to minimize the amount of water used and to capture all the wastewater. Non-potable air conditioning condensate is used for power washing at the janitorial wash stations, and washing is generally conducted from 11pm to 4am because of drought conditions. To address the potential release or transport of pollutants during power-washing activities, the Authority requires the use of several BMPs in Appendix B, including the Non-Storm Water Management BMP (SC01), Employee Training BMP (SC10), Outdoor Washdown/Sweeping BMP (SC12), and Housekeeping BMP (SC18).

Ramp Scrubbing: In addition to ramp-sweeping activities, the Authority also performs ramp-scrubbing activities. CASQA guidance states that "no currently available conventional sweeper is effective at removing oil and grease." As such, the Authority conducts an outdoor ramp-scrubbing program in the gate areas (and in the north ramp area when requested by Authority staff or tenants) designed to remove oil and grease, debris, and particulate matter (to which heavy metals may be adsorbed, or which may contain metals). The airport janitorial contractor uses either one of two 3,500-pounds per square inch (psi) industrial pavement washers or a pressure washing truck for ramp scrubbing. Both pieces of equipment are equipped with vacuum collection systems. The pressure-washing truck also contains a reclamation system for direct reuse of wash water. Oil and grease, fuels, hydraulic fluids, and other substances may leak onto the ramp from parked aircraft, vehicles, and equipment. An effective outdoor ramp-scrubbing program, in conjunction with the ramp-sweeping program discussed above, can reduce levels of these pollutants in storm water runoff from the airport. Following washing activities, the wash water is either directly reused or vacuumed and collected by the Authority's environmental contractor, which filters and reuses the water.

7.8.1.7 Runway Rubber Removal

On the runway, materials such as tire rubber, oil and grease, paint chips, jet fuel, and vehicle exhaust products can build up on a surface over time, causing a reduction in the pavement's surface friction. When the friction value falls below a specific level, safety may be compromised, and maintenance must be performed. The buildup is generally removed using high-pressure water or specialized biodegradable detergents within a containment/recovery system. The detergent solution is not stored onsite. Only the amount needed is brought onsite during each rubber removal. Runway rubber removal is conducted on average every 4-4-6 weeks. The waste rubber is disposed of in a lined rubber removal lowboy (dumpster) east of the ATCT. A contractor is responsible for disposal of the waste and wastewater generated. To address

the potential release or transport of pollutants during runway rubber removal activities, the Authority requires the use of the Runway Rubber Removal BMP (SC15) in Appendix B.

7.8.1.8 Pesticide/Herbicide Use

Currently, six industrial tenants/facilities (Menzies Fuel Farm, Signature, Conrac, ARFF, Cartwright, and Bradford) and the Authority use pesticides and/or herbicides. Menzies uses herbicides to control weeds. They store small quantities in small containers within secondary containment outdoors at the FSF. The RCC contracts a landscaping service that applies herbicides biannually and pesticides on an as-needed basis. No herbicides or pesticides are stored onsite at the RCC. The Authority stores a small number of herbicides in flammable material storage lockers at the runway generator area. The Authority's landscape contractor also uses pesticides for weed control. These pesticides are not stored onsite. The use of pesticides and herbicides at the airport does not result in significant discharge to the ground. During rainfall events, pesticide and herbicide residuals that accumulate at the application sites can be washed into the storm drain system. However, based on the small quantities used at the airport and the application of an IPM system at SAN, this activity appears to present a low potential for impacting storm water discharge.

7.8.1.9 Shipping/Receiving Areas

The largest shipping/receiving areas are in Drainage Basins 6 and 5a. Additional secondary shipping and receiving areas are in Drainage Basins 8 and 12, as depicted in Figure 3 and Appendix B Figure SC-06. Loading and unloading of cargo and provisioning occurs in Drainage Basin 5a at the front loading dock and at the provisioning dock of the ASB, in Drainage Basin 5a. The ASB is also used to process mail that gets carried on passenger airplanes.The front of the main shipping and receiving area, the CRDC, is in the north portion of Drainage Basin 6 off of Pacific Coast Highway, where cargo and supplies are loaded and unloaded for the Authority and the various airlines and cargo carriers. The airport food service providers use loading/unloading areas at Terminal 1 and Terminal 2 West, and at the connection between the east and west halves of Terminal 2, where food, drink, and other catering supplies for the airport restaurants are delivered by truck. Equipment used for loading and unloading at the docks typically includes forklifts. Loading and unloading of aircraft occur in Drainage Basins 1, 3, 6, 8, 12, and 15 using hydraulic lifting equipment. To address the potential release or transport of pollutants during loading and unloading activities, the Authority requires the use of the Outdoor Loading/Unloading of Materials BMP (SC06) in Appendix B. The main loading and unloading areas are shown in the figure attached to the Material Loading/Unloading BMP description in Appendix B. Shipping and Receiving areas for each industrial tenant are listed in Appendix E.

7.9 MATERIAL HANDLING AND STORAGE AREAS AS POTENTIAL POLLUTANT SOURCES

7.9.1 FUEL, GSE, AND CHEMICAL STORAGE AREAS

Tenants at SAN store varying quantities of chemicals and petroleum products (i.e., hydraulic fluids, gasoline, diesel, and jet fuels). Many tenants have indoor and outdoor storage areas to house these items. Chemicals, oils, and waste oils are typically stored in 55-gallon drums or smaller containers. Fuels are typically stored in ASTs or USTs, but some tenants that store only small quantities have 5-gallon fuel containers. Deicing fluids are stored in 55-gallon metal or plastic drums. Other materials, such as cleaners, paints, and paint-related products, are stored in smaller containers. Secondary containment may be required by law for certain hazardous materials, and the Authority requires the use of secondary containment in all chemical storage areas. If not adequately protected from contact with storm water, outdoor storage areas have the greatest potential to impact storm water. In these areas, the Authority requires the implementation of the Outdoor Material Storage BMP (SC07), including the proper use of secondary containment and cover, whenever possible.

Fueling Facilities: The FSF, WRF, and Conrac RCC contain several ASTS and USTs, as outlined in the description of Drainage Basin 6 in Section 1.4 (presented in Attachment 1 of the SWPPP). Jet fuel is delivered to the five 1,000,000-gallon ASTs within a valved secondary containment area at the FSF via underground pipelines from the 10th Avenue Marine Terminal storage tanks. The facility can also receive jet fuel from commercial transport trucks at approximately 8,200 gallons per load. The fuel is off-loaded at the three dual-position unloading islands. The jet fuel tanks at the FSF and WRF are connected via an existing underground hydrant fueling system. Construction of a new hydrant fueling system throughout the apron areas at the terminal gates began in February 2019. The phased-in installation of the hydrant fueling system directly at the terminal gates will initially reduce and then potentially eliminate the need for fuel trucks on the airfield, thereby reducing the potential brake pad and tire wear dust generated from fuel trucks, as well as reduce spills, leaks, and discharges from truck fueling activities. A portion of the hydrant fueling infrastructure parallel to the VSR was completed by September 2020. Installation will continue through the completion of the Terminal 1 expansion project in 2035. The WRF project began in May 2021 and was completed in September 2022. The development project consists of five fueling bays to replace the now removed RFF. The new facility provides backup and supplements aircraft fueling capability to support the proposed hydrant system.

Currently, fueling is generally performed at SAN from fuel transfer trucks that load at the WRF. Loading of gasoline and diesel into cars and trucks occurs at various locations around the airport. The aircraft refueling trucks at the FBO are stored outdoors on the concrete ramp area at the FBO and are used to fuel general aviation aircraft and GSE at the FBO. Aircraft refueling truck storage capacities range from 1,200 to 15,000 gallons, and vehicle refueling truck storage capacities range from 300 to 2,200 gallons. UST fuel storage capacities range from 3,000 to 15,000 gallons. An exception to this is the RCC's three 25,000-gallon USTs that hold regular unleaded gasoline to refuel rental vehicles. TSAN emergency power generators are operated by the Authority and feature ASTs with fuel storage capacities ranging from 25 to 1,000 gallons. ASTs and USTs are fitted with a combination of overfill protection, leak detection, and alarm systems to prevent spills, leaks, and discharges. All fuel delivery trucks or fueling areas must be equipped with spill kits. The loading/unloading areas are inspected regularly to identify any leaks from fuel transfers. At the FSF, leaks from fuel transfers are directed to bermed, sloped, spill containment areas that are linked to the 12,000-gallon OWS. At the WRF, the five loading islands are sloped and bermed to direct any discharges to a 24,000-gallon containment basin. Fuel spills that occur in any other airport area must be cleaned immediately using dry methods to reduce the potential to impact storm water. The Authority procedures for spill reporting and response are outlined in Sections 3.5.3.2 and 3.5.3.3 (presented in Attachment 1 of the SWPPP). Tenants may also have additional spill procedures highlighted in their own SPCC plans and environmental response contractors for spill response. BMP SC03 covers Aircraft, Ground Vehicle, and Equipment Fueling, and the attached figure in Appendix B outlines fueling areas.

GSE: Areas designated for the storage and maintenance of GSE are primarily located in Drainage Basin 5a; however, parking of GSE occurs throughout the other ramp areas. During rain events, any residues (fuel, oil, or grease) on the GSE under repair or leaks from the GSE are potential pollutant sources in storm water discharges and must be controlled by proper BMP implementation. The Authority requires frequent inspections and preventive maintenance of GSE to prevent leaks, implementation of containment measures if leaks do occur, and proper, timely disposal of obsolete equipment, among other BMPs, as described in the Aircraft, Ground Vehicle, and Equipment Maintenance BMP (SC02B)and the Electric Vehicle Maintenance BMP (SC02C).

Chemical/Materials Storage: Chemicals and other materials are stored in the GSE maintenance areas at the ASB, around the gate areas, in the northside "boneyard" area, at the FBO, at the FSF, in the cargo areas north of the north ramp, and near the runway generator area. The materials stored include hydraulic fluids, lubricants, oils and greases, antifreeze, paints, rust preventers, solvents, batteries, metals, lavatory chemicals, cleaning solutions, deicing chemicals, pesticides, and herbicides. Any residues on chemical storage containers or residuals from chemical spills or leaks in uncovered outdoor storage areas are potential pollutant sources in storm water discharges during rain events. Facilities that include outdoor chemical and

materials storage must have secondary containment and overhead coverage. Generally, only small quantities of these industrial materials are stored at SAN. They are generally contained within flammable materials storage lockers or outdoor sheds or spill pallets with tarps or other coverage. The lockers are completely enclosed, provide containment for small spills, and do not appear to be a source of significant quantities of pollutants to the storm drain system. Large volumes of materials in 55-gallon drums tend to be stored indoors and associated with various tenant maintenance areas. Material storage areas for each industrial tenant are listed in Appendix E.

Appendix B Figure SC-07 outlines the main chemical and materials storage locations and the types of chemicals and materials stored. The figure attached to the Outdoor Loading/Unloading of Materials BMP (SC06) in Appendix B outlines areas where materials are shipped and received or loaded and unloaded. SC06 and SC07 detail the BMPs required by the Authority for these activities.

7.9.2 WASTE TREATMENT, STORAGE, AND DISPOSAL

Lavatory Waste: Lavatory waste is pumped daily from aircraft on the ramp or apron areas and transported to a specially designed liquid waste disposal facility, an enclosed facility referred to as the triturator. The triturator is located near P-16 and the Airline Support Building. To prevent sewage spills during the transfer of lavatory waste through the triturator into the sanitary sewer, the transfer is performed in a drive-up facility with an overhead cover. During aircraft lavatory servicing operations, chemical odorizers and/or sanitizers may be used. Airline tenants generally store this chemical indoors at the gate areas or occasionally outdoors on spill pallets under overhangs or tarps. BMP SC11 in Appendix B covers Lavatory Service Operation and the associated BMPs required.

Hazardous Waste Storage: Hazardous waste, mostly waste oils, oil filters, and used absorbent materials in 55-gallon drums, is stored at the following locations:

- The Authority's boneyard area in Drainage Basin 3;
- The Authority 90-day holding facility in Drainage Basin 6;
- The FSF in Drainage Basin 6;
- The gate areas in Drainage Basins 8, 12, and 15;
- The GSE maintenance areas in Drainage Basin 5a;
- The FBO in Drainage Basins 1 and 3;
- The ASB in Drainage Basin 5a;
- The north ramp in Drainage Basins 5 and 6; and
- The RCC in Drainage Basins 3 and 5.

The USTs for waste fuels at both the FSF and the WRF may store more than 6,000 kilograms (13,200 pounds) of hazardous waste at any time. The RCC stores waste fuel onsite in an oil room with three 2,500-gallon containers of used oil. Currently, no facility at the airport generates more than 1,000 kilograms (2,200 pounds) of hazardous waste in any one month. To address the potential release or transport of pollutants during hazardous waste storage and handling activities, the Authority requires the use of both the Outdoor Material Storage BMP (SC07) and the Waste Handling and Disposal BMP (SC08) in Appendix B. The areas in which hazardous waste is stored at the airport are also shown in the figure attached to these two BMP descriptions in Appendix B.

Waste Disposal: The main waste disposal area at SAN is the trash compactor/recycling compactor/compost compactor area, as outlined in the description for Drainage Basin 8 in Section 1.4 (presented in Attachment 1 of the SWPPP). The trash compactors, recycling compactors, and compost compactor are within a bermed

area. Drainage in the bermed area is directed toward a sump that also pumps the water and liquids into the sanitary sewer. The dewatering bin was moved from the main waste disposal area to an area next to the ATCT in Drainage Basin 6. Additional disposal areas are the Terminal 2 trash compactors in Drainage Basins 12 and 15, the West Solid Waste Facility in Drainage Basin 15, and the sweeping disposal lowboy in Drainage Basin 6, as depicted in Appendix B Figure SC-08. Dumpsters and recycling bins are also placed at various locations throughout the airport. To address the potential release or transport of pollutants during waste disposal activities, the Authority requires the use of the Waste Handling and Disposal BMP (SC08). The areas at which waste disposal occurs at SAN are also shown in the figure attached to the Waste Disposal and Handling BMP description in Appendix B.

7.9.3 DUST- AND PARTICULATE-GENERATING ACTIVITIES AS POTENTIAL POLLUTANT SOURCES

Construction/demolition, aircraft and vehicle use and emissions, and airport operations can generate dust and particulates at SAN. In addition, airline off-loading of trash and debris from aircraft generates a significant gross pollutant source (eg. litter, debris, and coarse sediment), requiring proper handling and disposal. The main industrial areas generating dust and particulates are the runway/taxiway area, the terminal gate areas, the FBO, and the gate areas for cargo operators on the north ramp. The pollutants and particulates generated can include trash and debris, metals, and hydrocarbons. To address the generation of dust and particulates, the Authority requires the use of the Outdoor Washdown/Sweeping BMP (SC12), Erodible Areas BMP (SC20), and the Building Repair and Construction BMP (SC21), as described in Appendix B.

7.9.4 ERODIBLE SURFACES AS POTENTIAL POLLUTANT SOURCES

SAN is approximately 90 percent impervious and is either covered by structures or is made up of concrete/asphalt surfaces. Unpaved areas are the California Least Tern nesting ovals in the southeast corner of SAN (south of the runway), northwest corner of SAN (north of the runway), erodible landscaped areas, and any active construction projects that may involve the removal of the impervious surface. The California Least Tern nesting oval surfaces are generally very coarse gravel with little exposed soil. Landscaped areas are well maintained and have environmentally friendly landscaping/xeriscaping, including various indigenous and drought-tolerant plants, shrubs, and ground cover, which are used where possible to prevent soil erosion. High-performance erosion control methods, such as bonded fiber matrix or anchored erosion control blankets, are used on exposed soils. Where erosion does occur, sandbags or other storm drain inlet protection methods are used, and maintenance is performed to repair or revegetate the eroded areas. Over-irrigation is prohibited to prevent soil erosion and transmission of pollutants to storm drains. Active construction projects contain specific contract requirements for erosion and sediment control and are required to have a SWPPP or WPCP, per Section 5.0 (presented in Attachment 1 of the SWPPP). Erodible surfaces are managed using the BMPs outlined in the Erodible Areas BMP (SC20) in Appendix B.

7.9.5 SIGNIFICANT SPILLS AND LEAKS AS POTENTIAL POLLUTANT SOURCES

Fueling and equipment maintenance activities generally involve the use or handling of jet fuel, aviation gas, hydraulic oils, oil, deicing fluids, degreasers, and other solvents. Considering that approximately 450,000 gallons of jet fuel are handled and transferred from truck to aircraft every day at the airport, it is highly likely that significant spills would involve the handling of jet fuel. The refueler trucks operate nearly all around the airport, from the airport's ramp areas and at the FBO to the air cargo/air freight operations area and overnight aircraft parking areas. Areas where the largest spills have occurred are the terminal gate areas, the FSF, the RON aircraft parking area, and the north cargo ramp area. In the past 5 years, most of these spills have been less than 15 gallons, with two spills between 25 to 100 gallons. All were contained within SAN; all were immediately cleaned up; and none of these spills reached San Diego Bay.

One significant spill incident occurred on August 19, 2022. A fuel truck tipped over near Gate 5 and spilled 1,400 gallons onto the ramp and into a storm drain inlet. Taxiways Bravo 6 and Bravo 7 were closed. An

environmental cleanup contractor, San Diego Fire Rescue Department (SDFD), San Diego Harbor Police Department (SDHPD), and Airport Operations units were called to the scene, and FMD deployed spill response trailers. San Diego County Hazardous Material (HazMat) and USEPA were also onsite. The National Response Center, the California Office of Emergency Services, and the RWQCB were all notified. Airport Operations and the environmental contractor performed cleanup onsite and SDFD retrieved 3,200 gallons of fuel from the tank. The United States Coast Guard and the contractor deployed hydrocarbon booms in front of Outfall 8 but did not capture any fuel; it is therefore unlikely that any fuel entered San Diego Bay. Menzies, the SAN fuel distributor, performed internal training to prevent future spills, and is currently developing an updated spill response plan with a HazMat vendor and reviewing the locations of all potential stop gaps in the event of a fuel spill from the FSF or the WRF. The Authority conducted a round table debrief with all involved stakeholders to discuss lessons learned and how to better handle future situations like this. Spill procedures are described in Section 3.2 (presented in Attachment 1 of the SWPPP), and the BMP required by the Authority to address spills is the Spill Prevention, Control, and Clean-up BMP (SR01) in Appendix B.

7.9.6 ILLICIT DISCHARGES AS POTENTIAL POLLUTANT SOURCES

Potential illicit discharges include those from aircraft, vehicle, and equipment washing; power washing, ramp scrubbing, and runway rubber removal; non-emergency firefighting activities; improper materials and waste handling, storage, and disposal; and spills and leaks without proper BMP implementation. As discussed in Section 7.10, BMPs are in place to avoid potential discharges from these sources. Potential illicit discharges are described in Section 3.0 (presented in Attachment 1 of the SWPPP), including the BMPs to control these discharges. The Authority's IDDE program is also discussed in Section 3.2 (presented in Attachment 1 of the SWPPP). With nearly every drainage basin susceptible to tidal intrusion, the drainage areas where most of the potential NSWDs occur are Drainage Basins 1, 3, 8, 12, and 15 for potable water flushing; Drainage Basins 1, 5, 5a, 6, 8, 9, 10, 11, 12, 14, and 15 for air conditioning condensation; and Drainage Basin 6 for non-emergency firefighting activities (see Appendix B Figure SC-13).

7.9.7 SUMMARY OF INDUSTRIAL SITES AND SOURCES

The industrial activities and pollutant sources occurring at SAN described in this section are summarized in Table 7-5. For each drainage basin at the airport (initially described in Section 1.4 [presented in Attachment 1 of the SWPPP] and depicted in Figure 3), Table 7-5 presents the drainage basin number; the storm water runoff sampling location identification number for any sampling locations within the drainage basin; the name of the industrial entity located or operating in that particular drainage basin; the types of industrial activities occurring in the drainage basin; and the potential pollutants associated with those activities. Similar and additional information is provided by the individual industrial/commercial entity and the Authority on the Tenant Summary Sheets in Appendix E.

The potential pollutants listed in Table 7-5 are either stored or handled in the particular drainage basin identified. Pollutant sources stored, handled, shipped, or received by each individual industrial entity are itemized in the Tenant Summary Sheets in Appendix E. The Tenant Summary Sheets also include maps that depict each entity's locations or operating areas. The locations for storage of particular types of materials and waste are indicated in Figure 3 and the figures attached to the Outdoor Material Storage BMP (SC07) and the Waste Handling and Disposal BMP (SC08) in Appendix B. The BMP descriptions in Appendix B also include maps of where particular activities occur at SAN, as well as a list of the pollutants associated with those activities and therefore the areas where the BMPs should be implemented.

Table 7-5. Industrial Inventory by Drainage Basin

Drainage Basin/Sampling Location ID	Facilities Located or Operating in Drainage Basin	Industrial Activities Conducted, Source Areas, or Potential Sources Within the Drainage Basin	Potential Industrial Pollutants
1 Sampling location C-B01-11 was moved to location C-B03-21 to capture the effluent from a Stormfilter BMP, so treated runoff from Basins 1 and 3 is sampled	Authority Signature	Aircraft sanitary services Building & ground maintenance Cargo handling Equipment storage Fluid leaks from aircraft/GSE Fuel spills Fuel storage Outdoor waste storage Pesticide/herbicide/fertilizer usage Ramp/taxiway scrubbing Runway rubber removal Tank fuel transfer Vehicle parking Water/fuel mixture within berm	Acetone Adhesives Antifreeze Asphalt debris Battery acid Cleaning solutions Coolant Dumpster wastes Fuel Hydraulic fluid Lavatory chemicals Lavatory wastes Lubricants Metals Oil and grease Paints Purple K Rubber particulates Rust preventer Sealants Sediment Solvents Transmission fluid Trash Turpentine
2	Drainage Basin 2 has been discontinued	Drainage Basin 2 was determined to be integrated with Drainage Basin 1	Drainage Basin 2 previously included a lavatory waste disposal facility connected to the sanitary sewer, but this facility has been moved to Drainage Basin 8.

Table 7-5. Industrial Inventory by Drainage Basin (continued)

Drainage Basin/Sampling Location ID	Facilities Located or Operating in Drainage Basin	Industrial Activities Conducted, Source Areas, or Potential Sources Within the Drainage Basin	Potential Industrial Pollutants
3 (C-B03-1c, C-B03-2, C-B03-21)	Conrac DHL Authority Signature	Aircraft sanitary services Building/grounds maintenance Cargo handling Equipment storage Fluid leaks from aircraft/GSE Fuel spills Fuel storage Outdoor waste storage Pesticide/herbicide/fertilizer usage Ramp/taxiway scrubbing Runway rubber removal Tank fuel transfer Vehicle parking Water/fuel mixture within berm	Acetone Adhesives Antifreeze Asphalt debris Battery acid Cleaning solutions Coolant Dumpster wastes Fuel Hydraulic fluid Lavatory chemicals Lavatory wastes Lubricants Metals Oil and grease Paints Purple K Rubber particulates Rust preventer Sealants Sediment Solvents Transmission fluid Trash Turpentine
4 (No safe sampling location identified. See Appendix D-1 MIP for details.)	Authority	Aircraft sanitary services Equipment storage Vehicle parking	Antifreeze Coolant Fuel Lavatory chemicals Lavatory wastes Oil and grease Transmission fluid

Table 7-5. Industrial Inventory by Drainage Basin (continued)

Drainage Basin/Sampling Location ID	Facilities Located or Operating in Drainage Basin	Industrial Activities Conducted, Source Areas, or Potential Sources Within the Drainage Basin	Potential Industrial Pollutants
5 (C-B05-4, C-B05-13)	Conrac DHL FedEx Authority UPS	Aircraft sanitary services Building & ground maintenance Cargo handling Equipment storage Fluid leaks from aircraft/GSE Fuel spills Fuel storage Outdoor apron wash Outdoor waste storage Pesticide/fertilizer/herbicide usage Potable water flushing Ramp/taxiway scrubbing Runway rubber removal Tank fuel transfer Vehicle parking Water/fuel mixture within berm	Acetone Adhesives Antifreeze Asphalt debris Battery acid Brake fluid Cleaning solutions Coolant Dumpster wastes Fuel Hydraulic fluids Lavatory chemicals Lavatory wastes Lubricants Metals Oil and grease Paints Purple K Rubber particulates Rust preventer Sealants Solvents Transmission fluid Trash Turpentine
5a (C-B05a-23, C-B05a-24)	American Delta Southwest United	Aircraft deicing storage Aircraft sanitary services Cargo handling Equipment storage Fluid leaks from aircraft/GSE Fuel spills Fuel storage Outdoor waste storage Vehicle parking	Antifreeze Battery acid Brake fluid Carburetor cleaner Cleaning solutions Coolant Deicing/anti-icing fluids Fuel Hydraulic fluids Lavatory wastes Lavatory chemicals Lavatory truck wash water Lubricants Metals Oil and grease Paints Rubber particulates Sealants Solvents Transmission fluid Trash

Table 7-5. Industrial Inventory by Drainage Basin (continued)

Drainage Basin/Sampling Location ID	Facilities Located or Operating in Drainage Basin	Industrial Activities Conducted, Source Areas, or Potential Sources Within the Drainage Basin	Potential Industrial Pollutants
6 (C-B06-5a, C-B06-14, C-B06-15a, C-B06-17, C-B06-19, C-B06-25)	American ARFF Authority Bradford Delta FedEx Authority Menzies Menzies Fuel Farm Southwest	Aircraft deicing Aircraft sanitary services Building/grounds maintenance Cargo handling Equipment fueling Equipment storage Equipment washing Firefighting equipment testing Fluid leaks from aircraft/GSE/automobiles Fuel spills Fuel storage Loading/unloading of gasoline, diesel, and jet fuel Offloading of water/ fuel mixture from a 3,000-gallon UST Outdoor waste storage Pesticide/herbicide usage Potable water flushing Ramp/taxiway scrubbing Runway rubber removal Tank fuel transfer Vehicle parking Water/fuel mixture within berm	Acetone Adhesives Antifreeze Battery acid Brake fluid Cleaning solutions Coolant Deicing/anti-icing fluids Dumpster wastes Firefighting foam Fuel Hydraulic fluids Lavatory chemicals Lavatory wastes Lubricants Metals Oil and grease Paints Purple K Radioactive goods Rubber particulates Rust preventer Sealants Sediment Solvents Trash Transmission fluid Turpentine

Table 7-5. Industrial Inventory by Drainage Basin (continued)

Drainage Basin/Sampling Location ID	Facilities Located or Operating in Drainage Basin	Industrial Activities Conducted, Source Areas, or Potential Sources Within the Drainage Basin	Potential Industrial Pollutants
7 (Under construction; C-B07-6, C-B07-7 were retired)	Authority	None	None
8 (C-B08-8, C-B08-22*) *: Alternate sampling location. Will be used to represent runway runoff if C-B03-1c is inaccessible due to safety reasons.	Alaska Allegiant Authority Frontier Menzies Authority Southwest Spirit Sun Country	Aircraft deicing Aircraft sanitary services Building/grounds maintenance Cargo handling Equipment storage Fluid leaks from aircraft/GSE Fuel spills Fuel storage Outdoor apron wash Outdoor waste storage Pesticide/herbicide usage Potable water flushing Ramp/taxiway scrubbing Runway rubber removal Tank fuel transfer Vehicle parking Water/fuel mixture within berm	Acetone Adhesives Antifreeze Asphalt debris Battery acid Brake fluid Carburetor cleaner Cleaning solutions Coolant Deicing/anti-icing fluids Dumpster wastes Firefighting foam Fuel Hydraulic fluids Lavatory chemicals Lavatory wastes Lavatory truck wash water Lubricants Metals Oil and grease Paints Purple K Rubber particulates Rust preventer Sealant Sediment Solvents Trash Transmission fluid Turpentine
9	No Industrial Tenants	None	None
10	No Industrial Tenants	None	None
11	No Industrial Tenants	None	None

Table 7-5. Industrial Inventory by Drainage Basin (continued)

Drainage Basin/Sampling Location ID	Facilities Located or Operating in Drainage Basin	Industrial Activities Conducted, Source Areas, or Potential Sources Within the Drainage Basin	Potential Industrial Pollutants
12 (C-B12-9a)	Alaska Allegiant American Delta JetBlue Menzies United	Aircraft sanitary services Building/grounds maintenance Cargo handling Equipment storage Fluid leaks from aircraft/GSE Fuel spills Fuel storage Outdoor apron wash Outdoor waste storage Potable water flushing Tank fuel transfer Vehicle parking	Acetone Adhesives Antifreeze Battery acid Brake fluid Cleaning solutions Coolant Dumpster wastes Fuel Hydraulic fluids Lavatory truck wash water Lavatory chemicals Lavatory wastes Lubricants Metals Oil and grease Paints Purple K Rubber particulates Sealant Solvents Trash Transmission fluid
13	No Industrial Tenants	None	None
14	No Industrial Tenants	None	None

Table 7-5. Industrial Inventory by Drainage Basin (continued)

Drainage Basin/Sampling Location ID	Facilities Located or Operating in Drainage Basin	Industrial Activities Conducted, Source Areas, or Potential Sources Within the Drainage Basin	Potential Industrial Pollutants
15 (C-B15-18a, C-B15-26)	Air Canada Alaska British Airways Delta Hawaiian Japan Airlines Lufthansa Menzies Menzies Fuel Farm Authority United West Jet	Aircraft sanitary services Building/grounds maintenance Cargo handling Equipment storage Fluid leaks from aircraft/GSE Fuel spills Fuel storage Outdoor apron wash Outdoor waste storage Pesticide/herbicide usage Potable water flushing Ramp/taxiway scrubbing Runway rubber removal Tank fuel transfer Vehicle parking Water/fuel mixture within berm	Acetone Adhesives Antifreeze Asphalt debris Battery acid Brake fluid Carburetor cleaner Cleaning solutions Coolant Deicing/anti-icing fluids Dumpster wastes Firefighting foam Fuel Hydraulic fluids Lavatory truck wash water Lavatory chemicals Lavatory wastes Lubricants Metals Oil and grease Paints Purple K Rubber particulates Rust preventer Sealant Sediment Solvents Trash Transmission fluid Turpentine

7.10 BEST MANAGEMENT PRACTICE REQUIREMENTS

A BMP is broadly defined as any program, technology, process, siting criteria, operating method, measure, or device that controls, removes, or reduces pollution in storm water and authorized NSWDs. The Authority has identified BMPs required to control industrial/commercial pollutant sources at SAN, in accordance with Provision E.5.b of the Municipal Permit and Section X-H of the Industrial Permit. The required BMPs were first presented in the SWMP prepared under the 2001 Municipal Permit (RWQCB Order No. 2001-01).

Both the Industrial Permit and the Municipal Permit require the Authority to implement BMPs to address potential pollutant discharges; however, each permit's performance standard is different. The Industrial Permit requires that the implementation of BMPs achieve BAT for toxic and nonconventional pollutants and BCT for conventional pollutants. The Municipal Permit requires that the implementation of BMPs achieve MEP. These standards were taken into account when developing the BMP requirements at SAN.

BMPs are commonly defined in two ways: non-structural or structural, and source control or treatment control. Non-structural BMPs generally consist of processes, prohibitions, procedures, schedules of activities, etc., that prevent pollutants associated with industrial activities from entering storm water or authorized NSWDs. They are generally low cost and low technology in nature. Structural BMPs either prevent the pollutants from coming into contact with storm water or treat/remove the pollutants in storm water. Conversely, source control BMPs prevent contact between storm water and the pollution source and can be structural or non-structural. Treatment control BMPs treat the storm water to remove pollutant(s) and are structural by their basic nature. Treatment control BMPs are not 100 percent effective, even if maintained and operated properly. From a cost and aesthetic perspective, treatment control BMPs that use natural processes are usually preferred over other fabricated or manufactured designs when conditions allow. Source control BMPs are preferred over treatment control BMPs because they are generally 100 percent effective if implemented properly and are usually less costly than treatment control BMPs.

LID BMPs can include source control or treatment control BMPs and are defined in the Municipal Permit as "schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of water of the United States through storm water management and land development strategies that emphasize conservation and the use of onsite natural features integrated with engineered, small-scale hydrologic controls to more closely reflect pre-development hydrologic functions. LID BMPs include retention practices that do not allow runoff, such as infiltration, rainwater harvesting and reuse, and evapotranspiration. LID BMPs also include flow-through practices such as biofiltration that may have some discharge of storm water following pollutant reduction." These types of BMPs are also referred to as Green Infrastructure. The types and designs of LID BMPs that can be implemented at SAN are discussed in detail in Appendix C.

The BMPs required by the Authority may consist of a single measure or activity, a set of BMPs, or a pollution prevention program. This section discusses BMPs that pertain to specific industrial activities and areas, as well as the minimum BMPs required airport-wide under the Industrial Permit. Also discussed are four specific pollution prevention programs implemented at SAN. One of these is the regularly scheduled power washing conducted by the airport janitorial services provider. The other three pollution prevention programs are conducted by the Authority and entail ramp sweeping, ramp scrubbing, and runway rubber removal. LID and structural treatment control BMPs implemented at SAN are discussed in Section 6.2 (presented in Attachment 1 of the SWPPP) and in the Treatment Controls BMP (TC-01) in Appendix B and in Appendix C. They are also discussed below as advanced BMPs under the Industrial Permit.

Additional operational BMPs are discussed in other sections of the SWMP, such as the NSWDs section (Section 3.0) and the Public Participation and Education Component section (Section 9.0).

7.10.1.1 Updated BMP Requirements

The BMPs required by the Authority to address industrial pollutant sources at SAN were first summarized into 19 BMP titles in Appendix B of the August 2003 version of the SWMP and most recently presented in the same appendix of the March 2008 version of the SWMP. These 19 BMP titles have been updated and revised as described in this section to arrive at the current total of 25 required BMP titles. The updates and revisions are based on information gathered during recent site visits and annual inspections, the 2005, 2007, 2011, 2012, 2014, 2016, 2018, 2020 and 2022 site audits (WSP, 2005, 2007a, 2009, 2011, 2013, 2015a, 2017, 2019, and 2022), the 2006 BMP Recommendations Report (WSP, 2006), the 2016, 2017, 2018, 2019, 2020, 2021 and 2022 ERA Evaluations, as well as other information regarding the current industry and technical standards. The updates and revisions include enhancements to existing BMPs currently being implemented at SAN and the addition of new BMPs where necessary.

One significant change has been to categorize the BMPs according to the minimum BMPs required by Section X.H of the Industrial Permit. The required minimum BMPs include:

- Good housekeeping;
- Preventive maintenance;
- Spill and leak prevention and response;
- Material handling and waste management;
- Erosion and sediment controls;
- Employee training programs; and
- Quality assurance and recordkeeping.

A summary of updates to each BMP is as follows:

- SC01 – Non-Storm Water Management; no changes;
- SC02A – Outdoor Equipment Operations and Maintenance Areas; no changes;
- SC02B – Aircraft, Ground Vehicle, and Equipment Preventive Maintenance; no changes;
- SC02C – Electric Vehicle Maintenance; no changes;
- SC03 – Aircraft, Ground Vehicle, and Equipment Fueling; no changes;
- SC04 – Aircraft, Ground Vehicle, and Equipment Cleaning; BMP description modified for 1 element;
- SC05 – Aircraft De-icing/Anti-Icing; no changes;
- SC06 – Outdoor Loading/Unloading of Materials; no changes;
- SC07 – Outdoor Material Storage; no changes;
- SC08 – Waste Handling and Disposal; no changes;
- SC09 – Building and Grounds Maintenance; BMP description enhanced to include 1 new element;
- SC10 – Employee Training; no changes;
- SC11 – Lavatory Service Operations; no changes;
- SC12 – Outdoor Washdown/Sweeping (Apron Washing, Ramp Scrubbing); no changes;
- SC13 – Firefighting Foam Discharge; no changes;
- SC14 – Potable Water System Flushing; no changes;
- SC15 – Runway Rubber Removal; no changes;
- SC16 – Parking Lots; no changes;
- SC17 – Storm Drain Maintenance; no changes;
- SC18 – Good Housekeeping; no changes;
- SC19 – Safer/Alternative Products; no changes;
- SC20 – Erodible Areas; no changes;
- SC21 – Construction and Remodeling/Repair; no changes;
- SR01 – Spill Prevention, Control, and Clean-up; no changes;

- TC01 – Treatment Controls; no changes;

All Authority staff and tenant personnel are required to implement the minimum BMPs as applicable and appropriate. Table 7-6 presents an assessment of the sources of pollutants that are likely to be found in storm water discharges at SAN and identifies the BMPs, in terms of individual BMP element, required to address those sources. Table 7-6 associates the pollutant sources with issues/areas identified by the BMP titles listed above. A list and description of all 25 BMP categories required by the Authority are in Appendix B. Appendix B also lists the pollutants reduced, the targeted pollutant-generating activities, and the applicable tenants responsible for each BMP, and materials or equipment needed for implementation of the BMP, and frequency of BMP implementation if applicable. Most BMPs are implemented during daily operations (e.g., housekeeping and spill response). Each BMP has an associated map illustrating SAN areas where the BMP applies.

The particular BMPs, listed by individual element applicable to each tenant and the Authority, are presented in Table 7-7, indicating whether the activity is being performed indoors or outdoors. The particular BMPs listed by individual element are presented in the Tenant Summary Sheets in Appendix E.

Table 7-8 summarizes the BMPs required at SAN in terms of the minimum BMP categories that they satisfy. Some SAN BMPs satisfy multiple requirements under the Industrial Permit.

Table 7-6. Potential Pollutant Sources at SAN

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Non-Storm Water Management Throughout SAN	Prevention of NSWDs	Misinformation (improper/lack of signs)	Metals, particulates, sediment, solid waste	SC01-01 Notify SAN Communication Center (619-400-2710) and the Authority Planning and Environmental Affairs Department (619-400-2784) if there is any evidence of illicit connections or illegal discharges. SC01-02 Provide the appropriate level of employee, tenant, and public training or education in NSWD management, i.e., spill response and prevention, non-storm water pollution prevention, and hazardous materials management. SC01-03 Limit the availability of outdoor water supplies (e.g., hose bibs, faucets) and post with appropriate use signs to discourage uses that may pollute the storm drain system/receiving water. SC01-04 Ensure the site is free of evidence of illicit connections and illegal discharges. SC01-05 Do not irrigate during forecasted rain events and 48 hours following a rain event. SC01-06 Periodically inspect and maintain irrigation systems and landscaped areas to prevent prohibited over-irrigation and to repair any leaks. SC01-07 Direct air conditioning or refrigerator condensation to landscaping, porous surface, the sanitary sewer, or for reuse. SC01-08 Irrigate using the satellite water-tracking system to reach proper levels of soil moisture applicable for landscaping, and follow City water restriction guidelines. SC01-09 Use a hand-held hose equipped with positive shut-off nozzle, handheld water container, or timed sprinkler system to irrigate landscaped areas. SC01-10 Prohibit over-irrigation of landscaped areas
		Litter improperly disposed of, including bottles and cans, paper and plastic bags, fast-food wrappers, cigarette butts, etc.	Solid waste	
		Improper hosing, power washing or washing down of vehicles or equipment	Fuel oil, particulates/sediment	
		Spills or leaks	Fuel, oils, sewage, trash	
		Over irrigation	Pesticides, sediment, bacteria, metals, nutrients	
		Air conditioning condensate	Particulate, metals, oil and grease, bacteria	
Outdoor Equipment Operations and Maintenance Areas	Equipment operations and maintenance	Vehicle and aircraft use and emissions	Metals, fuels, lubricants, antifreeze	SC02A-01 Equipment operations and maintenance areas should not be located directly in the path of storm drains. SC02A-02 Perform equipment operations and maintenance in designated areas with overhead cover for pollutant sources and/or activity areas.
		Industrial and commercial spills and releases	Metals, oils and greases, fuels, battery acids, antifreeze	
		Dirt or fluids from equipment and vehicles	Particulates/sediment, oils, lubricants, antifreeze, fuel, battery acid	
		Maintenance activities	Oil and grease, lubricants, hydraulic fluids, antifreeze	

Table 7-6. Potential Pollutant Sources at SAN (continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Aircraft, Ground Vehicle, and Equipment Maintenance	Aircraft, ground vehicle, and equipment operations and maintenance	Industrial and commercial spills and releases	Metals, oils and greases, fuels, battery acids, antifreeze	SC02B-01 Employees are trained in safe vehicle and equipment operations and maintenance. SC02B-02 Aircraft, vehicle and equipment maintenance areas should not be located directly in the path of storm drains. SC02B-03 Perform maintenance of aircraft, ground vehicles and equipment in designated areas that are either indoors or are covered, bermed, enclosed, or sloped/positioned away from the MS4. SC02B-04 Perform regular equipment inspection and testing. SC02B-05 Inspect aircraft, vehicles and equipment on a regular basis for fluid leaks. Place drip pans under leaks as needed. SC02B-06 Maintain aircraft, vehicles and equipment in good condition to prevent or correct any leakage of oil or other fluids. SC02B-07 Use drip pans during maintenance. SC02B-08 Do not leave drip pans containing fluids or other open containers lying around. Regularly transfer fluids for recycling or proper disposal. SC02B-09 Minimize the use of solvents or use less toxic solvents whenever possible. If solvents cannot be avoided, clean or drain parts in self-contained sinks or drum units, and check those units regularly for leaks. SC02B-10 Store mechanical parts, equipment and vehicles awaiting repair/removal under cover and away from storm drains. SC02B-11 Store spill response materials in maintenance areas and on maintenance vehicles. Adequately collect/remove absorbent materials from area after use and dispose of them in an appropriate manner. SC02B-12 Remove fluids and batteries from salvage vehicles and equipment and dispose of properly. SC02B-13 Properly dispose of obsolete and inoperable vehicles and equipment.
		Dirt or fluids from aircraft, equipment, and vehicles	Particulates/sediment, oils, lubricants, antifreeze, fuel, battery acid	
		Maintenance activities	Oil and grease, lubricants, hydraulic fluids, antifreeze	

Table 7-6. Potential Pollutant Sources at SAN (continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Electric Vehicle Maintenance and Charging Areas	Electric vehicle charging, vehicle parking, and battery maintenance	Electrolyte spills and improper storage of batteries	Acid, heavy metals	SC02C-01 Do not overcharge batteries in electric vehicles. SC02C-02 Park electric vehicles in cool and dry areas (e.g., shade under building) when not in use. SC02C-03 Use acid resistant drip pans sprinkled with battery acid neutralizing agent (e.g., lime or baking soda) when filling or cleaning electric vehicle batteries and dispose of waste properly. SC02C-04 Maintain battery acid neutralizing kits adjacent to charging stations. Adequately recover spill response material from area after use and dispose of them in an appropriate manner. SC02C-05 Avoid overfilling electric vehicle batteries. SC02C-06 Do not fill batteries or perform electric vehicle maintenance during rain events. SC02C-07 Store batteries inside in a cool and dry place if possible. If batteries are stored outside, store in a non-reactive container with a cover. SC02C-08 Clean battery case and terminals regularly or when there is a buildup of corrosion with a rag dampened with a solution of water and battery acid neutralizing agent. Capture any wastewater to be treated as hazardous waste. SC02C-09 Apply petroleum jelly or grease on battery terminals to slow down corrosion process.
		Overcharged vehicles	Acid, heavy metals	

Table 7-6. Potential Pollutant Sources at SAN (continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Aircraft, Ground Vehicle, and Equipment Fueling	Fueling	Fuel spills and improper storage of fuel	Jet fuel, gasoline, diesel	SC03-01 Perform aircraft, ground vehicle and equipment fueling in the designated areas that are covered, bermed, enclosed, or sloped/positioned away from the MS4. SC03-02 Fueling areas should not be located directly in the path of storm drains. SC03-03 Label, regularly inspect and keep in good condition all tanks, piping and valves. SC03-04 Store absorbent booms, spill kits, or vacuum equipment in fueling areas or on fueling vehicles. SC03-05 Regularly inspect fueling areas. SC03-06 Monitor major fueling operations. SC03-07 Use secondary containment or cover when transferring fuel from a tanker truck to a fuel tank. SC03-08 Use leak detection, overfill protection and spill prevention devices for tanks and piping. SC03-09 Use automatic shut-off mechanisms for fuel tankers and hose connections. SC03-10 Do not top off fuel tanks. SC03-11 Restrict access to fuel tanks and fueling vehicles.
		Leaking storage tanks	Jet fuel, gasoline, diesel	
		Aircraft, equipment, and vehicle leaks and spills	Jet fuel, gasoline, diesel	
		Hosing or washing down fuel areas without proper containment	Jet fuel, gasoline, diesel	
		Storm water run-on and runoff from fueling areas	Jet fuel, gasoline, diesel	
		Spills and leaks during delivery, including topping off	Jet fuel, gasoline, diesel	

Table 7-6. Potential Pollutant Sources at SAN (continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Aircraft, Ground Vehicle, and Equipment Cleaning	Cleaning	Aircraft, vehicle, or equipment washing	Particulates/sediment, oil and grease, metals, soaps/cleaning solutions	SC04-01 Keep vehicles, equipment, and washing areas clean and free of waste. SC04-02 Use dry washing and surface preparation techniques where feasible or submit a Wash Water Management Plan to P&EAD for review and approval if wet washing techniques will be used. SC04-03 Wash areas should not be located directly in the path of storm drains. SC04-04 Use pigs and cover mats to cover all catch basins in the surrounding area to contain the wash water during washing activities. SC04-05 Perform all washing activities in designated areas that capture, filter and recycle water (e.g., at RCC's wash bays), or use reclaimed water and divert wash water to a structural treatment control BMP, sanitary sewer or dead end sump with pump. SC04-06 Perform routine visual observations of washing activities and inspect nearby storm drains to detect and prevent discharges from cleaning activities. SC04-07 Remove all excess materials such as drippings and residue by using vacuum methods. Properly dispose of all waste materials. SC04-08 Use a hand-held hose equipped with positive shut-off nozzle to wash vehicles.
		Fallout from pressure washing	Particulates/sediment, oil and grease, metals	
Aircraft Deicing/ Anti-Icing	Deicing/anti-icing	Spraying deicing fluid onto aircraft	Ethylene or propylene glycol	SC05-01 Perform all anti-icing and deicing operations only in designated areas that are covered, bermed, enclosed or sloped/positioned away from the MS4. SC05-02 Monitor deicing and anti-icing operations regularly to ensure quantities of fluids used are at a minimum while not jeopardizing aircraft safety and operation. SC05-03 All fluids are captured or diverted to a structural treatment control BMP, recycling system, sanitary sewer or dead end sump with pump. SC05-04 Clean the designated anti-icing and deicing ramp areas following deicing/anti-icing operations with wet-type sweepers to remove deicing fluids from the paved areas.
		Deicing fluids dripping from aircraft without proper clean up	Ethylene or propylene glycol	

Table 7-6. Potential Pollutant Sources at SAN (continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Outdoor Loading and Unloading of Materials	Loading/ unloading	Spills or leaks during loading/unloading	Fuel, oils, trash/debris	SC06-01 Contractors and haulers should be made aware of and adhere to BMPs specifications that are relevant to the loading and unloading of materials. SC06-02 Loading and unloading areas should not be located directly in the path of storm drains. SC06-03 Loading and unloading areas should be graded, bermed, covered or otherwise protected to prevent contact with rainfall and storm water run-on and runoff. SC06-04 Equipment used for loading and unloading should be checked on a regular basis for leaks. SC06-05 Use drip pans or other containment measures under hoses. SC06-06 Keep loading and unloading areas free of spills and debris by containing and absorbing leaks during transfers and spillage from hose disconnections or cargo pallets; dispose of residue or debris properly. SC06-07 Spill kits or other measures are available in accessible locations near areas where spills may be likely to occur to contain spills and/or prevent tracking offsite.
		Leaking of loading/unloading equipment	Fuel, hydraulic fluids	
Outdoor Material Storage	Material storage	Industrial and commercial spills and releases from storage units	Fuels, oil and grease, solvents, soap/cleaning fluids, lavatory chemicals, paints, battery acid, antifreeze, ethylene or propylene glycol, pesticides/herbicides, adhesives, rust preventers, AFFF, sealants	SC07-01 Outdoor material storage areas and equipment should not be located directly in the path of storm drains. SC07-02 Outdoor material storage areas have areas with overhead cover and secondary containment. SC07-03 Outdoor material storage areas are prevented from contacting storm water run-on and run-off (e.g., by the use of berms, wood pallets etc.). SC07-04 Cover and contain material stockpiles or implement erosion control practices at the perimeter of the site and at any inlets or catch basins to prevent the offsite transport of eroded material.

Table 7-6. Potential Pollutant Sources at SAN (continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Outdoor Material Storage (continued)	Material storage	Lack of proper secondary containment	Fuels, oil and grease, solvents, soap/cleaning fluids, lavatory chemicals, paints, battery acid, antifreeze, ethylene or propylene glycol, pesticides/herbicides, adhesives, rust preventers, AFFF, sealants	SC07-05 Cover wood products treated with preservative chemicals with tarps or store them indoors. SC07-06 Install protection guards (bollards, posts, or guardrails) around ASTs and piping to prevent damage from vehicles or forklifts and any subsequent release. SC07-07 Regular inspections are performed on tanks, storage containers, and berms to check for corrosion, structural failure, loose fittings, poor welds, leaks etc. Repairs or replacements are performed as needed. SC07-08 Liquid materials in ASTs should be stored in double-walled, valved storage tanks or within concrete bermed secondary containment areas to provide the capacity to contain the entire volume of the single largest container, with sufficient freeboard to contain precipitation. The area inside the curb should slope to a drain. SC07-09 Precipitation from bermed areas should be drained to the sanitary sewer if available or inspected and tested according to applicable regulations prior to its release to a storm drain. The drain must have a positive control, such as a lock, valve, or plug, below the product level in the tank to prevent release of contaminated liquids. SC07-10 Properly dispose of ponded storm water removed from bermed or containment areas. SC07-11 The facility/operation has and displays a San Diego County hazardous materials permit for hazardous materials storage. SC07-12 Maintain an accurate, up-to-date inventory of the materials delivered and stored onsite. SC07-13 Do not permanently store equipment and materials in the bed of a pickup truck. If storing temporarily, provide cover and containment.
		Raw material, and finished product stock piles	Metals, sediments, particulates, debris	
		Contact between stored materials and storm water run-on/off due to lack of cover/berms, etc.	Fuels, oil and grease, solvents, soap/cleaning fluids, lavatory chemicals, paints, battery acid, antifreeze, ethylene or propylene glycol, pesticides/herbicides, adhesives, rust preventers, AFFF, sealants	
		Improper storage of fuel	Fuels	

Table 7-6. Potential Pollutant Sources at SAN (continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Waste Handling/ Disposal	Waste handling/ disposal	Lack or failure of proper secondary containment	Oils, fuels, antifreeze, deicing fluids	SC08-01 Reduce the amount of waste generated (e.g., use only amount needed, use solvents more than once, practice good inventory control, do not over-buying, purchase long-lasting products, etc.). SC08-02 Recycle materials whenever possible. SC08-03 Designate waste/recycling areas with restricted access. SC08-04 Do not locate waste/recycling areas directly in the path of storm drains. SC08-05 Provide secondary containment and cover for wastes. SC08-06 Wastes that are not contained or covered are prevented from contacting storm water and run-on and run-off by the use of berms. SC08-07 All dumpsters are covered and kept closed and any drain holes plugged. SC08-08 Inspect on a frequent basis all waste collection and storage containers for evidence of leaks, spills, compromised structural integrity, and proper closure seal. SC08-09 Train all employees in the proper handling and disposal of waste materials. SC08-10 Store wastes and recyclable materials in appropriate containers and segregate and properly labeled them. SC08-11 Wastes are properly characterized and disposed. SC08-12 Prevent overflow of waste containers by timely pickup/service and removal. SC08-13 Perform dumpster cleaning in designated areas that are bermed to contain wash water. Properly dispose of all fluids collected or discharge to the sanitary sewer. SC08-14 Track waste generated, stored, and disposed.
		Waste container leaks	Oils, fuels, antifreeze, deicing fluids	
		Improper training procedures	Oils, fuels, antifreeze, deicing fluids, lavatory wastes and chemicals	
		Contact between stored waste and storm water run-on/off due to lack of cover/berms etc.	Oils, fuels, antifreeze, deicing fluids, trash/debris	
		Improper disposal practices	Wastewater, oil and grease, fuels, rubber debris, trash	
		Irregular waste removal schedule	Oils, fuels, antifreeze, deicing fluids, trash/debris	

Table 7-6. Potential Pollutant Sources at SAN (continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Building and Grounds Maintenance	Maintenance	Painting	Metals	SC09-01 Landscape, re-vegetate, or install erosion and sediment controls in areas of exposed soil. SC09-02 Use hand weeding when practical. SC09-03 Implement integrated pest management methods, minimize the use of pesticides, herbicides, and fertilizers, and use according to directions. SC09-04 Use temporary BMPs such as portable booms and vacuum trucks to contain water from outdoor building or structure washdown activities. Use reclaimed water, where possible, and collect and properly dispose of all wastewater through a permitted connection to the sanitary sewer. SC09-05 Compost or recycle grass trimmings, leaves, sticks, or other collected vegetation, where possible, or dispose of appropriately. SC09-06 Remove temporary stockpiled materials at the end of the day or place away from watercourses and drainage inlets, and berm and cover stockpiles to prevent material releases to the storm drain. SC09-07 Clean pavement or sidewalk (using dry methods or reclaimed water) of any residual materials or spills before applying irrigation water, and capture and properly dispose of any wash water. SC09-08 Repair damaged asphalt when degradation is observed. SC09-09 Reduce the exposure of galvanized or rusty metal structures to rainfall, where possible. SC09-10 Regularly inspect roof top conditions for deteriorated roof coating/sealant and accumulated dust.
		Pesticide application	Organic compounds	
		Wood preserving	Metals	
		Underground utilities (copper grounding wires in electrical vaults connected to storm drains) and lighting systems	Metals	
		Roofing	Metals, tar	
		Cement in concrete pouring	pH	

Table 7-6. Potential Pollutant Sources at SAN (continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Employee Training	Training	Mismanagement	Oil and grease, hydrocarbons, pH, solid waste, particulates, sediment, ethylene glycol, metals, fuels, chemicals	SC10-01 Update the Authority SWMP and tenant SWPPPs covering the facility or operation on a periodic basis and complete and insert the amendment pages for the SWMP or SWPPP, as needed. SC10-02 Train Authority and tenant employees and contractors in storm water pollution prevention education covering all storm water issues, implementation and effectiveness of BMPs, spill prevention and cleanup, hazardous materials management, right-to-know awareness, and SWMP or SWPPP implementation. SC10-03 Implement additional training programs for relevant Authority and tenant employees and contractors covering any Spill Plan implementation, the prohibition on cross-connections between sanitary sewers and storm drains, and contractor responsibility to comply with adopted BMPs. SC10-04 Maintain training records for 5 years of current employees that have participated in the storm water pollution prevention education program and other related training programs.
		Lack of education outreach programs	Oil and grease, hydrocarbons, pH, solid waste, particulates, sediment, ethylene glycol, metals, fuels, chemicals	
		Inefficient or irregular training	Oil and grease, hydrocarbons, pH, solid waste, particulates, sediment, ethylene glycol, metals, fuels, chemicals	

Table 7-6. Potential Pollutant Sources at SAN (continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Lavatory Service Operation	Operating/ maintenance	Leaking or blocked hoses	Lavatory waste, BOD, lavatory chemicals	SC11-01 Triturator facilities are covered and have low roll-over type berming. SC11-02 Triturator facilities should not be located directly in the path of storm drains. SC11-03 Perform regular inspections of all hoses and fittings used for transferring lavatory waste and keep the equipment in good condition. SC11-04 Absorbent booms, spill kits and other containment equipment are present on lavatory service equipment and at the triturator facility. SC11-05 Perform all mixing and transfers of surfactants and disinfectants within the covered and bermed triturator area or under a cover. SC11-06 Use drip pans when draining aircraft lavatory systems. Immediately dump the collected drippage into the bulk storage tank on the lavatory service cart or lavatory service truck. SC11-07 Immediately clean and properly dispose of all spills of lavatory wastes and lavatory chemicals at the triturator facility. SC11-08 Secure all hoses, valves, and equipment when transporting lavatory waste. SC11-09 Perform lavatory truck cleanouts/backflushing and lavatory waste discharging to sanitary sewer connections ONLY at triturator facilities. SC11-10 Completely drain all hoses. SC11-11 Use lavatory service cart or truck with spill prevention equipment installed, where possible. SC11-12 Temporary sanitary facilities must have secondary containment and be located away from watercourses, drainage facilities, traffic circulation and high wind areas. SC11-13 Regularly inspect temporary sanitary facilities for leaks and spills and clean or replace when necessary.
		Spills during operations	Lavatory waste, BOD, lavatory chemicals	
		Improper waste disposal	Lavatory waste, BOD, lavatory chemicals	
		Storm water contact with dirty lavatory trucks or hoses	Lavatory waste, BOD, lavatory chemicals	
		Lack of lavatory truck/hose maintenance	Lavatory waste, BOD, lavatory chemicals	

Table 7-6. Potential Pollutant Sources at SAN (continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Outdoor Wash Down/Sweeping (Apron Washing Ramp Scrubbing)	Washing/ sweeping	Fallout from pressure washing operations	Particulates/sediment, rubber, debris, oil and grease, fuel	SC12-01 Inspect and maintain sweeping and scrubbing equipment regularly to ensure effectiveness at removing pollutants and to avoid leaks. SC12-02 Roads, ramp areas, apron areas, and, if feasible, runway/taxiway areas are swept on a regular basis. SC12-03 Perform sweeping during dry weather using dry sweeping techniques where feasible. SC12-04 Operate sweepers at manufacturer-recommended optimal speeds. SC12-05 Properly dispose of debris and sediment from sweeping. SC12-06 Berm outdoor washdown areas to contain the wash water and to prevent run-on to adjacent areas. SC12-07 Minimize the amount of water used during outdoor washdown activities. SC12-08 Wash water is collected and filtered and reused, or discharged to the sanitary sewer system through a permitted connection at designated and approved discharge facilities (i.e., dewatering bin). SC12-09 Maintain records of the sweeping or scrubbing activities, including the miles swept or scrubbed and the amount of waste collected. SC12-10 Do not use a running hose to wash down sidewalks, or other hard surface areas. A water-efficient, filtering and recycling device must be used and all wash water must be prevented from entering the storm drain system (curb gutters, streets, alleys, and inlets) SC12-11 Use reclaimed or recycled/filtered water. SC12-12 Roads, ramp areas, and apron areas are scrubbed on an as-needed basis.
		Improper waste disposal	Particulates/sediment, rubber, trash/debris, oil and grease, fuel, waste water, soaps	
		Irregular sweeping or scrubbing	Particulates/sediments, oils and grease, fuel, trash/debris	
		Industrial air emissions	Particulates/sediments, metals	

Table 7-6. Potential Pollutant Sources at SAN (continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Firefighting Foam Discharge	Firefighting	Ineffective containment of discharge	AFFF, wastewater	SC13-01 Do not perform firefighting foam testing directly in the path of storm drains. SC13-02 Inspect and test firefighting equipment on a regular basis. SC13-03 Perform firefighting foam testing ONLY in a designated area that captures or divers all foam waste to a structural treatment control, sanitary sewer, or dead-end sump with pump. SC13-04 Service sump(s) and/or oil-water separators on a regular basis. SC13-05 Prevent all designated testing areas from contacting storm water run on and run-off or from reaching storm drains (e.g., by the use of berms and sandbags).
		Improper vacuum procedure	AFFF, wastewater	
		Improper waste disposal	AFFF, wastewater	
Potable Water System Flushing	Flushing	Fallout from flushing operations	Particulates/sediment, metals, oil and grease, fuels	SC14-01 The aircraft potable water system and water truck flushing/cleaning areas should not be located directly in the path of storm drains. SC14-02 Perform potable water system flushing only in designated flushing/cleaning areas that capture or divert all wastewater away from storm drains, or to a structural treatment control, sanitary sewer, or dead-end sump with pump. SC14-03 Prevent flushing/cleaning areas from contacting storm water run-on and run-off.
Runway Rubber Removal	Cleaning	Failure of equipment to adequately capture all waste water and debris	Rubber particulates/sediment/debris, metals, oil and grease, fuels	SC15-01 Minimize the amount of water used during runway rubber removal activities. SC15-02 Prevent waste water produced from runway rubber removal activities from entering the storm drainage system by immediately collecting and properly disposing of it. SC15-03 Use manual or mechanical cleaning methods such as mechanical street sweepers to remove rubber particulates from the runway and adjacent paved areas following runway rubber removal activities. SC15-04 Inspect storm drain inlets, catch basins, and runway drainage areas following runway rubber removal activities for any resulting debris, and remove and properly dispose of debris. SC15-05 Use reclaimed water, where possible.

Table 7-6. Potential Pollutant Sources at SAN (continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Parking Lots	Maintenance of parking lots	Dirt and leaking fluids from equipment and vehicles	Particulates/sediment, oil and grease, brake fluid, fuel, antifreeze, metals	SC16-01 Post "No Littering" signs around parking lots and regularly empty trash receptacles. Trash receptacles must be covered. SC16-02 Sweep all parking lot areas on a regular basis to remove accumulated debris and sediment. SC16-03 Operate sweepers at manufacturer-recommended optimal speeds. SC16-04 Perform sweeping in parking lot areas when the number of parked vehicles is lowest to maximize areas swept. SC16-05 Maintain records of the sweeping activities, including the miles swept and the amount of waste collected. SC16-06 Clean oily spots from parking lot surfaces with absorbent materials. SC16-07 Perform all repairs to parking lot surfaces during periods of dry weather. SC16-08 Cover and seal nearby storm drain inlets, catch basins, and manholes during parking lot repairs. SC16-09 Use drip pans and absorbent materials to catch and collect drips and leaks from paving equipment that are not in use. SC16-10 Hot bituminous materials used for parking lot repairs are to be preheated and transferred or loaded away from storm drain inlets. SC16-11 Properly dispose of used absorbent materials, debris, and collected drips. SC16-12 Avoid draining rooftop downspout drains onto paved parking lot surfaces. SC16-13 Sweep, vacuum, or use other dry methods to remove waste materials generated from repairs. SC16-14 Temporarily store waste materials and debris generated from parking lot repairs in containers or in stockpiles with cover and berm around them and away from storm drain inlets.
		Dirt and grit from parking lots, driveways, sidewalks and landscaped areas	Particulates/sediment, metals	
		Litter improperly disposed of, including bottles and cans, paper and plastic bags, fast-food wrappers, cigarette butts, and more	Solid waste/trash	
		Galvanized metal roofs, gutters and downspouts	Metals, sediment	
		Paving and recycling operations	pH, debris, tar/hydrocarbons	

Table 7-6. Potential Pollutant Sources at SAN (continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Storm Drain Maintenance	Maintenance	Fallout from MS4 cleaning operations	Particulates/sediments, metals, trash and debris, fuel, oil and grease, bacteria, waste water	SC17-01 Stencil storm drains with "No Dumping" messages. SC17-02 Conduct routine self-inspections of the storm drainage system. The Authority should inspect the entire MS4 at least annually between May 1 and September 30. SC17-03 Use appropriate measures to prevent discharges during MS4 cleaning and maintenance. SC17-04 Clean and maintain storm drain inlets, catch basins, pipes, and other conveyance structures before the wet season and as needed. SC17-05 Clear open channels of accumulated litter in a timely manner. SC17-06 Properly dispose of all accumulated sediments, contaminants, debris and waste water from cleaning and maintenance activities. SC17-07 Maintain records for all inspections, cleaning, and maintenance, including the quantity of waste removed.
		Irregular or inadequate inspection and maintenance schedule	Particulates/sediments, metals, trash and debris, fuel, oil and grease, bacteria	
Housekeeping	Cleaning/ tidying	Insufficient facility and BMP inspections	Trash/debris, oil and grease, paints, fuels, pesticides/herbicides, hydraulic fluids, antifreeze, rust preventers, sealants	SC18-01 Perform and document on a regular basis self-inspections and evaluations of the implemented BMPs. SC18-02 Keep all facility and operation areas clean and orderly. SC18-03 Place trash receptacles that have covers in appropriate locations. SC18-04 Sweep all facility and operation areas at least once per week to prevent the accumulation of sediments, debris, and contaminants. SC18-05 Properly dispose of all debris and sediment from sweeping. SC18-06 Store significant materials in the appropriate containers that are properly sealed and labeled. SC18-07 Store significant materials within secondary containment. SC18-08 Store significant materials in a restricted access area. SC18-09 Material Safety Data Sheets (MSDSs) are readily available for all significant materials.
		Improper trash handling/trash or FOD cans not covered	Trash and debris, bacteria	
		Lack or failure of proper secondary containment	Oils, fuels, antifreeze, brake fluids, hydraulic fluids, lubricants, paints, deicing fluids	
		Dirt and grit from ramp and facility areas	Particulates/sediment, metals, trash, and debris	
Safer/Alternative Products	Replacement of toxic with less or nontoxic materials	Use of toxic materials	Metals, hydrocarbons, synthetic organic compounds	SC19-01 Whenever possible, use alternative products that are "Regionally Accepted" and are identified as being nontoxic, less toxic, or biodegradable. SC19-02 Whenever possible, maximize the purchase and use of products containing recycled materials.

Table 7-6. Potential Pollutant Sources at SAN (continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Erodible areas	Erosion	Erosion of disturbed areas	Sediment	SC20-01 Implement erosion control BMPs to stabilize soils. SC20-02 Implement wind erosion control BMPs to control dust. SC20-03 Maintain effective perimeter controls. SC20-04 Stabilize loose soils and slopes prior to a forecasted storm event. SC20-05 Prevent material tracking offsite. SC20-06 Divert all storm water away from erodible materials.
		Wind erosion	Sediment	
Construction and Remodeling/ Repair	Construction	Erosion from erodible surfaces	Sediment	SC21-01 Avoid outdoor repairs and construction during rain events or during any period for which the National Weather Service is forecasting a 5 chance of precipitation. SC21-02 Stabilize inactive areas (where there will be no construction for 14 days) or finished slopes or erodible areas with erosion control. SC21-03 Implement wind erosion control BMPs to control dust, and limit traffic to stabilized roadways within the site, where possible. SC21-04 Maintain effective perimeter and run-on controls. SC21-05 Maintain effective inlet protection. SC21-06 Install a stabilized construction entrance to prevent offsite tracking. SC21-07 Sweep streets of any loose dirt or materials. SC21-08 Cover and contain all chemicals, liquids, erodible landscape materials, and fertilizers when not in use. SC21-09 Discontinue use of erodible landscape material within 2 days prior to forecast rain even or when it's raining.

Table 7-6. Potential Pollutant Sources at SAN (continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Construction and Remodeling/ Repair (continued)	Construction	Off-site material tracking	Sediment, metals, oil, fuel, paint, trash/debris, hydraulic fluids, antifreeze, rust preventers, sealants	SC21-10 Waste containers are covered at the end of each work day and when it is raining. Use plastic under-sheets when appropriate. SC21-11 Cover waste containers at the end of each work day and prior to a rain event, and have waste recycled or collected and properly disposed of frequently. SC21-12 Perform concrete washout in designated areas away from inlets and drainage courses, and in appropriately sized and designed pits or containers. Empty regularly. SC21-13 Temporary sanitary facilities must have secondary containment and be located away from storm drains and traffic circulation. SC21-14 Minimize water usage and use reclaimed water where possible. SC21-15 Contain any particulate generating activities. SC21-16 Designate areas for fueling equipment and vehicles away from inlets and drainage courses, or perform offsite.
		Material spills	Metals, oil, fuel, paint, trash/debris, hydraulic fluids, antifreeze, rust preventers, sealants	
Spill Prevention, Control and Cleanup	Spill control	Fuel spills and improper storage of fuel	Fuels	SR01-01 Develop, implement and keep current Spill Plan, and develop facility spill prevention and response procedures. SR01-02 Post a summary of the Spill Plan and spill response procedures, at key locations, identifying the spill cleanup coordinators, location of cleanup equipment, and phone numbers of regulatory agencies to be contacted in the event of a spill. SR01-03 Train relevant employees and contractors in the implementation of the Spill Plan, if applicable, or spill control procedures. SR01-04 Use leak and spill prevention devices. SR01-05 Place adequate spill kits in appropriate locations. SR01-06 Notify Airport Operations (619-400-2710), the Authority Planning and Environmental Affairs Department (619-400-2784), and any agencies or companies identified in the Spill Plan or facility spill prevention and response procedures in the event of a spill. SR01-07 In the event of a spill or release, immediately follow procedures identified in the Spill Plan or facility spill prevention and response procedures. SR01-08 Use only dry cleaning methods. SR01-09 Properly dispose of all used spill control and clean-up materials. SR01-10 Waste water from washing activities is captured by vacuum and properly disposed of, or is diverted to a structural treatment control, sanitary sewer, or dead end sump with pump.
		Improper waste storage and disposal	Oil and grease, fuel, hydraulic fluids, antifreeze, lubricants	
		Aircraft, equipment and vehicle fluid leaks and spills	Oil and grease, fuel, hydraulic fluids, antifreeze, lubricants, battery acid	
		Inadequate spill response or spill response materials	Oil and grease, fuel, hydraulic fluids, antifreeze, lubricants, battery acid	
		Lack or failure of proper secondary containment	Oil and grease, fuel, hydraulic fluids, antifreeze, lubricants, battery acid	

Table 7-6. Potential Pollutant Sources at SAN (continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Treatment Controls	Inspections/ cleaning/ maintenance	Irregular or inadequate inspections and maintenance	Particulates/sediment, oil and grease, metals, trash and debris, fuels	TC01-01 Regularly inspect, clean, and maintain all structural treatment control BMPs to prevent the accumulation or resuspension of oil, grease, floating debris and sediments. TC01-02 During cleaning operations, close any effluent valves at the treatment control device and properly dispose of any standing water and accumulated waste that are removed. Replace oil absorbent pads in the treatment control device prior to the start of the wet season and as needed. TC01-03 Document and maintain records for all inspections, cleaning, and maintenance of structural treatment control BMPs. TC01-04 Perform an annual inventory of all structural treatment control BMPs.

Table 7-7. BMPs Applicable to Individual Industrial Sites/Sources

TENANTS	SUMMARY OF INDUSTRIAL ACTIVITY CATEGORIES (See Appendix B For Associated BMPs)	AIRCRAFT				VEHICLES AND EQUIPMENT					OTHER																
		Aircraft, Ground Vehicle and Equipment Fueling	Aircraft, Ground Vehicle and Equipment Cleaning	Aircraft Deicing/Anti-Icing	Lavatory Service Operation	Outdoor Equipment Ops and Maintenance Areas	Aircraft, Ground Vehicle and Equipment Maintenance	Electrical Vehicle Maintenance	Aircraft, Ground Vehicle and Equipment Fueling	Aircraft, Ground Vehicle and Equipment Cleaning	Non-Storm Water Management	Outdoor Loading/Unloading of Materials	Outdoor/Indoor Material Storage	Waste Handling and Disposal	Building and Grounds Maintenance	Employee Training	Outdoor Washdown/Sweeping (Apron Washing, Ramp Scrubbing)	Firefighting Foam Discharge	Potable Water System Flushing	Runway Rubber Removal	Parking Lots	Storm Drain Maintenance	Housekeeping	Safer/Alternative Products	Erodible Surfaces	Construction and Remodeling Repair	Spill Prevention, Control, and Clean-up	Treatment Controls
		SC03	SC04	SC05	SC11	SC02A	SC02B	SC02C	SC03	SC04	SC01	SC06	SC07	SC08	SC09	SC10	SC12	SC13	SC14	SC15	SC16	SC17	SC18	SC19	SC20	SC21	SR01	TCO1
Air Canada	SC01, 02A, 02B, 03, 04, 06, 07, 08, 10, 11,14, 18, 19, SR01	O	O		O	O	O		O	O	I/O	O	I/O	I		X			O				O	X			O	
Alaska	SC01, 02A, 02B, 02C, 03, 04, 06, 07, 08, 10, 11, 12, 14, 18, 19, SR01	O	O		O	O	O	O	O	O	I/O	O	I/O	I/O		X	O		O				X	X			I/O	
Allegiant	SC01, 02A, 02B, 03, 04, 06, 07, 08, 10, 11, 12, 18, 19, SR01	O	O		O	O	O		O	O	I/O	O	O	I		X	O						O	X			O	
American Airlines	SC01, 02A, 02B, 02C, 03, 04, 06, 07, 08, 09, 10, 11, 12, 14, 18, 19, SR01	O	O		O	O	I/O	I	O	O	I/O	O	I/O	I/O	O	X	O		O				I/O	X			I/O	
ARFF	SC01, 02A, 02B, 03, 04, 07, 08, 09, 10, 13, 16, 17, 18, 19, SR01					O	I		I	O	I/O		I/O	I/O	O	X		O			O	O	I /O	X			I/O	
Bradford	SC01, 02A, 02B, 04, 06, 07, 08, 09, 10, 16, 17, 18, 19, SR01, TC01					I	I/O			I	I/O	O	I	I/O	I/O	X					O	O	I/O	X			I/O	O
British Airways	SC01, 02A, 02B, 03, 04, 06, 08, 10, 11, 14, 18, 19, SR01	O			O	O	I/O			O	I/O	O		I		X			O				O	X			I/O	

Table Notes:

Industrial Activity Category
SC01 - Non-Storm Water Management
SC02A - Outdoor Equipment Ops and Maintenance Areas
SC02B - Aircraft, Ground Vehicle and Equipment Maintenance
SC02C - Electric Vehicle Maintenance
SC03 - Aircraft, Ground Vehicle and Equipment Fueling
SC04 - Aircraft, Ground Vehicle and Equipment Cleaning
SC05 - Aircraft Deicing/Anti-Icing
SC06 - Outdoor Loading/Unloading of Materials
SC07 - Outdoor/Indoor Material Storage
SC08 - Waste Handling and Disposal
SC09 - Building and Grounds Maintenance
SC10 - Employee Training
SC11 - Lavatory Service Operation

Industrial Activity Category (continued)
SC12 - Outdoor Washdown/Sweeping (Apron Washing, Ramp Scrubbing)
SC13 - Firefighting Foam Discharge
SC14 - Potable Water System Flushing
SC15 - Runway Rubber Removal
SC16 - Parking Lots
SC17 - Storm Drain Maintenance
SC18 - Housekeeping
SC19 - Safer/Alternative Products
SC20 – Erodible Areas
SC21 – Building Repair & Construction
SR01 - Spill Prevention, Control, and Clean-up
TC01 - Treatment Controls

Codes:
BMP = Best Management Practice
I = The industrial activity is performed by the tenant indoors
O = The industrial activity is performed by the tenant outdoors
I/O = The industrial activity is performed by the tenant both indoors and outdoors
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Table 7-7. BMPs Applicable to Individual Industrial Sites/Sources (continued)

TENANTS	SUMMARY OF INDUSTRIAL ACTIVITY CATEGORIES (See Appendix B For Associated BMPs)	AIRCRAFT				VEHICLES AND EQUIPMENT					OTHER																	
		Aircraft, Ground Vehicle and Equipment Fueling	Aircraft, Ground Vehicle and Equipment Cleaning	Aircraft Deicing/Anti-Icing	Lavatory Service Operation	Outdoor Equipment Ops and Maintenance Areas	Aircraft, Ground Vehicle and Equipment Maintenance	Electrical Vehicle Maintenance	Aircraft, Ground Vehicle and Equipment Fueling	Aircraft, Ground Vehicle and Equipment Cleaning	Non-Storm Water Management	Outdoor Loading/Unloading of Materials	Outdoor/Indoor Material Storage	Waste Handling and Disposal	Building and Grounds Maintenance	Employee Training	Outdoor Washdown/Sweeping (Apron Washing, Ramp Scrubbing)	Firefighting Foam Discharge	Potable Water System Flushing	Runway Rubber Removal	Parking Lots	Storm Drain Maintenance	Housekeeping	Safer/Alternative Products	Erodible Surfaces	Construction and Remodeling Repair	Spill Prevention, Control, and Clean-up	Treatment Controls
		SC03	SC04	SC05	SC11	SC02A	SC02B	SC02C	SC03	SC04	SC01	SC06	SC07	SC08	SC09	SC10	SC12	SC13	SC14	SC15	SC16	SC17	SC18	SC19	SC20	SC21	SR01	TCO1
Conrac	SC01, 02A, 02B, 03, 04, 06, 07, 08, 09, 10, 12, 16, 18, 19, 20, SR01, TC01					I	I		I	I	I	I/O	I	I	I	X	O				I/O		I	X	O		I	I/O
Delta	SC01, 02A, 02B, 02C, 03, 04, 06, 07, 08, 10, 11, 12, 17, 18, 19, SR01	O			O	O	I/O	I/O	O	O	I/O	O	I/O	I/O		X	O				O	O	I/O	X			O	
DHL	SC01, 02A, 02B, 03, 04, 06, 07, 08, 09, 10, 11, 12, 16, 18, 19, SR01	O	X		O	O	O		O	X	I/O	O	I/O	I/O	I/O	X	O						I/O	X			I/O	
FedEx	SC01, 02A, 02B, 03, 04, 06, 07, 08, 09, 10, 11, 12, 14, 16, 18, 19, SR01, TC01	O	O		O	O	O		O	O	I/O	O	O	I/O	I/O	X	O		O		O		O	X			O	O
FlagShip	SC01, 02A, 02B, 03, 04, 06, 07, 08, 09, 10, 12, 18, 19, SR01	O	O			O	O		O	O	1/O	O	I/O	I/O	I/O	X	O						O	X			O	
Frontier	SC01, 02A, 02B, 03, 06, 07, 08, 10, 11, 12, 14, 18, 19, SR01	O			O	O	I/O		X		I/O	O	I/O	I/O		X	O		O				O	X			O	
Hawaiian	SC01, 02A, 02B, 03, 04, 06, 07, 08, 10, 11, 12, 18, 19, SR01	O	O		O	O	X		O	O	I/O	O	I	I		X	O						O	X			O	
Japan Airlines	SC01, 02A, 02B, 02C, 03, 04, 06, 07, 08, 10, 11, 12, 18, 19, SR01	O	O		O	O	O	O	O	O	I/O	O	O	I		X	O						O	X			O	

Table Notes:

Industrial Activity Category
SC01 - Non-Storm Water Management
SC02A - Outdoor Equipment Ops and Maintenance Areas
SC02B - Aircraft, Ground Vehicle and Equipment Maintenance
SC02C - Electric Vehicle Maintenance
SC03 - Aircraft, Ground Vehicle and Equipment Fueling
SC04 - Aircraft, Ground Vehicle and Equipment Cleaning
SC05 - Aircraft Deicing/Anti-Icing
SC06 - Outdoor Loading/Unloading of Materials
SC07 - Outdoor/Indoor Material Storage
SC08 - Waste Handling and Disposal
SC09 - Building and Grounds Maintenance
SC10 - Employee Training
SC11 - Lavatory Service Operation

Industrial Activity Category (continued)
SC12 - Outdoor Washdown/Sweeping (Apron Washing, Ramp Scrubbing)
SC13 - Firefighting Foam Discharge
SC14 - Potable Water System Flushing
SC15 - Runway Rubber Removal
SC16 - Parking Lots
SC17 - Storm Drain Maintenance
SC18 - Housekeeping
SC19 - Safer/Alternative Products
SC20 – Erodible Areas
SC21 – Building Repair & Construction
SR01 - Spill Prevention, Control, and Clean-up
TC01 - Treatment Controls

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Table 7-7. BMPs Applicable to Individual Industrial Sites/Sources (continued)

TENANTS	SUMMARY OF INDUSTRIAL ACTIVITY CATEGORIES (See Appendix B For Associated BMPs)	AIRCRAFT				VEHICLES AND EQUIPMENT					OTHER																	
		Aircraft, Ground Vehicle and Equipment Fueling	Aircraft, Ground Vehicle and Equipment Cleaning	Aircraft Deicing/Anti-Icing	Lavatory Service Operation	Outdoor Equipment Ops and Maintenance Areas	Aircraft, Ground Vehicle and Equipment Maintenance	Electrical Vehicle Maintenance	Aircraft, Ground Vehicle and Equipment Fueling	Aircraft, Ground Vehicle and Equipment Cleaning	Non-Storm Water Management	Outdoor Loading/Unloading of Materials	Outdoor/Indoor Material Storage	Waste Handling and Disposal	Building and Grounds Maintenance	Employee Training	Outdoor Washdown/Sweeping (Apron Washing, Ramp Scrubbing)	Firefighting Foam Discharge	Potable Water System Flushing	Runway Rubber Removal	Parking Lots	Storm Drain Maintenance	Housekeeping	Safer/Alternative Products	Erodible Surfaces	Construction and Remodeling Repair	Spill Prevention, Control, and Clean-up	Treatment Controls
		SC03	SC04	SC05	SC11	SC02A	SC02B	SC02C	SC03	SC04	SC01	SC06	SC07	SC08	SC09	SC10	SC12	SC13	SC14	SC15	SC16	SC17	SC18	SC19	SC20	SC21	SR01	TCO1
JetBlue	SC01, 02A, 02B, 03, 04, 06, 07, 08, 10, 11, 12, 14, 18, 19, SR01	O	O		O	O	O			O	I/O	O	O	I/O		X	O		O				O	X			O	
Lufthansa	SC01, 02A, 02B, 03, 06, 08, 10, 11, 12, 18, SR01	O			O	O	O		O		I/O	O		I/O		X	O						O				O	
Menzies	SC01, 02A, 02B, 03, 04, 06, 07, 08, 09, 10, 12, 16, 18, 19, SR01, TC01	O				O	I		O	O	I/O	O	I/O	I	I/O	X	O				O		I/O	X			I/O	O
Menzies Fuel Farm	SC01, 02A, 02B, 03, 04 06, 07, 08, 09, 10, 12, 13, 16, 17, 18, 19, SR01, TC01	O				O	O		O	O	I/O	O	I/O	O	I/O	X	O	O			O	O	O	X			O	O
SDCRAA	SC01, 02A, 02B, 02C, 03, 04, 06, 07, 08, 09, 10, 11, 12, 15, 16, 17, 18, 19, 20, 21, SR01, TC01				O	O	O	I/O	O	O	I/O	O	I/O	I/O	I/O	X	O			O	O	O	I/O	X	O	I/O	I/O	O
Siemens	SC01, 02A, 02B, 02C, 04, 07, 08, 09, 10, 12, 14, 18, 19, SR01					O	I/O	I/O		O	I/O		I/O	O	I/O	X	O		O				O	X			I/O	
Signature	SC01, 02A, 02B, 02C, 03, 04, 06, 07, 08, 09, 10, 11, 16, 17, 18, 19, SR01, TC01	O	O		O	O	O	O	O	O	I/O	O	I/O	O	O	X					O	O	O	X			O	O
Southwest	SC01, 02A, 02B, 02C, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 14, 18, 19, SR01	O		O	O	O	I/O	I/O	O	O	I/O	O	I/O	I/O	I/O	X	O		O				I/O	X			I/O	

Table Notes:

Industrial Activity Category
SC01 - Non-Storm Water Management
SC02A - Outdoor Equipment Ops and Maintenance Areas
SC02B - Aircraft, Ground Vehicle and Equipment Maintenance
SC02C - Electric Vehicle Maintenance
SC03 - Aircraft, Ground Vehicle and Equipment Fueling
SC04 - Aircraft, Ground Vehicle and Equipment Cleaning
SC05 - Aircraft Deicing/Anti-Icing
SC06 - Outdoor Loading/Unloading of Materials
SC07 - Outdoor/Indoor Material Storage
SC08 - Waste Handling and Disposal
SC09 - Building and Grounds Maintenance
SC10 - Employee Training

Industrial Activity Category (continued)
SC11 - Lavatory Service Operation
SC12 - Outdoor Washdown/Sweeping (Apron Washing, Ramp Scrubbing)
SC13 - Firefighting Foam Discharge
SC14 - Potable Water System Flushing
SC15 - Runway Rubber Removal
SC16 - Parking Lots
SC17 - Storm Drain Maintenance
SC18 - Housekeeping
SC19 - Safer/Alternative Products
SC20 – Erodible Areas
SC21 – Building Repair & Construction
SR01 - Spill Prevention, Control, and Clean-up
TC01 - Treatment Controls

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Table 7-7. BMPs Applicable to Individual Industrial Sites/Sources (continued)

TENANTS	SUMMARY OF INDUSTRIAL ACTIVITY CATEGORIES (See Appendix B For Associated BMPs)	AIRCRAFT				VEHICLES AND EQUIPMENT					OTHER																	
		Aircraft, Ground Vehicle and Equipment Fueling	Aircraft, Ground Vehicle and Equipment Cleaning	Aircraft Deicing/Anti-Icing	Lavatory Service Operation	Outdoor Equipment Ops and Maintenance Areas	Aircraft, Ground Vehicle and Equipment Maintenance	Electrical Vehicle Maintenance	Aircraft, Ground Vehicle and Equipment Fueling	Aircraft, Ground Vehicle and Equipment Cleaning	Non-Storm Water Management	Outdoor Loading/Unloading of Materials	Outdoor/Indoor Material Storage	Waste Handling and Disposal	Building and Grounds Maintenance	Employee Training	Outdoor Washdown/Sweeping (Apron Washing, Ramp Scrubbing)	Firefighting Foam Discharge	Potable Water System Flushing	Runway Rubber Removal	Parking Lots	Storm Drain Maintenance	Housekeeping	Safer/Alternative Products	Erodible Surfaces	Construction and Remodeling Repair	Spill Prevention, Control, and Clean-up	Treatment Controls
		SC03	SC04	SC05	SC11	SC02A	SC02B	SC02C	SC03	SC04	SC01	SC06	SC07	SC08	SC09	SC10	SC12	SC13	SC14	SC15	SC16	SC17	SC18	SC19	SC20	SC21	SR01	TCO1
Spirit	SC01, 02A, 02B, 02C, 03, 06, 07, 08, 10, 11, 12, 14, 18, 19, SR01	O			O	O	O	O	O		I/O	O	I/O	O		X	O		O				O	X			O	
Sun Country	SC01, 02A, 02B, 03, 06, 07, 08, 10, 11, 12, 18, 19, SR01	O			O	I	I				I/O	O	O	O		X	O						O	X			O	
United	SC01, 02A, 02B, 02C, 03, 04, 06, 07, 08, 10, 11, 12, 18, 19, SR01	O			O	I/O	I/O	I/O	O	O	I/O	O	I/O	I/O		X	O						I/O	X				
UPS	SC01, 02A, 02B, 03, 04, 06, 07, 08, 09, 10, 11, 12, 16, 18, 19, SR01	O	X		O	O	O		O	X	I/O	I/O	O	O	I/O	X	O						O	X			O	
West Jet	SC01, 02A, 02B, 03, 04, 06, 07, 08, 10, 11, 12, 18, 19, SR01	O	O		O	O	O			O	I/O	O	O	I		X	O						O	O			O	

Table Notes:

Industrial Activity Category
SC01 - Non-Storm Water Management
SC02A - Outdoor Equipment Ops and Maintenance Areas
SC02B - Aircraft, Ground Vehicle and Equipment Maintenance
SC02C - Electric Vehicle Maintenance
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SC06 - Outdoor Loading/Unloading of Materials
SC07 - Outdoor/Indoor Material Storage
SC08 - Waste Handling and Disposal
SC09 - Building and Grounds Maintenance
SC10 - Employee Training
SC11 - Lavatory Service Operation

Industrial Activity Category (continued)
SC12 - Outdoor Washdown/Sweeping (Apron Washing, Ramp Scrubbing)
SC13 - Firefighting Foam Discharge
SC14 - Potable Water System Flushing
SC15 - Runway Rubber Removal
SC16 - Parking Lots
SC17 - Storm Drain Maintenance
SC18 - Housekeeping
SC19 - Safer/Alternative Products
SC20 – Erodible Areas
SC21 – Building Repair & Construction
SR01 - Spill Prevention, Control, and Clean-up
TC01 - Treatment Controls

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Table 7-8. Minimum BMPs Implemented at SAN

Industrial Permit Minimum BMPs		BMPs Applicable to Authority and Tenants
Good Housekeeping	Observe all outdoor areas associated with industrial activity; including storm water discharge locations, drainage areas, conveyance systems, waste handling/disposal areas, and perimeter areas impacted by off-facility materials or storm water run-on to determine housekeeping needs. Any identified debris, waste, spills, tracked materials, or leaked materials shall be cleaned and disposed of properly.	SC-01: Non-Storm Water Management SC-02A: Outdoor Equipment Ops and Maintenance Areas SC-07: Outdoor/Indoor Material Storage SC-09: Building and Grounds Maintenance SC-15: Runway Rubber Removal SC-16: Parking Lots SC-17: Storm Drain Maintenance SC-18: Housekeeping SC-19: Safer/Alternative Products
	Minimize or prevent material tracking.	SC-18: Housekeeping SC-20: Erodible Areas SC-21: Building Repair and Construction
	Minimize dust generated from industrial materials or activities.	SC-20: Erodible Areas SC-21: Building Repair and Construction
	Ensure that all facility areas impacted by rinse/wash waters are cleaned as soon as possible.	SC-12: Outdoor Washdown/Sweeping (Apron Washing, Ramp Scrubbing) SC-18: Housekeeping
	Cover all stored industrial materials that can be readily mobilized by contact with storm water.	SC-07: Outdoor/Indoor Material Storage SC-18: Housekeeping
	Contain all stored non-solid industrial materials or waste (e.g., particulates, powders, shredded paper, etc.) that can be transported or dispersed by the wind or contact with storm water.	SC-12: Outdoor Washdown/Sweeping (Apron Washing, Ramp Scrubbing) SC-18: Housekeeping
	Prevent disposal of any rinse/wash waters or industrial materials into the storm water conveyance system.	SC-07: Outdoor/Indoor Material Storage SC-09: Building and Grounds Maintenance SC-12: Outdoor Washdown/Sweeping (Apron Washing, Ramp Scrubbing) SC-17: Storm Drain Maintenance SC-18: Housekeeping
	Minimize authorized NSWDs from non-industrial areas (e.g., potable water, fire hydrant testing, etc.) that contact industrial areas of the facility.	SC-01: Non-Storm Water Management SC-02A: Outdoor Equipment Ops and Maintenance Areas SC-17: Storm Drain Maintenance

Table 7-8. Minimum BMPs Implemented at SAN (continued)

Industrial Permit Minimum BMPs		BMPs Applicable to Authority and Tenants
Preventative Maintenance	Identify all equipment and systems used outdoors that may spill or leak pollutants.	SC-02A: Outdoor Equipment Ops and Maintenance Areas SC-02B: Aircraft, Ground, and Equipment Maintenance SC-02C: Electrical Vehicle Maintenance SC-09: Building and Grounds Maintenance SC-17: Storm Drain Maintenance
	Observe the identified equipment and systems to detect leaks, or identify conditions that may result in the development of leaks.	SC-02B: Aircraft, Ground, and Equipment Maintenance SC-02C: Electrical Vehicle Maintenance SC-09: Building and Grounds Maintenance SC-17: Storm Drain Maintenance
	Establish an appropriate schedule for maintenance of identified equipment and systems.	SC-02B: Aircraft, Ground, and Equipment Maintenance SC-02C: Electrical Vehicle Maintenance SC-09: Building and Grounds Maintenance SC-17: Storm Drain Maintenance
	Establish procedures for prompt maintenance and repair of equipment, and maintenance of systems when conditions exist that may result in the development of spills or leaks.	SC-02B: Aircraft, Ground, and Equipment Maintenance SC-02C: Electrical Vehicle Maintenance SC-09: Building and Grounds Maintenance SC-17: Storm Drain Maintenance
Spill and Leak Prevention and Response	Establish procedures and/or controls to minimize spills and leaks.	SC-03: Aircraft, Ground, and Equipment Fueling SC-04: Aircraft, Ground, and Equipment Cleaning SC-10: Employee Training SC-11: Lavatory Service Operation SR-01: Spill Prevention, Control, and Clean-up
	Develop and implement spill and leak response procedures to prevent industrial materials from discharging through the storm water conveyance system. Spilled or leaked industrial materials shall be cleaned promptly and disposed of properly.	SC-03: Aircraft, Ground, and Equipment Fueling SC-04: Aircraft, Ground, and Equipment Cleaning SC-11: Lavatory Service Operation SR-01: Spill Prevention, Control, and Clean-up
	Identify and describe all necessary and appropriate spill and leak response equipment, location(s) of spill and leak response equipment, and spill or leak response equipment maintenance procedures.	SR-01: Spill Prevention, Control, and Clean-up
	Identify and train appropriate spill and leak response personnel.	SR-01: Spill Prevention, Control, and Clean-up SC-10: Employee Training

Table 7-8. Minimum BMPs Implemented at SAN (continued)

Industrial Permit Minimum BMPs		BMPs Applicable to Authority and Tenants
Material Handling and Waste Management	Prevent or minimize handling of industrial materials or wastes that can be readily mobilized by contact with storm water during a storm event.	SC-05: Aircraft Deicing/Anti-Icing SC-08: Waste Handling and Disposal SC-11: Lavatory Service Operation
	Contain all stored non-solid industrial materials or wastes (e.g., particulates, powders, shredded paper, etc.) that can be transported or dispersed by the wind or contact with storm water.	SC-05: Aircraft Deicing/Anti-Icing SC-06: Outdoor Loading/Unloading of Materials SC-07: Outdoor/Indoor Material Storage SC-08: Waste Handling and Disposal SC-11: Lavatory Service Operation SC-13: Firefighting Foam Discharge
	Cover industrial waste disposal containers and industrial material storage containers that contain industrial materials when not in use.	SC-07: Outdoor/Indoor Material Storage SC-08: Waste Handling and Disposal SC-11: Lavatory Service Operation
	Divert run-on and storm water generated from within the facility away from all stockpiled materials.	SC-05: Aircraft Deicing/Anti-Icing SC-06: Outdoor Loading/Unloading of Materials SC-07: Outdoor/Indoor Material Storage SC-08: Waste Handling and Disposal SC-13: Firefighting Foam Discharge SC-14: Potable Water System Flushing
	Clean all spills of industrial materials or wastes that occur during handling in accordance with the spill response procedures (Section X.H.1.c).	SC-07: Outdoor/Indoor Material Storage SC-08: Waste Handling and Disposal SC-11: Lavatory Service Operation
	Observe and clean as appropriate, any outdoor material or waste handling equipment or containers that can be contaminated by contact with industrial materials or wastes.	SC-08: Waste Handling and Disposal
Erosion and Sediment Controls	Implement effective wind erosion controls.	SC-20: Erodible Surfaces SC-21: Building Repair and Construction
	Provide effective stabilization for inactive areas, finished slopes, and other erodible areas prior to a forecasted storm event.	SC-20: Erodible Surfaces SC-21: Building Repair and Construction
	Maintain effective perimeter controls and stabilize all site entrances and exits to sufficiently control discharges of erodible materials from discharging or being tracked off the site.	SC-01: Non-Storm Water Management SC-20: Erodible Surfaces SC-21: Building Repair and Construction
	Divert run-on and storm water generated from within the facility away from all erodible materials.	SC-01: Non-Storm Water Management SC-20: Erodible Surfaces SC-21: Building Repair and Construction
	If sediment basins are implemented, ensure compliance with the design storm standards.	SC-21: Building Repair and Construction

Table 7-8. Minimum BMPs Implemented at SAN (continued)

Industrial Permit Minimum BMPs		BMPs Applicable to Authority and Tenants
Employee Training Program	Ensure that all team members implementing the various compliance activities of this General Permit are properly trained to implement this General Permit requirements, including but not limited to: BMP implementation, BMP effectiveness evaluations, visual observations, and monitoring activities. If a Discharger enters Level 1 status, appropriate team members shall be trained by a QISP.	SC-10: Employee Training
	Prepare or acquire appropriate training manuals or training materials.	SC-10: Employee Training
	Identify which personnel need to be trained, their responsibilities, and the type of training they shall receive.	SC-10: Employee Training
	Provide a training schedule.	SC-10: Employee Training
	Maintain documentation of all completed training classes and the personnel that received training in the SWPPP.	SC-10: Employee Training
Quality Assurance and Record Keeping	Develop and implement management procedures to ensure that appropriate staff implement all elements of the SWPPP, including the Monitoring Implementation Plan.	SC-10: Employee Training
	Develop a method of tracking and recording the implementation of BMPs identified in the SWPPP.	SC-10: Employee Training SC-12: Outdoor Washdown/Sweeping (Apron SC-16: Parking Lots SC-17: Storm Drain Maintenance
	Maintain the BMP implementation records, training records, and records related to any spills and clean-up related response activities for a minimum of five (5) years.	SC-10: Employee Training

7.11 ADVANCED BMPS

In addition to the minimum BMPs described above, the Authority implements several advanced BMPs to further prevent the discharge of pollutants in its storm water discharge. The advanced BMPs include exposure minimization and treatment control BMPs.

7.11.1 EXPOSURE MINIMIZATION BMPS

Exposure minimization BMPs include storm-resistant shelters that prevent storm water contact with industrial materials or activities. Drainage Basins 3, 5a, and 6 contain permanent storm resistant shelters for vehicle and equipment maintenance and operations. Drainage Basins 3, 5, 5a, 6, 8, 12, and 15 contain fire-resistant cabinets, roll-top containers, storage sheds, and other storm-resistant shelters for outdoor materials storage. Figures 3 and 5-7 show the locations of these shelters.

7.11.2 STORM WATER CONTAINMENT AND DISCHARGE REDUCTION BMPS

These BMPs include any that divert, infiltrate, reuse, contain, retain, or reduce the volume of storm water runoff. During the Green Build expansion of Terminal 2, artificial turf was added in Drainage Basin 15, near the RON parking lot, and porous pavement was added in that area to infiltrate runoff. Porous pavement and eight infiltration basins below permeable surfaces and asphalt strips were also installed as part of the Signature FBO construction. Twelve modular wetland systems are installed in the SANPark 2 parking lot on the northside of the runway. A 3-million-gallon cistern was installed to capture storm water runoff. This cistern is currently connected to the storm drains near the FMD Building and will eventually be connected to the RCC to capture and reuse the water used at the wash bays. An underground infiltration basin with the capacity for 35,273 ft^3 of runoff was constructed under the ASB. Additionally, air conditioning condensate is captured in Drainage Basins 8, 12, and 15 and reused in power washing activities.

7.11.3 TREATMENT CONTROL BMPS

Treatment control BMPs include mechanical, chemical, and biological systems that are used to reduce pollutants in storm water. Existing treatment control BMPs include 9 OWSs, 3 Contech StormFilters, 1 Contech Jellyfish Filter, 2 curb inlet boxes and 2 drop inlet filters, 2 Bio Clean Round Curb Inlet Skimmer Boxes, 6 Bio Clean Grate Inlet Skimmer Boxes, 26 ClearWater High-Rate Media Filters, 1 Bio Clean Water Polisher, 3 trench drain filters, 8 subsurface infiltration basins, 1 infiltration trench, 2 permeable surface locations, 3 hydrodynamic separators, 18 Modular Wetland Systems, 15 biofiltration areas, 2 underground detention basins, 1 artificial turf infiltration, 24 REM Triton Inlet Filters, 1 HFF Oil Stop Valve, 1 cistern, 1 Oldcastle/Kristar Perkfilter Unit, 5 CleanWay MetalZorbs, 3 activated alumina filter bags (including two as trench drain filters), 1 containment basin, and 1 underground infiltration basin. These treatment control BMPs were selected, designed, and implemented per Appendix C or as part of the ERA implementation for NAL exceedances. Any new treatment control BMPs will comply with the Industrial General Permit design storm standards as follows:

- Volume-based BMPs: The Authority, at a minimum, calculates the volume to be treated using one of the following methods:
  - The volume of runoff produced from an 85th percentile 24-hour storm event, determined from local, historical rainfall records;
  - The volume of runoff produced by the 85th percentile 24-hour storm event, determined as the maximized capture runoff volume for the facility, from the formula recommended in the Water Environment Federation's Manual of Practice; or

  - The volume of annual runoff required to achieve 80 percent or more treatment determined according to the methodology set forth in the latest edition of the CASQA Storm Water BMPs Handbook, using local, historical rainfall records.

- Flow-based BMPs: The Authority calculates the flow needed to be treated using one of the following methods:
  - The maximum flow rate of runoff produced from a rainfall intensity of at least 0.2 inch per hour for each hour of a storm event;
  - The maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity, determined from local historical rainfall records, multiplied by a factor of 2; or
  - The maximum flow rate of runoff, determined using local historical rainfall records, that achieves approximately the same reduction in total pollutant loads that would be achieved by treating the 85th percentile hourly rainfall intensity multiplied by a factor of 2.

More information on treatment control BMPs is provided in Section 6.2 and Appendix C. Figures 3 and 5-7 and Appendix B Figure TC-01 show the locations of these systems. Appendix C was updated in February 2016 in accordance with the Municipal Permit.

7.12 POLLUTION PREVENTION PROGRAMS

7.12.1 REGULAR POWER WASHING

Outdoor tenant operational areas that are regularly cleaned by power washing include the concrete pad at the RFF and several cargo ramp areas. The airport janitorial services provider also regularly power washes the sidewalks in front of the terminals, the trash compactor areas near the terminals, the loading/unloading dock at the west end of Terminal 2 West, and the grease trap areas operated by the food service provider. Power washing is performed from 11pm to 4am. The janitorial services provider uses recovered air conditioning condensate instead of potable water for power washing, whenever possible.

In FY 2023, approximately 94,605 gallons of condensate were recovered and properly disposed of or reused. The pressure washers used are equipped with a water recollection and filtration system. They are designed to collect all residual water, filter, recycle, and reuse the water throughout the equipment's operation. Before starting the pressure washing operation, janitorial staff locate all storm drain inlets and cover the areas with berms or mats. They then remove and sweep all trash, debris, and cigarette butts. Next, staff determine the path that the water will run and funnel the water using berms and bags into the vacuum/reclaim system. Once the job is complete, the wash water is vacuumed up, hoses are drained into the sanitary sewage system or airport wash rack, and equipment is cleaned. The concrete pad at the WRF is steam cleaned, and the discharge enters the 24,000-gallon containment basin, which is serviced as needed and at least annually. Those tenants power washing the cargo ramp areas either perform the work themselves or contract for the service. All power washing is conducted in accordance with the BMPs described in Section 7.8.1.6

7.12.2 RAMP SWEEPING

The Authority FMD sweeps the aircraft gate and ramp (apron) areas 3 to 4 days a week during evening hours. Using mechanical sweeping equipment utilizing regenerative air technology, the program is directed mainly at removing FOD, but it also removes sediment, particulate matter, and other pollutants. The schedule allows sweeping of each gate area approximately every other month; some areas are swept more frequently upon request. Perimeter roads and taxiways are swept at least once per week. The debris/sweepings are vacuumed up into the unit and are disposed of in a lowboy container in the north portion of Drainage Basin 6. All sweeping is conducted in accordance with the BMPs described in Section 7.8.1.6

7.12.3 RAMP SCRUBBING

The janitorial services provider performs ramp scrubbing as needed, at a minimum of once every 6 months using 3,500-psi industrial pavement washers. A biodegradable waxy soap, specifically made for oil removal, is used during the procedure. The soap is stored in two 100-gallon plastic containers on wooden pallets, under cover, at Terminal 2 West. The wash water is vacuumed up and collected by the Authority's environmental contractor, which filters and reuses the water. The north ramp/cargo areas near the control tower are scrubbed when tenants request it or as needed. The janitorial services provider recently acquired a pressure washing truck for ramp scrubbing. This truck is equipped with a vacuum water reclamation system, a series of two drums for solids and grease removal, and four filters to filter water for direct reuse. FMD also contracts for a professional concrete cleaning company to conduct large-scale ramp scrubbing operations to thoroughly clean ramp and apron areas once per year or as needed.

7.12.4 RUNWAY RUBBER REMOVAL

A contracted company conducts runway rubber removal under contract to the Authority. An all-in-one system uses either high-pressure water or a chemical rubber removal solution and scrubbing action followed by a rinse(s). Both systems vacuum up the rubber and any residual liquids. Runway rubber removal is performed as warranted by runway friction (skidometer) testing, which tends to be every 6 to 8 weeks. Runway rubber removal is conducted on average every 4-6 weeks. The waste rubber is disposed of in a lined rubber removal lowboy (dumpster) east of the ATCT. A contractor is responsible for disposal of the waste and wastewater generated.

7.13 PROGRAM IMPLEMENTATION

The Authority has identified updated BMPs applicable to industrial activities at SAN (Table 7-6 and Appendix B) and identified BMPs applicable to individual tenants and the Authority (Table 7-7 and Appendix E). Tenants and Authority departments are required to adopt applicable BMPs, when necessary, as new activities are added or existing activities change. BMPs or elements of BMPs requiring major operational and/or structural modifications must be implemented in a timely manner. New BMP requirements will be incorporated into any SWMP updates, as required by both the Industrial Permit and Municipal Permit.

All tenants and Authority departments (with storm water management responsibilities) maintain current, up-to-date copies of the SWMP in either hard-copy or electronic copy, or have immediate access to the SWMP via the internet. The Tenant Summary Sheets in Appendix E list the contact information for each tenant. Tenants are required to notify the Authority P&EAD at least annually regarding any need to update or modify the SWMP. All industrial tenants should be knowledgeable of the BMPs required for use by the Authority to address their individual operations and activities (see Tables 7-6 and 7-7, and Appendix B and Appendix E, respectively).

The specific elements of the Authority's industrial storm water management activities are presented in Sections 7.13.1 through 7.13.4.

7.13.1 EDUCATION AND OUTREACH

Details on education and outreach programs for Authority staff, tenants, and the general public related to industrial activities are provided in Section 9.0 (presented in Attachment 1 of the SWPPP).

7.13.2 STAFF TRAINING

All Authority staff members are provided annual SWMP implementation training regarding topics such as prohibited discharges, BMP requirements, good housekeeping, inspections, spill response, and

recordkeeping procedures. Authority staff training is mandatory. Additional details on staff training are in Section 9.0 (presented in Attachment 1 of the SWPPP).

7.13.3 WET WEATHER SAMPLING AND ANALYSIS

The Authority is required to collect and analyze storm water samples from four QSEs each year. A QSE is defined as a storm producing discharge from at least one drainage area and preceded by at least 48 hours with no discharge from any drainage area. The samples are collected according to the following timeline:

- Two QSEs during the first half of each reporting year (July 1 through December 31); and
- Two QSEs during the second half of each reporting year (January 1 through June 30).

Samples are collected within the first 4 hours after the start of discharge.

The details of the industrial compliance monitoring are provided in Appendix D-1, the Monitoring Implementation Plan.

7.13.4 FACILITY INSPECTIONS

Generally, Authority staff and industrial tenants inspect their operating and storage areas either daily or as part of their own routine facility inspections. Tenants are encouraged to request the assistance of FMD for any cleaning that cannot be addressed by their own efforts (in response to lease obligations) or that are not being addressed by the Authority's regularly scheduled ramp-sweeping or ramp-scrubbing programs. The Authority A&TO Department staff also inspect the terminals, ramps, runway, and the FBO continuously during operating hours (and are generally available 24 hours per day).

Any inspections specifically required by either the Municipal Permit or the Industrial Permit are conducted by P&EAD, as discussed below. The Authority may choose to require tenants and/or other Authority staff to conduct inspections that might complement the permit-required inspection program and further ensure that BMPs are being properly implemented. The Authority recommends that tenants conduct at least semi-annual inspections of their activities and operational areas and that they maintain records of these inspections as further means to ensure that BMPs are being properly implemented. Inspection records should be retained for at least 5 years.

7.13.4.1 Municipal Permit Inspection Requirements

The Authority is required to conduct inspections of industrial activities/operations/facilities to monitor compliance with the Municipal Permit and the Authority's ordinances, permits, and approvals. The Municipal Permit (Provisions D.3.b.(3)(b) and D.3.b.(3)(c)) outlines procedures for determining the number of high-priority industrial sites that must be inspected in any given year of program implementation under the renewed Municipal Permit. Nevertheless, the Authority has determined that all industrial entities at SAN are considered high priority (as noted in Section 7.7.3.1), and each one will be inspected at least monthly. These inspections will be coordinated with inspections for the Industrial Permit (described below).

7.13.4.2 Industrial Permit Inspection Requirements

The Industrial Permit requires the Authority to conduct an inspection program to ensure that the BMPs being implemented are evaluated and revised to meet changing conditions, aid in the implementation and revision of the SWMP, measure the effectiveness of BMPs to prevent or reduce pollutants in storm water discharges and authorized NSWDs, and identify additional BMP needs. The inspections must be recorded, and the program revised whenever appropriate. Inspections are readily available for Authority staff and tenants' review via the Authority's Web-based database. The Industrial Permit inspection requirements include the following:

- Monthly dry weather visual observations;
- Sampling event visual observations to coincide with storm water sampling;
  - Two observations between July 1 and December 31; and
  - Two observations between January 1 and June 30; and
- Annual Evaluation (addressed in Section 7.16.1).

Monthly Dry Weather Discharge Visual Observations: P&EAD conducts monthly inspections of SAN to observe authorized NSWDs and their sources and to verify that BMPs required to control those authorized discharges are being properly implemented and are effective. The Authority also conducts monthly visual observations of all drainage areas to identify any prior, current, or potential illicit discharges and their sources. Authority staff evaluate authorized NSWDs to ensure that (1) they comply with the Industrial Permit and the Municipal Permit; (2) required BMPs are effective in preventing or reducing the contact of NSWDs with industrial materials or equipment and to minimize, to the MEP, the flow or volume of discharges; (3) NSWDs do not contain or transport significant quantities of pollutants that cause or contribute to an exceedance of a water quality standard; (4) they comply with the Authority's Storm Water Code and Rules and Regulations; and (5) they meet BAT/BCT standards. The monthly inspections also verify the list of potential pollutants at the industrial sites/sources and identify any necessary modifications to the SWMP.

The monthly observations are conducted during daylight hours on days with no storm water discharges. The observations are conducted at least once per calendar month. Each year, at least one of the monthly inspections becomes the Annual Evaluation discussed below. The observations document the presence of any uncharacteristic volumes, discolorations, stains, odors, floating material, etc., as well as the source of any discharge. Records of the observations, including date, location, description of observations, response taken to eliminate unauthorized NSWDs to reduce or prevent pollutants from contacting NSWDs, and BMP corrective actions needed, are maintained by the Authority P&EAD via its Web-based database, as described below.

Sampling Event Visual Observations: P&EAD conducts visual observations of storm water discharges at all storm water monitoring locations at the same time that sampling occurs at those discharge locations. Two such observations take place from July 1 through December 31, and two observations take place from January 1 through June 30 of each year. Visual observations are not required during dangerous weather conditions, such as electrical storms or flooding. During observations, the Authority documents the presence of any floating and suspended material, oil and grease, discolorations, turbidity, odor, trash, or debris, and the source of any pollutant observed. If the pollutants are observed, efforts are made to identify the source of the pollutants. The investigation begins at the sampling location and continues upstream through the drainage basin until the pollutant source is located, if possible. Once the source is located, the Authority directs the responsible party to take corrective actions to reduce or prevent pollutants from contacting storm water discharge. Visual observations of stored or contained storm water, such as at the FSF, are conducted at the time of release. Containment areas are checked monthly to detect leaks and ensure adequate freeboard maintenance. The SWMP will be revised, if necessary, in response to any issues identified during the sampling event visual observations.

Annual Evaluations: One Annual Evaluation is conducted in each reporting year, as required by Industrial Permit Section XV. The procedures for Annual Evaluations are discussed in Section 7.16.1

7.13.4.3 Formal Inspection Procedures for Industrial Sites and Sources

Formal inspections of industrial sites and sources by P&EAD staff generally include a review of the following information, to the extent the information exists: (1) any SWPPPs or BMP implementation plans; (2) any relevant monitoring data; (3) any self-inspection records; and (4) any previous inspection reports.

The inspection generally involves an assessment of (1) compliance with the SWMP and Authority ordinances and permits related to urban runoff; (2) existing BMP requirements and the adequacy of BMP implementation, BMP maintenance and effectiveness, and the site supervisor/manager's efforts to make appropriate adjustments when ineffective BMPs have been identified; (3) confirmation of no exposure for all drainage areas previously identified as having no exposure to industrial activities; and (4) visual observations for illicit discharges, potential illicit connections, and potential discharge of pollutants in storm water runoff. The inspection also presents an opportunity to provide education and training regarding storm water pollution prevention. There are four basics steps in the Authority's facility/site inspection procedures: initiation, preparation, site visit, and post-inspection activities.

Step 1: Initiation: The inspection is typically initiated in response to a schedule, a public report or complaint, or an illicit discharge investigation, or as follow-up to a previous inspection, violation, or other enforcement action. The inspector typically conducts a complete inspection of the entire facility/site, regardless of the initiating circumstances. However, the inspectors may choose to focus on specific issues that were previously identified or the reason for the inspection initiation.

Step 2: Pre-Inspection Preparation: Prior to visiting a facility/site, the inspector reviews any of the available information noted above and reviews the Authority's Web-based database that tailors the inspection form (found in Appendix G) to each particular tenant or facility. Using maps and other sources, inspectors familiarizes themselves with general site location and vicinity, including proximity to storm drain inlets. Inspectors also gather needed equipment, i.e. an iPad, tablet, or smart phone to access the Web-based database and to record the inspection, a camera, and pertinent documents or information not available in the database or internet, maps, and any other required equipment.

Step 3: Site Visit: The inspector begins assessing site conditions upon approach to the facility/site. Depending upon circumstances and availability, the inspector may begin by interviewing the facility/site operator or other responsible individual. The inspector then verifies/clarifies observations made upon approaching the facility/site and identifies and evaluates the BMP requirements applicable to the site/activity, as well as the effectiveness of the BMPs being implemented. If responsible individuals are available, the inspector ensures that the contact information and BMP requirements on record are accurate and discusses how various BMP requirements are being met (especially if requisite BMPs have been incorporated into the operations and activities in a manner that may not be obvious). The inspector typically asks to see any existing pollution prevention plans, records, or environmental management system documentation not previously gathered or available. While conducting a walkthrough of the facility/site, the inspector notes those industrial/commercial areas and activities that are exposed to precipitation (potentially increasing the risk of pollutants entering the storm drain system). Areas of storm water run-on and runoff are also noted. The inspector uses the walkthrough to assess the accuracy of site maps, descriptions of the areas and activities, and lists of materials onsite; the effectiveness of the BMPs being implemented; and any evidence of potential or existing illegal discharges. The inspection is documented on the Web-based database, as outlined below. The inspection is acknowledged by both the inspector and the responsible individual (or designee) for the facility/site in a back-and-forth communication on any issues requiring corrective actions.

Step 4: Post-Inspection Activities: After the inspection, the inspector ensures that actions are taken to address any immediate concerns; updates the Authority's records, as necessary; completes the inspection via the Authority's Web-based tracking application and ensures that a copy is issued to the responsible party; issues corrective action or enforcement orders to the responsible party via the Web-based database, as necessary; schedules follow-up inspections, as needed; and makes reports or referrals, as needed, to the appropriate departments or agencies.

7.13.4.4 Inspection Tracking and Records

P&EAD conducts various inspections at SAN to maintain and ensure compliance with both the Industrial Permit and the Municipal Permit. The various inspection programs were outlined above. The inspections are documented within the Authority's Web-based database. Inspection reports and/or summaries, as appropriate, are included in the Annual Reports required by the Industrial Permit and Municipal Permit. The inspection forms used for each of the various inspection programs are presented in Appendix G.

The Authority generally conducts all inspections using the Web-based database in real time. However, the Authority may use the following inspection forms generated by the CASQA if the database is not available:

- Form 1 – BMP Inspection Form;
- Form 2 – Visual Observation Log—Monthly; and
- Form 3 – Visual Observation Log—Sampling Event.

Note – Appendix G also includes CASQA Form 4 – Sampling Log, which is used to present the wet weather sampling and analysis results. The wet weather sampling and analysis performed by the Authority in compliance with the Industrial Permit is discussed in Appendix D-1.

Alternatively, the inspections may be recorded directly in the Web-based database, the application developed for P&EAD to track and manage the storm water management program data. The Web-based database can be used to document BMP deficiencies for each tenant during monthly, annual, or ad hoc inspections. It can also be used as a platform to correspond with tenants on inspection issues, view records on inspection history, and access storm water reference material.

Both the inspection forms and the Web-based database incorporate the minimum required inspection tracking information per Industrial Permit Section XI.A.3 and Municipal Permit Provision E.5.c(3). This includes the inspector's name, name and location of each inspected entity, inspection date and time, findings of the inspection, description of any deficiencies, violations or pollutants observed, description of any applicable enforcement actions, and date of resolution for each deficiency or violation. Any SWPPP revisions required in response to the visual observations will be implemented by P&EAD.

7.13.4.5 Owner Operator Notifications

One objective of the SAN SWMP is to notify all industrial sites/sources at SAN, whether operated by tenants or the Authority, of the BMP requirements deemed applicable to each site/source by the Authority. As noted above, all tenants and Authority departments (with storm water management responsibilities) are provided and maintain current copies of the SWMP in either hard-copy or electronic copy or have immediate access to the SWMP via the internet. BMP descriptions are also provided to all tenants in the Web-based database.

Notification of BMP deficiencies are conveyed via the Web-based database. When an inspection or audit of a tenant area is complete, an authority inspector uploads the inspection results, including text and photos, into the Web-based database. An email is then generated by the Web-based database and sent to the tenant. The tenant is then provided with the opportunity to enter a resolution for each deficiency identified. The inspector then reviews the resolution for completeness and either approves or denies the action. Enforcement measures for issues that cannot be resolved in a timely fashion are addressed in Section 7.13.4.6.

7.13.4.6 Enforcement Measures

This section describes the ERP as it applies to industrial areas and activities at SAN. In accordance with the Municipal Permit, the ERP has been updated concurrently with submittal of the final San Diego Bay WQIP, so that the ERP aligns with WQIP strategies.

All industrial tenants operating within the Authority's jurisdiction are required to maintain compliance with the Authority Rules and Regulations, Storm Water Code (Article 8), the SWMP, the Industrial Permit, the Municipal Permit, and contracts and leases. Any findings or violations noted during a site inspection by P&EAD inspector are discussed onsite or via the Web-based database with the Authority employee or tenants. A corrective action form may also be used to document the problem and its resolution. The P&EAD inspector discusses the issues, and the inspection report details the corrective actions required and the timeframe in which corrective actions must be completed. Findings and violations are described and recorded in the Web-based database (and include photographs and other information, as applicable).

The Authority requires that corrective actions be started immediately and be completed within 14 days to the Authority's Web-based database or prior to the next predicted rain event, whichever is sooner. Escalated enforcement mechanisms can be enforced if corrective action is not completed within 30 days. Depending on the nature of the finding, some corrective actions may take longer to complete. In those cases, the Authority employee or tenants provide an explanation to the P&EAD inspector and a suggested timeframe for completion within 30 days of the initial inspection, which the P&EAD inspector either agrees upon or rejects and provides a preferred timeframe. (Note: corrective actions must be completed within 24 hours for Enforcement Level 2 violations, as described below.) The Authority or tenants must document the corrective action taken by responding to P&EAD through the Web-based database. The Authority or tenants that cannot complete corrective actions in the time required must explain in detail through the Web-based database the specific causes of delay and propose a schedule for compliance. P&EAD has the sole discretion to grant an extension or pursue escalated enforcement. All corrective actions, as well as the time periods allowed and dates of actual completion, are recorded in the Web-based database.

The following enforcement mechanisms are used by the Authority. The Authority generally obtains compliance using the first four mechanisms listed. The remaining enforcement mechanisms can be used, as necessary, to increase the severity of penalties and to compel compliance as soon as possible:

1) Verbal and written warnings;
2) Written notices of violation;
3) Written notices to clean, test, or abate;
4) Order to cease and desist (stop work orders);
5) Fines;
6) Denial or revocation of permits and approvals;
7) Administrative and criminal penalties;
8) Bonding requirements; and
9) Liens.

The Authority's ERP for industrial dischargers has two main levels of enforcement, with escalating enforcement measures used as necessary on a case by case basis, using the Authority inspector's professional judgment. The Authority has the discretion to initiate or escalate enforcement using any enforcement mechanism available, depending on the nature of the violation or discharge, the effect on water quality, and the degree of cooperation or response time of responsible parties. Further information on the Authority's enforcement activities is provided in Section 2.3. The general escalated enforcement process is outlined as follows:

- Enforcement Level 1 is initiated by the findings of a BMP deficiency in the BMP categories outlined in Appendix B, as appropriate for the particular activity or area being inspected. The issues are documented in the Web-based database so that the responsible party and interested parties are notified of the violation. The responsible party can then notify the inspector via the Web-based database when

the corrective action has been completed. Corrective actions are expected to be completed within 30 days. Photos of the corrective action should be uploaded to the Web-based database within 30 days or the agreed upon timeframe, if longer. The Web-based data generates a date associated with each photo, which reflect the photo's upload date. If the finding is not corrected after the first reinspection, a notice of violation is issued to escalate enforcement, which may include an order to clean, test, or abate. Upon the second reinspection, if the finding is still not corrected the issues are directed to Airline Relations for escalated enforcement.

- Enforcement Level 2 is initiated when the non-compliant activity or violation may impact water quality, human health, or the environment (i.e., prohibited discharge). A written notice to clean, test, or abate, and/or a CDO is used to initiate enforcement and compliance is expected within 24 hours. If a CDO is issued, the recipient must cease and desist all activities that cause or contribute to illegal discharges or remove illicit connections. A notice and order to clean, test, and abate is a written or verbal order to perform the activities listed in the Authority's Storm Water Code. If the violation is not corrected, Airline Relations is notified for escalated enforcement. Penalties and fines may be issued if the notice to clean, test, or abate and/or the CDO are ineffective, and the violation continues. Additionally, the Authority or tenants may be subject to a meeting with the Director of P&EAD to discuss the reasons for failing to comply and the means of resolving the issue.

If the noncompliance resulted in a spill or discharge, the party responsible for the discharge is responsible for conducting cleanup measures appropriate to the degree of the spill or discharge, or if needed, for contacting the appropriate emergency response or cleanup contractor.

Contractors and developers are required to abide by the Authority documents, permits, rules, and regulations while working within airport operational areas. The Authority may use provisions within the contract to correct any noncompliant activities. The Authority may also employ this mechanism for tenants that are under lease or use permits.

7.13.4.7 Reporting of Industrial Non-Filers and Incidents of Non-compliance

7.14 REPORTING OF INDUSTRIAL NON-FILERS

Per Municipal Permit Provision E.6.e(2), the Copermittees are required to report any persons required to obtain coverage under the Industrial Permit and failing to do so, within 5 calendar days of becoming aware of the non-filer. As noted in Section 1.0, the industrial operations at SAN have been subject to the Industrial Permit since 1992. At that time, the Port of San Diego filed an NOI with the permit that included all the industrial entities at SAN. Since then, ownership and operation of SAN were transferred from the Port of San Diego to the Authority, and the Port of San Diego filed a Notice of Termination from permit compliance and listed the Authority as the new facility operator for SAN. In March 2003, the Authority filed an NOI to comply with the Industrial Permit and listed the site's primary SIC code as 4500 Air Transportation. In response, the SWRCB issued WDID #937I018035 to SAN. In August 2003, the Authority prepared the SAN SWMP to comply, in part, with the Industrial Permit. As was true at the time that the Port of San Diego operated SAN, all SAN tenants operate under lease or license agreement with the airport owner/operator, which is currently the Authority. As a result, industrial operations and tenants at SAN are also subject to the requirements of the Industrial Permit through the Authority's own WDID number and must comply with the Authority direction regarding storm water management at SAN, as described in Section 7.2.

7.14.1 INCIDENTS OF NON-COMPLIANCE

The Authority may issue a written enforcement notice for repeat or serious non-compliance incidents. If an incident or practice of non-compliance occurs, P&EAD staff then determine whether the incident endangers human health or the environment by considering the following criteria:

- Characteristics, quantity, and toxicity of substances/materials involved;

- Proximity of site to a sensitive water body (San Diego Bay);
- Proximity of site to an impaired water body (San Diego Bay);
- Proximity of site to a sensitive habitat/endangered species;
- Estimated volume of actual and/or potential discharge;
- Whether the incident involves a discharge to the storm drain; and
- Condition of the storm drain system (clog, etc.).

If the Authority determines that the incident does endanger human health or the environment, then the Authority provides verbal notification to the RWQCB within 24 hours from the time that the Authority becomes aware of the circumstances. Within 5 days from the time that the Authority becomes aware of the circumstances, the Authority provides the RWQCB with a written submission containing a description of the non-compliance and its cause; the period of non-compliance, including exact dates and times, and, if the non-compliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the non-compliance. The following are reported within 24 hours:

- Any unanticipated bypass that exceeds any effluent limitation in the Municipal Permit;
- Any upset that exceeds any effluent limitation in the Municipal Permit; and
- Violation of a maximum daily discharge limitation for any or the pollutants listed by the RWQCB in the Municipal Permit to be reported within 24 hours.

In addition, under the Industrial Permit, incidents of non-compliance are grounds for enforcement actions and/or removal from Industrial Permit coverage. If any storm water or NSWDs exceed the discharge prohibitions, effluent limitations, or receiving water limitations specified in the Industrial Permit, or exceed any applicable water quality standards in the SWRCB or RWQCB Basin Plans, the facility is not in compliance. Should such a situation arise, the Authority submits a report to the RWQCB within 60 days describing BMPs currently being implemented and additional BMPs to be implemented, with a schedule of implementation, to prevent or reduce any pollutants that are causing or contributing to the exceedance of water quality standards. Following approval of the report by the RWQCB, the Authority revises and implements this SWMP and monitoring program, as necessary, within 90 days to incorporate any additional BMPs that may have been and/or will be implemented (including a schedule for implementation) and any additional monitoring requirements. Any anticipated non-compliance, such as a planned change at the airport facility that will change the nature or increase the amount of pollutants discharged, are reported to the RWQCB. Any non-compliance is reported in the monitoring report discussed below, and includes a description of the non-compliance and its cause, the date and time of the non-compliance and whether it has been corrected, and the steps taken or planned to reduce and prevent a recurrence of the non-compliance.

7.15 EXCEEDANCE RESPONSE ACTIONS

The Industrial Permit establishes NALs for certain pollutants (described in Appendix D-1). Under the Industrial Permit, all industrial dischargers are in baseline compliance status for the first year of implementation. If the pollutant levels are found to exceed either an annual NAL or an instantaneous NAL in a given year, this Baseline status will change to Level 1 beginning July 1 of the subsequent year. The actions required under Level 1 status are described in Section 7.15.1. If pollutant levels are found to exceed an annual or instantaneous NAL while in Level 1 status, SAN will enter Level 2 status beginning July 1 of the subsequent year. The actions required under Level 2 status are described in Section 7.15.2. The exceedance response level is pollutant-specific, meaning that the Authority may fall under Baseline, Level 1, and Level 2 status for different pollutants within the same reporting year.

The Authority is required to implement water quality-based corrective actions if industrial discharges and/or NSWDs are found to be in violation of receiving water limitations in San Diego Bay. These required actions are summarized in Section 7.15.3.

7.15.1 LEVEL 1 EXCEEDANCE RESPONSE ACTIONS

SAN started in Baseline status for all pollutants for the 2015–2016 reporting year. However, by the end of the 2015–2016 reporting period, sampling results indicated an NAL exceedance for copper, and SAN entered Level 1 status for that parameter beginning on July 1, 2016. By the end of the 2016–2017 reporting period, sampling results indicated NAL exceedances for copper and zinc. Subsequently, SAN entered Level 1 status for zinc and Level 2 status for copper, beginning on July 1, 2017.

By the end of the 2017–2018 reporting period, sampling results indicated NAL exceedances for copper, zinc, BOD, and chemical oxygen demand (COD). Subsequently, SAN entered Level 1 status for COD and BOD and Level 2 status for zinc beginning on July 1, 2018, while continuing to remain in Level 2 status for copper. In February 2019, the RWQCB granted the request for an extension of the Level 2 Technical Report for Copper and Zinc to December 31, 2025. Therefore, SAN will remain in Level 2 for both copper and zinc until the Technical Report has been submitted and approved by the RWQCB, and results from four subsequent consecutive QSEs sampled indicate no additional NAL exceedances.

By the end of the 2018–2019 reporting period, sampling results indicated NAL exceedances for copper but no additional NAL exceedances for zinc, BOD, or COD. According to the IGP, results from four consecutive QSEs sampled after to BMP implementation must indicate no additional NAL exceedances to return to Baseline from Level 1. BMPs for BOD and COD were implemented on December 31, 2018, and four QSEs were subsequently sampled in 2019, with no further NAL exceedances. As such, SAN returned to Baseline status for BOD and COD after the fourth QSE sampled indicated no NAL exceedances.

Similar to the monitoring year 2018–2019, by the end of the 2019–2020 reporting period, sampling results indicted NAL exceedances for copper but no additional NAL exceedances for zinc, BOD, or COD. However, SAN will remain in Level 2 for zinc until the ERA Level 2 Technical Report extension requirements are completed. COD and BOD concentrations were below the NAL for three storms in 2018–2019 and the consecutive first storm of the 2019–2020 monitoring season, returning SAN to Baseline status for these parameters.

In the 2020–2021 monitoring season, there was a NAL exceedance for mean concentration of iron, which brings SAN to Level 1 status. Although there were no NAL exceedances for mean concentrations of zinc, the Authority remains in Level 2 for zinc until the ERA Level 2 Technical Report extension requirements are completed. There was an NAL exceedance for mean concentration of copper during the 2020–2021 monitoring season, so SAN remains in Level 2 for copper. The 2020–2021 monitoring season experienced a season total of approximately 4.51 inches of rainfall, considerably lower than the annual average of 10 inches per year.

In the 2021–2022 monitoring season, there were four instantaneous maximum NAL exceedances of pH. As a result, SAN entered Level 1 status for pH beginning on July 1, 2022. Although there were no NAL exceedances for mean concentrations of zinc or copper, SAN remains in Level 2 for these parameters until the ERA Level 2 Technical Report extension requirements are completed. For SAN to return to Baseline status for iron, the total iron concentration requires four consecutive storms with average results below the NAL.

The 2022-2023 monitoring season results are still being analyzed but there were four consecutive storms with average results below the NAL for iron during the FY23 sampling, so iron returned to baseline on July 1, 2023.

The Industrial Permit requires that by October 1, following commencement of Level 1 status, the Authority must have completed an evaluation, with the assistance of a QISP, of the industrial pollutant sources at SAN that are or may be contributing to the exceedance. The evaluation must also identify the corresponding BMPs and any additional BMPs that may be necessary to prevent future NAL exceedances to comply with the Industrial Permit. All drainage areas must be included in this evaluation.

The site evaluation for the copper NAL exceedance was conducted on September 23 and 28, 2016. As a result of the evaluation, three new BMPs were created, and two existing BMPs were modified. The new BMPs include SC09-08: Repair Damaged Asphalt, SC09-09: Prevent Rain From Contacting Galvanized or Rusty Metals, and SC12-12: Scrub Roads, Ramp Areas, and Apron Areas as Needed. The language for the BMP SC02B-10 was modified to include the word "removal" in the following description: mechanical parts, equipment, and vehicles that are awaiting repair/removal under cover and away from storm drains. BMP SC07-01 was modified to include equipment in the following description: locate storage and equipment away from storm drains. In addition, some sampling locations were changed as a result of the site evaluation to more accurately reflect the activities for which the Authority is sampling. In a further attempt to decrease copper concentrations, ERA training was given in November 2016 to tenant employees working in areas where copper levels were found to be elevated, and treatment control BMPs were implemented, where possible, in areas with elevated copper levels.

The site evaluation for the copper and zinc NAL exceedances was conducted on July 28, August 4, and August 8, 2017. As a result of the evaluation, changes to the following sampling locations were made: C-B05-4a was moved back to its previous location C-B05-4 for both safety and sampling feasibility reasons, C-B06-16a was moved to C-B06-16b to avoid construction staging yard runoff near C-B06-16a, and C_B15-18 was moved to C-B15-18a to avoid active construction site runoff near C-B15-18. Additionally, two new BMPs were created, and one existing BMP was modified. The new BMPs are SC01-10: Prohibit Over-Irrigation of Landscaped Areas, and SC07-13: Do Not Permanently Store Equipment and Materials in the Bed of a Pickup Truck. If storing temporarily, provide cover and containment. The language for BMP SC01-06 was modified to replace "minimize excess watering" with "prevent prohibited over-irrigation." In a further attempt to decrease copper and zinc concentrations, ERA training was provided in June 2017 to tenants and employees working in areas where copper and zinc levels were found to be elevated, and treatment control BMPs were implemented, where possible, in areas with elevated copper and zinc levels.

The site evaluation for the copper, zinc, BOD, and COD NAL exceedances was conducted on August 21 and 22, 2018. As a result of the evaluation, changes to the following sampling locations were made: C-B06-16b was moved back to C-B06-16a because construction had finished, and the construction staging yard was removed, and C-B07-7a was moved back to C-B07-7 once the new BMPs were installed. These sampling locations were updated in Amendment 5 of the SWMP/SWPPP and its associated attachment and appendices. No source control BMPs were modified or added. In a further attempt to decrease copper, zinc, BOD and COD concentrations, ERA training was given in December 2018 to tenants and employees working in areas where copper, zinc, BOD and COD levels were found to be elevated, and treatment control BMPs were implemented, where possible, in areas with elevated copper, zinc, BOD and COD levels.

The site evaluation for the copper exceedances was conducted on August 23, 2019. In a further attempt to decrease copper concentrations, ERA training was provided in December 2019 to tenants and employees working in areas where copper and zinc levels were found to be elevated, and treatment control BMPs were implemented, where possible, in areas with elevated copper and previously elevated zinc levels.

The site evaluations for copper exceedances were conducted on August 24, 2020, and August 27, 2020. ERA training was provided in May 2020 to tenants and employees working in areas where copper and zinc levels were found to be elevated as part of the annual training and in December 2020. Treatment control BMPs were implemented as needed in areas that had elevated concentrations.

The site evaluations for copper, iron, and zinc exceedances were conducted on August 24 through 27, 2021, and August 31, 2021. ERA training was provided in May and June 2021 as part of the annual training and in December 2021 to tenants and employees working in areas where iron, copper, and zinc levels were found to be elevated. Treatment control BMPs were implemented as needed in areas that had elevated concentrations.

The site evaluations for copper, iron, zinc, and pH exceedances were conducted on August 10 and 17, 2022. ERA training was provided in June 2022 and December 2022 as part of the annual and focused training, respectively, to tenants and employees working in areas where iron, copper, zinc and pH levels were found to be elevated. After the evaluation of Drainage Basin 5a, source control BMP SC04-02 was modified to read as follows: *Use dry washing and surface preparation techniques where feasible or submit a Wash Water Management Plan to P&EAD for review and approval if wet washing techniques will be used*. White residual coating from the roof drain spouts was observed during the site evaluations, which resulted in a newly added BMP SC09-10: *Regularly inspect roof top conditions for deteriorated roof coating/sealant and accumulated dust*.

By January 1 of each year following commencement of Level 1 status, the Authority revised this document as necessary and implemented any additional BMPs identified by the QISP in the Level 1 evaluations. The QISP prepared Level 1 ERA Reports, and the LRP certified these reports via SMARTS. The Level 1 ERA Reports included the QISP identification number, name, phone number, email address, and included the following components:

- A summary of the Level 1 ERA evaluations; and
- A detailed description of any SWPPP revisions made and additional BMPs implemented for each parameter that exceeds an NAL.

ERAs implemented for Level 2 copper and zinc are outlined in Section 7.15.2 .

7.15.1.1 Returning to Baseline from Level 1 Status

SAN will return to Baseline status for a given parameter if the following conditions are met:

- A Level 1 ERA Report has been completed;
- All identified additional BMPs have been implemented; and
- Results from four consecutive QSEs indicate no additional NAL exceedances for that parameter.

Prior to the implementation of an additional BMP identified in the Level 1 ERA Evaluation or October 1 (whichever comes first), sampling results for any parameter(s) being addressed by that additional BMP will not be included in the calculations of annual average or instantaneous NAL exceedances in SMARTS. As noted above, SAN returned to Baseline status for BOD and COD during FY 2020 because the fourth QSE sampled after December 31, 2018, indicated no NAL exceedances. During the 2020–2021 reporting season, iron concentrations exceeded the NAL, and SAN entered Level 1 on July 1, 2021. During the 2021–2022 reporting season, pH levels exceeded the NAL, and SAN entered Level 1 on July 1, 2022.

7.15.2 LEVEL 2 EXCEEDANCE RESPONSE ACTIONS

If SAN is in Level 1 status for a given parameter, the Level 1 ERA Report has been completed, and the sampling results indicate that an NAL exceedance for the same parameter has occurred, the SAN enters Level 2 status for that parameter beginning on July 1 of the subsequent reporting year. Level 2 status requires submittal of a Level 2 ERA Action Plan and Level 2 ERA Technical Report. As stated above, SAN entered Level 2 status for copper beginning on July 1, 2017, and entered Level 2 status for zinc beginning on July 1, 2018.

7.15.2.1 Level 2 ERA Action Plan

The Level 2 ERA Action Plan was prepared by a QISP. The LRP or his representative certified and submitted this report via SMARTS and included the QISP identification number, name, phone number, and email address. The plan was submitted by January 1 following the reporting year in which the exceedance triggering a new Level 2 status occurred. A new Level 2 exceedance is any Level 2 NAL exceedance for a new parameter in any drainage area or an exceedance of the same parameter that is being addressed in an existing Level 2 ERA Action Plan, but in a new drainage area. At a minimum, this plan addresses the drainage area in which the Level 2 exceedance has occurred.

For each new Level 2 exceedance, the plan identifies which of the following demonstrations the Authority has elected to perform:

- Industrial Activity BMP Demonstration: describing additional BMPs that will be implemented to eliminate future NAL exceedances, or any which are not feasible to be implemented and the reasons why;
- Non-industrial Pollutant Source Demonstration: finding that the exceedance of the NAL is due solely to the presence of non-industrial pollutant sources; and
- Natural Background Pollutant Source Demonstration: finding that the NAL exceedance is due solely to the presence of the pollutant in the natural background, undisturbed by industrial activities.

The Level 2 ERA Action Plan (revised in December 2018, December 2019, December 2020, December 2021, and December 2022) includes a detailed schedule and description of tasks required to complete the selected demonstration. The Authority has chosen the Industrial Activity BMP Demonstration. All Action Plan elements were to be implemented as soon as practicable and completed no more than 1 year following submittal of the plan unless an extension was granted. As noted above, the Authority has been granted such an extension for copper and zinc. In addition, the Authority provided ERA training in June 2017, December 2018, December 2019, December 2020, December 2021, and December 2022 to tenants and employees working in areas where copper and zinc levels were found to be elevated and updated the SWPPP.

7.15.2.2 Level 2 ERA Technical Report

By January 1 of the reporting year following submittal of the Level 2 ERA Action Plan, the Authority is required to certify and submit via SMARTS a Level 2 ERA Technical Report. This report must include one of the three demonstrations listed above and described in Section XII.D.2 of the Industrial Permit. Upon submittal of the Level 2 ERA Technical Report, both the SWRCB and RWQCB may review the report; if the report is found to be deficient, the Authority may be directed to take further action to comply with the Industrial Permit.

However, as allowed by the Industrial Permit, the Authority was able to apply for and was granted two extensions to the January 1 submittal deadline when the following items were submitted to SMARTS (per Industrial Permit requirements):

- Reasons for the extension;
- A revised Level 2 ERA Action Plan with a schedule and tasks necessary to complete the Level 2 ERA Technical Report; and
- A description of any additional temporary BMPs that will be implemented while permanent BMPs are being constructed.

Any additional extensions must be approved in writing by the RWQCB. The RWQCB may require that additional tasks or temporary BMPs be implemented. The Authority sent such a written request to the RWQCB because the schedule in the Action Plan extended beyond the 6-month automatic extension.

Once the Level 2 ERA Technical Report has been developed, it will be updated annually upon additional NAL exceedances of the same parameter within the same drainage area outlined in the report. The report will also be updated annually following any facility operational changes, pollutant source changes, or new and relevant inspection and monitoring results. This updated Level 2 ERA Technical Report will be submitted with each industrial Annual Report. If there have been no changes necessitating an updated Level 2 ERA Technical Report, the Authority will certify that no changes are needed in the Annual Report.

The Authority submitted revised Level 2 ERA Action Plans for copper and zinc by January 1, 2019, January 1, 2020, January 1, 2021, January 1, 2022, and January 1, 2023.

7.15.2.3 Returning to Baseline Status From Level 2 Status

SAN will be eligible to return to Baseline status for a pollutant only if the Level 2 ERA Technical Report follows the Industrial Activity BMP Demonstration and all BMPs outlined in the Level 2 ERA Action Plan have been implemented. The results from four consecutive QSEs must also indicate no additional NAL exceedances for that parameter. If any future NAL exceedances occur for that parameter, SAN will automatically enter Level 2 status on July 1 of the subsequent reporting year, bypassing Level 1.

SAN will not be eligible to return to Baseline status if any of the following are submitted in the Level 2 ERA Technical Report:

- An Industrial Activity BMP Demonstration stating that all of the implemented BMPs, including additional BMPs outlined in the Level 2 ERA Action Plan, achieve compliance with the Industrial Permit but are not expected to eliminate future exceedances. This demonstration must include an evaluation of any additional BMPs that could reduce or prevent NAL exceedances that are not being implemented, the estimated costs of these additional BMPs, and an analysis of the basis for selecting the BMPs implemented rather than the additional BMPs evaluated.
- A Nonindustrial Pollutant Source Demonstration.
- A Natural Background Pollutant Source Demonstration.

The Authority continues to implement its revised ERA Level 2 Action Plan, following its submittal into SMARTS.

7.15.3 VIOLATION OF RECEIVING WATER LIMITATIONS

Per Industrial Permit Section XX.B, the Authority will implement water quality-based corrective actions if it is determined that industrial storm water discharges or NSWDs are in violation of any applicable receiving water limitations within the receiving water, or are causing or contributing to an exceedance of a water quality standard within the receiving water. Water quality-based corrective actions are different from Level 1 and Level 2 ERAs resulting from effluent-based monitoring. It is possible to be engaged in Level 1 or Level 2 ERAs while simultaneously being required to perform water quality-based corrective actions. The Authority will conduct a facility evaluation to identify any BMPs described in the SWPPP that are not being properly implemented. Following this evaluation, the SWPPP itself will be assessed to determine whether additional BMPs are needed to reduce pollutants to a level meeting receiving water limitations. If necessary, the SWPPP will be revised. These evaluations and revisions will be certified and submitted via SMARTS for review by the RWQCB, which may reject these corrective actions or request more documentation. To date, none of the industrial storm water discharges or NSWDs from SAN have been determined to be in violation

of any applicable receiving water limitations within the receiving water (San Diego Bay) or causing or contributing to an exceedance of a water quality standard within the bay.

7.16 ANNUAL EVALUATION AND REPORTING

7.16.1 ANNUAL EVALUATION

The Authority conducts one Annual Evaluation during the Industrial Permit reporting period of July 1 through June 30 (which corresponds to the fiscal year of the Authority). Annual Evaluations are conducted within 8 to 16 months of each other. The Annual Evaluation process generally follows the procedure outlined in Section 7.13.4.3, and includes a review of all visual observations records, inspection records, and sampling and analysis results; inspections, review, and evaluation of all BMPs to determine whether the BMPs are adequate, properly implemented, and maintained, or whether additional BMPs are needed; a visual inspection of all potential pollutant sources for evidence of, or the potential for, pollutants entering the drainage system; an inspection of all drainage areas previously identified as having no exposure to industrial activities and materials; and a visual inspection of equipment needed to implement the SWMP, such as spill response equipment. Any incidents of noncompliance are noted, and the responsible party is directed by the Authority to take corrective action. The Annual Evaluation process includes timely follow-up inspections whenever BMP deficiencies are found at any particular site. The process also produces a report that identifies any necessary revisions to the SWMP or to the Authority's BMP requirements or to the descriptions of the BMPs and outlines a schedule for implementing any necessary revisions. Any revisions necessary must be implemented within 90 days of the Annual Evaluation.

7.16.2 ANNUAL REPORTING

Both the Municipal Permit and the Industrial Permit require the Authority to submit Annual Reports to the RWQCB. The Municipal Permit requires submission of an Annual Report by January 31 of each year, which includes the information listed in Provision F.3 of the Municipal Permit. The Industrial Permit requires submission of an Annual Report by July 15 of each year, which includes the information listed in Section XVI of the Industrial Permit for the preceding 12-month period of July 1 through June 30. Annual Reports are signed and certified by the LRP or his DAR.

Industrial Annual Reports are submitted via SMARTS. The following components are included in the report:

- A compliance checklist indicating compliance with the components of the Industrial Permit;
- An explanation for any incidents of non-compliance, as indicated in the compliance checklist;
- An identification, including page numbers, of all revisions made to the SWPPP within the reporting year; and
- The date(s) of the Annual Evaluation.

The Municipal Annual Report consists of two components, an assessment of the JRMP for July 1 through June 30 of the preceding year, and a WQIP monitoring and assessment evaluation for October 1 through September 30 of the preceding year. The Municipal Annual Report requirements are discussed in more detail in Section 12.1.

7.16.3 RECORDS MANAGEMENT

The Authority retains records of all storm water monitoring information, copies of all reports (including Annual Reports) required by the Municipal Permit and the Industrial Permit, records of all data used to complete the NOI for the Industrial Permit, and all other data and information required by either permit for a period of at least 5 years. These records are provided to the RWQCB, SWRCB, or USEPA within 10 days of receipt of a written request for information, or during office hours for review by the RWQCB.

7.17 INDUSTRIAL COMPONENT EFFECTIVENESS ASSESSMENT REPORTING

The Authority has developed internal and external effectiveness assessment programs to evaluate the Authority staff, Authority Board, and tenant compliance with water quality issues. The Authority's Effectiveness Assessment component is described in Section 11.6 (presented in Attachment 1 of the SWPPP).

7.18 INDUSTRIAL COMPONENT PROGRAM REVIEW AND MODIFICATION

The Authority has reserved this section to identify and document future changes to the Industrial Component of the SWMP. Section 13.0 details the program modifications made to the June 2015 version of the SWMP to bring this document into compliance with the renewed Municipal Permit and Industrial Permit. Changes made are as follows:

- Updates were made to the Industrial Component, Section 7.0, following the Annual Evaluations and ERA Evaluations (2016, 2017, 2018, 2019, 2020, 2021, and 2022), including updating the LRP and adding the QISP.
- The following BMPs were added as a result of the ERA Evaluation (2016):
    - SC09-8 Repair damaged asphalt;
    - SC09-9 Reduce the exposure of galvanized or rusty metal structures to rainfall, where possible; and
    - SC12-12 Roads, ramp areas, and apron areas are scrubbed on an as-needed basis.
- The following BMPs were added as a result of the ERA Evaluation and Annual Evaluation (2017):
    - SC01-10; Prohibit over-irrigation of landscaped areas; and
    - SC07-13: Do not permanently store equipment and materials in the bed of a pickup truck. If storing temporarily, provide cover and containment.
- The following BMP was removed due to reduced drought restrictions:
    - SC04-09: Wash vehicles, aircraft, and equipment during specified hours.
- No new source control BMPs were added as a result of the ERA Evaluation and Annual Evaluation (2018, 2019, 2020, 2021).
- The following BMP was added as a result of the ERA Evaluation and Annual Evaluation (2022):
    - SC09-10: Regularly inspect roof top conditions for deteriorated roof coating/sealant and accumulated dust.
- Treatment control BMPs were installed in various locations following the 2016, 2017, 2018, 2019, 2020, 2021, and 2022 ERA Evaluations, and are indicated on the SWMP figures:
    - Five CleanWay MetalZorbs; and
    - Three Activated Alumina Filter Bags (including two as trench drain filters).
- The SWMP was modified in February 2017 to enhance the information included in Section 7.0 for tenants Menzies Fuel Farm and Menzies, and to add information for the new tenant Conrac, in anticipation of their incorporation into the Authority's program and WDID number under the Industrial General Permit.

- The SWPPP was modified in December 2017 to incorporate over-irrigation prohibitions.
- The SWPPP/SWMP was modified in January 2019, December 2019, December 2020, January 2022, and January 2023 to incorporate updates as a result of ERAs and annual evaluations.
- Section 7.13.4.6, Enforcement Measures, was updated to reflect updated escalated enforcement measures.

Section 13.0 will also be used as an amendment log for any future revisions to the SWMP. The amendment log will note the date of each amendment. The Authority will continue to revise the SWMP as needed, including changes necessary because of the following:

- There is a change in the total industrial area exposed to storm water;
- Additional BMPs are added;
- There is a significant change in industrial operations that may affect the type or amount of a pollutant that may be discharged;
- There is a change in the parties responsible for implementation of the SWMP; and
- A revision is otherwise deemed necessary.

The revised SWPPP will be submitted via SMARTS within 30 days when it contains significant revisions. The previously revised SWPPP, Amendment 9 was uploaded to SMARTS in February 2023. The onsite SWPPP will be kept up to date at all times, although SWPPP revisions are not required to be certified and submitted via SMARTS more than once every 3 months.