



Stormwater Management Plan (SWMP)

Principal Permittee

- **City of Brawley**

The City of Brawley gratefully acknowledge and thank the Riverside County Flood Control and Water Conservation District, County of Riverside, and Sempra Energy Utilities for providing wording, resources, and assistance in the preparation of this document.

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Executive Summary

Federal regulations implementing Clean Water Act section 402 (p) require operators of municipal separate storm sewer systems (MS4s) serving urbanized areas with populations of 100,000 or greater to obtain National Pollutant Discharge Elimination System (NPDES) permits for municipal stormwater discharges. A MS4 is defined as a publicly owned conveyance or system of conveyances - including roadways, catch basins, curbs, gutters, ditches, man-made channels and storm drains – designed or used for collecting and conveying stormwater. NPDES municipal stormwater permits require MS4 operators to 1) effectively prohibit non-stormwater discharges to the MS4 and 2) implement controls to reduce the discharge of pollutants to the maximum extent practicable.

The Stormwater Phase II Final Rule is the next step in EPA's effort to preserve, protect, and improve the Nation's water resources from polluted storm water runoff. The Phase II program expands the Phase I program by requiring additional operators of MS4's in urbanized areas and operators of small construction sites, through the use of NPDES permits, to implement programs and practices to control stormwater runoff.

The Imperial Valley watershed is generally situated in Imperial County within the Imperial Valley Planning Area of the Colorado River Basin RWQCB. The watershed is generally defined by the boundaries of the Imperial Hydrologic Unit as described in the Water Quality Control Plan for the Colorado River Basin RWQCB (Basin Plan). Much of the watershed consists of sparsely populated mountains, desert, and agricultural lands. Urbanized areas are principally located on the valley floor between Salton City and Calexico along State Highway 86, and from Calipatria to Brawley along State Highway 111.

The Phase II federal storm water regulations (40 CFR 122.26) require municipal stormwater Permittee to develop and implement a comprehensive stormwater management program to reduce pollutants in municipal stormwater discharges to the maximum extent practicable. In 2003, the City of Brawley submitted a proposed Stormwater Management Plan (SWMP) to the RWQCB as part of their NPDES Permit application. The SWMP includes Best Management Practices (BMPs) that are expected to be incorporated into the Permit by reference.

The SWMP presents each major program area as a separate section, including the identification of any proposals for program development during the term of the Permit, and corresponding BMPs. Where applicable, performance measures are included to assess SWMP implementation and to measure progress toward the achievement of program goals.

Program Structure

Introduction & Background

Approximately fifty (50) percent of the City of Brawley's polluted storm water runoff is often transported to municipal separate storm sewer systems (MS4s) and ultimately discharged into the local river without treatment, the other 50% enters the City's wastewater collection system and it's treated at the City's wastewater treatment plant. A storm water management program can help improve the waterways by reducing the quantity of pollutants that storm water picks up and carries into storm sewer systems during storm events. Common pollutants include oil and grease from roadways, pesticide from lawns, sediment from construction sites, and carelessly discarded trash, such as cigarette butts, paper wrappers, and plastic bottles. When deposited into nearby waterways through MS4s discharges, these pollutants can impair the waterways, thereby discouraging recreational use of the resource, contaminating drinking water supplies, and interfering with the habitat for fish, other aquatic organisms, and wildlife.

Storm water discharges from MS4s in urbanized areas, due to urban development is a concern because of the high concentration of pollutants found in these discharges. Concentrated development in urbanized areas substantially increases impervious surfaces, such as city streets, driveways, parking lots, and sidewalks, on which pollutants from concentrated human activities settle and remain until a storm event washes them into nearby storm drains. Another concern is the possible illicit connections of sanitary sewers, which can result in fecal coliform bacteria entering the storm sewer system. Storm water runoff picks up and transports these as well as other harmful pollutants, previously mentioned, then discharges them – untreated – to waterways via storm sewer systems.

Phase I of the U.S. Environmental Protection Agency's (EPA) storm water program was promulgated in 1990 under the Clean Water Act. Phase I relies on National Pollutant Discharge Elimination System (NPDES) permit coverage to address storm water runoff from (1) "medium" and "large" municipal separate storm sewer systems (MS4s) generally serving populations of 100,000 or greater, (2) construction activity disturbing 5 acres of land or greater, and (3) ten categories of industrial activity.

The Storm Water Phase II Final Rule is the next step in EPA's effort to preserve, protect, and improve the Nation's water resources from polluted storm water runoff. The Phase II program expands the Phase I program by requiring additional operators of MS4's in urbanized areas and operators of small construction sites to implement programs and practices to control polluted storm water runoff.

The Phase II final rule set a deadline of March 10, 2003 to obtain permit coverage. The final rule 'automatically' covers two classes of storm water dischargers on a nationwide basis:

- (1) Operators of small MS4s located in ‘urbanized areas’ as delineated by the Bureau of the Census. A ‘small’ MS4 is any MS4 not already covered by Phase 1 of the NPDES storm water program.
- (2) Operators of small construction activities that disturb equal to or greater than 1 (one) and less than 5 (five) acres of land.

The SWMP outlines Best Management Practices (BMPs) that will be used by the Permittee to manage and control stormwater runoff to the maximum extent practicable.

Organization

The Permit identifies the City of Brawley as Principal Permittee. A working organizational framework developed during the application process which resulted in the Principal Permittee assuming responsibility for coordinating Permittee activities, including report preparation and submittals to the RWQCB.

Specific provisions of the agreement will include the cost for public education activities, and water quality monitoring. The implementation agreement will expire coincident with the expiration of the first permit.

This Stormwater Management Plan is an integral component of the NPDES Permit and is organized into the following programs:

- 1) **Public Education Program (Section 1)** – Public education is led by the Stormwater Management Plan (SWMP). The media campaign will take advantage of existing countywide resources to develop and increase public awareness of urban runoff issues.
- 2) **Public Participation Program (Section 2)** – Public participation is addressed by two components: Residential section 2A and Commercial/Industrial section 2B. By splitting the public participation program into two subsections we will be able to focus specifically on the unique characteristics of each group.
 - 2A) **Residential (Section 2A)** – The Residential program area is focused mainly in public education, encouraging watershed awareness, individual responsibility, and offering practical alternatives for citizens to properly dispose of Household Hazardous Waste (HHW). The program is implemented primarily through area-wide education activities and HHW material collection.
 - 2B) **Commercial/Industrial Program (Section 2B)** – The Commercial/Industrial program area is implemented primarily through area-wide outreach, education, and subsequent facility visits. The program includes technical training for municipal staff regarding BMPs and stormwater management at industrial and commercial sites.
- 3) **Illicit Connection/Illegal Discharge (IC/ID) Program (Section 3)** – This program involves screening, detection, and elimination of improper discharges to the storm drain

system. This program is implemented at both the area-wide and individual municipal levels.

- 4) **Construction Activities (Section 4)** – The Construction program is closely linked to New Development/Redevelopment.
- 5) **New Development/Redevelopment (Section 5)** – New Development/Redevelopment program requirements will focus on integrating stormwater management measures into current development review processes within the City’s Planning, Building and Public Works Departments.
- 6) **Municipal Agency Activities (Section 6)** – This program area is targeted at municipal operations and activities throughout the watershed, including various departments within the Public Works framework. Employee training activities are a key aspect of stormwater management at the municipal agency level.

These sections adequately address the six program elements identified in the Phase II MS 4 program requirements as published by the EPA.

Area-wide Programs

The City of Brawley employs two area-wide programs to implement certain BMPs.

Hazardous Materials Spill Response

The Fire Department’s Hazardous Materials Emergency Spill Response Team (HAZMAT Team) is a major component of the Permittee’s area-wide source control efforts. The HAZMAT Team responds to incidents of spills and illegal dumping of hazardous material throughout the watershed. HAZMAT directly oversees and directs incident response and clean up of hazardous material with the goal of preventing discharges into the municipal storm drain system. The HAZMAT Team efforts support BMPs for the IC/ID and Commercial/Industrial program areas. Details are presented in Section 3 (IC/ID).

HHW/Anti-freeze, Batteries, Oil, Latex Paint (ABOP)

The HHW and ABOP programs are principal components of the Permittee’s source control efforts. Both programs are implemented by the Imperial Valley Resource Management Agency (IVRMA). City of Brawley and the IVRMA provide practical alternatives to improper disposal of household hazardous wastes that might otherwise be disposed into the municipal storm drain system. The HHW and ABOP programs directly support BMPs for Residential and IC/ID program areas. Both programs are discussed further in Section 2A (Residential).

Legal Authority

It is expected that the initial Permit will require the City of Brawley to establish adequate legal authority to implement the provisions of the Permit in accordance with federal regulations at 40 CFR 122.26.

Following Permit adoption, the City of Brawley will examine its respective ordinance framework and adopt or modify existing ordinances to ensure adequate legal authority in accordance with the Permit requirements. The City of Brawley expect to rely on the principle of “combined legal authority” as outlined in the United States Environmental Protection Agency's (USEPA’s) Part 2 Permit Application Guidance and the City of Brawley’s application. Legal authority will then be maintained and exercised by the appropriate governmental entities with jurisdiction for the storm drain system.

Fiscal Analysis

Fiscal resources for supporting the SWMP in the Colorado River watershed will be evaluated and established, if necessary, during the Permit term.

Section 1

Public Education Program

The Permittee will develop a public education and outreach program, which is comprised of several BMPs that will be developed and implemented. The implementation of these BMPs will be accomplished primarily through the activities of the SWMP. Through the SWMP, the Permittee will develop outreach materials and methods that target both general public as well as specific audiences. Significant outreach materials and methods include:

- Focused brochures and stormwater management guides
- Mass-media stormwater educational campaigns
- School programs and classroom presentations
- Stormwater presentations to adult audiences
- Participation at Community Events

Pollution prevention strategies that will be highlighted through the above educational tools include:

- Proper disposal of household hazardous wastes
- Proper disposal of used motor oil
- Practices to reduce excessive use of pesticides and fertilizers
- Good housekeeping BMPs for homeowners and business operators
- Proper disposal of pet waste

1.1 Best Management Practices

Each program area in the SWMP is supported by multiple public education BMPs. The BMPs are implemented at either the regional or local level. Most of the BMPs are intended for multiple audiences and therefore apply to more than one stormwater management program area. See Table 1-1 for a listing of program areas and the educational BMPs that support those areas.

Table 1-1
Public Education Program BMP Summary

Program Area	Applicable BMPs	Intended Audiences	Implementation	Responsible Party	Time Schedule
Illicit Connection/ Illegal Discharges	E1, E2, E3, E4	<ul style="list-style-type: none"> Residents Groundskeepers Nurseries Comm/Industrial facility owners/operators Students 	Local	IVRMA City of Brawley	Ongoing
Commercial/ Industrial	E2, E3, E4, E9	<ul style="list-style-type: none"> Comm/Industrial facility owners/operators 	Local	IVRMA City of Brawley	Ongoing
Development and Construction	E2, E3, E9, E11, E12	<ul style="list-style-type: none"> Contractors Architects Engineers Planning/ Inspection staff 	Local	IVRMA City of Brawley	Ongoing
Municipal Agency Activities	E1, E2, E3, E4, E11, E12	<ul style="list-style-type: none"> Municipal maintenance staff 	Local	IVRMA City of Brawley	Ongoing
Residential	E1, E2, E3, E4, E7, E9	<ul style="list-style-type: none"> Residents Students 	Local	IVRMA City of Brawley	Ongoing

The sections that follow describe the outreach methods, proposed outreach activities, and program evaluation assessments. Sections 2 through 6 provide more detail about how the Permittee customize outreach activities for those individual program areas.

1.2 Outreach Methods

The Permittee will develop outreach methods to effectively reach a variety of diverse audiences. The table below presents the various outreach methods expected to be applied to targeted audiences.

Table 1-2
Outreach Methods

Audience	Outreach Methods	Responsible Party	Time Schedule
Residents	<ul style="list-style-type: none"> • Flyers • Brochures • Radio, TV/Cable commercials • Utility bill inserts • Newspaper inserts and advertisements • Community events & presentations • Video presentations for adult audiences 	IVRMA City of Brawley	Ongoing
Groundskeepers Nurseries	<ul style="list-style-type: none"> • Focused Brochures • Posters • Workshops 	IVRMA City of Brawley	Ongoing
Commercial/ Industrial	<ul style="list-style-type: none"> • Awareness Events (e.g. Pollution Prevention Week) • Brochures • Posters 	IVRMA City of Brawley	Ongoing
Students	<ul style="list-style-type: none"> • Classroom presentations • Teacher educational materials • Learning contests • Videos 	IVRMA City of Brawley	Ongoing
Contractors	<ul style="list-style-type: none"> • Brochures at City of Brawley's public counters 	IVRMA City of Brawley	Ongoing
Architects/ Developers	<ul style="list-style-type: none"> • Brochures at City of Brawley's public counters • Workshops 	IVRMA City of Brawley	Ongoing
Permittee Engineers	<ul style="list-style-type: none"> • Training modules 	IVRMA City of Brawley	Ongoing
General Public	<ul style="list-style-type: none"> • Newspaper inserts • Television commercials • Radio campaigns • Adult presentations • Awareness Events (e.g. Pollution Prevention Week) 	IVRMA City of Brawley	Ongoing

1.3 Proposed Outreach Activities

1.3.1 Media Efforts

The City of Brawley in collaboration with IVRMA and the other jurisdictions to conduct radio advertising campaigns addressing stormwater pollution prevention. This effort will increase public awareness during the initial Permit term and will be supplemented by updated stormwater management information.

The City of Brawley in collaboration with IVRMA and the other jurisdictions to develop newspaper inserts, poly bags (plastic covers for newspapers used on rainy days) and other various advertisements to help increase public awareness. The City of Brawley will collaborate with IVRMA and the other jurisdictions develop a stenciling program. Brochures will also be developed addressing topics such as pool discharges and pet waste.

1.3.2 Presentations

The City of Brawley in collaboration with IVRMA will conduct garden workshops at local nurseries and home improvement centers. At these workshops residents will learn about insectary plants that help attract beneficial insects and other plants that help deter harmful pests. The workshop will also include information on composting and mulching for erosion control. The City of Brawley in association with IVRMA will also provide educational information and materials at workshops for landscape contractors, and groundskeepers.

The City of Brawley will also provide presentations to civic club gatherings. At the presentations civic club members will be informed about the problem of stormwater pollution and what they can do to help prevent it. Presentations will conclude with material distribution and a question and answer period. The City of Brawley will be developing a presentation outline that will be specific for homeowner associations. The presentation will focus on the topic of pesticides/fertilizers and erosion control in the home garden. The presentation will also cover the proper disposal of unwanted garden chemicals.

It is anticipated that a partnership with the California Conservation Corps (CCC) and the Imperial Valley Regional Management Association (IVRMA) will be developed to conduct various community outreach for the City of Brawley. The potential scope of work will include attending various events throughout the City of Brawley, distributing educational materials to residents, conducting classroom presentations, and conducting surveys to help measure residents' knowledge of stormwater pollution.

1.3.3 Scholastic Events

Classroom presentations to classes in middle and high schools within the City of Brawley's service area will be held. The presentations will identify the causes of stormwater pollution, its effects on surface waters, and what students can do to prevent it. Topics will include motor oil recycling, responsible car wash events, proper use of material according to label instructions, and

proper disposal of Household Hazardous Waste (HHW), fertilizer, trash, yard clippings, and pet waste.

1.4 Evaluation / Assessment

The primary performance targets for public education and outreach activities are the number of the audiences reached and their level of knowledge for stormwater pollution prevention. The evaluation and assessment of the Public Education Program will be accomplished by collecting a list of data, categorized by the types of audiences and distribution media as follows.

- Number of educational materials distributed at community events
- Attendance at community events
- Number of educational materials distributed at school presentations
- Attendance at school presentations
- Number of adult presentations provided
- Attendance at adult presentations
- Number of educational materials distributed at Permittee public counters
- Number of construction and development-focused workshops conducted
- Attendance at construction/development workshops
- Number of development staff training sessions conducted
- Attendance at development staff training sessions
- Local television, radio, and newspaper circulation estimates

Section 2A

Residential

The Residential program is designed to educate the general public on the importance of stormwater pollution prevention. The program focuses on residential activities such as vehicle washing and maintenance, landscaping, home maintenance, illegal dumping, and pet ownership. This section presents:

- Current Activities and Source Identification that are the focus of BMP implementation (2A.1)
- BMPs to manage both stormwater and non-stormwater discharges for the next Permit term (2A.2)
- Education for general public on residential related stormwater quality issues (2A.3)
- Evaluation and Assessment of BMPs (2A.4)

2A.1 Current Activities and Source Identification

2A.1.1 Vehicle Washing and Maintenance

This category encompasses vehicle washing and maintenance activities that present opportunities for harmful pollutants such as soap, motor oil, radiator fluid, etc. to enter into the storm drain system. The SWMP will work cooperatively with the City of Brawley's and the IVRMA's motor oil recycling programs to distribute informational materials that address the importance of proper disposal of used motor oil. In addition, the City of Brawley will provide information on vehicle washing and maintenance related pollution prevention and control activities through distribution of brochures, utility inserts and newspaper advertisements, presentations to student and adult audiences, etc. Please refer to Section 1 Public Education Program for more information.

2A.1.2 Landscaping

Landscaping related activities such as mowing, fertilizing, weeding, etc. are potential sources of stormwater pollution. The improper handling of grass clippings, chemical fertilizers and pesticides can introduce pollutants into stormwater system and jeopardize the quality of the receiving waters. The City of Brawley will develop a home garden care brochure to inform residents of the adverse effects of stormwater pollution and to offer environmentally safe alternatives such as Integrated Pest Management, Companion Planting, Soil Solarization and Composting. The brochures will be distributed to the general public via public offices, local nurseries, home improvement centers, garden workshops conducted by the Agricultural Commissioner and the UC Riverside Cooperative Extension. Other environmental educational tools such as video, newspaper insert, poly bag for newspaper, etc. will be developed to help

increase public awareness in stormwater pollution prevention. Please refer to Section 1 Public Education Program for more information.

2A.1.3 Home Maintenance

This category encompasses BMPs to facilitate the proper use and disposal of common household products such as insecticides, batteries, latex paints, varnishes, cleaners, etc. The City of Brawley will develop a brochure to educate residents on the importance of proper disposal of household hazardous wastes as well as offer less toxic alternatives to commonly used household products. The IVRMA sponsors HHW Collection Events and ABOP Centers to encourage the proper disposal of household hazardous wastes. Please refer to Section 1 Public Education Program for more information.

2A.1.4 Illegal Dumping

This category covers the full array of activities by residents that involve the improper disposal of waste materials into the storm drain system. Environmental educational tools that include brochures, video, public services announcements, etc. will be developed to inform the general public on the detrimental effects of stormwater pollution. Another activity will include the use of "Notice of Violation" (NOV) door hanger notices specifically developed for the residential setting to inform residents of potential improper discharges from their properties. In addition, a catch basin stenciling program will be implemented to remind residents that no dumping is allowed. Please refer to Section 1 Public Education Program for more information.

2A.1.5 Pet Ownership

The importance of proper clean-up and disposal of pet waste will be addressed and emphasized throughout the Public Education Program campaign in various formats including educational brochures, video presentations, radio commercials, etc. The intent is to educate both adults and children on the adverse effects of improper disposal of pet waste and to cultivate awareness of responsible pet care to prevent stormwater pollution and potential health hazard.

2A.2 Best Management Practices

Program activities for these residential activities and the corresponding BMPs are discussed in the following sections

2A.2.1 Vehicle Washing and Maintenance

The Public Education Program will inform the general public of pollution prevention and control methods related to vehicle washing and maintenance. The City of Brawley in cooperation with IVRMA will continue the motor oil recycling programs to encourage the proper disposal of used motor oil. Applicable BMPs are summarized in Table 2-1 below.

Table 2-1
Vehicle Washing and Maintenance BMP Summary

BMPs	Description	Responsible Party	Time Schedule
E2	Educate/inform the general public on the impacts of littering and other improper disposal.	IVRMA City of Brawley	Ongoing
E3	Educate/inform the general public on the impacts of dumping pollutants into the storm drainage system.	IVRMA City of Brawley	Ongoing
E4	Educate/inform the general public on impacts from leakage or dumping of gasoline, oil and grease, antifreeze and hydraulic fluid from vehicles into the streets.	IVRMA City of Brawley	Ongoing

2A.2.2 Landscaping

The City of Brawley in collaboration with IVRMA and other jurisdictions will offer home gardening workshops at local nurseries and home improvement centers to educate the general public on the importance to reduce/eliminate the use of pesticides and fertilizers, to handle landscape wastes properly, and to avoid excessive irrigation. As part of the public education program, the City of Brawley in collaboration with IVRMA and other jurisdictions will offer and conduct landscape training for contractors and groundskeepers through the University of California Riverside Cooperative Extension Workshops. The City of Brawley in association with IVRMA will be placing display units with information on stormwater pollution, household hazardous waste, less toxic home gardening alternative products, etc. at public outreach events and libraries. Applicable BMPs are summarized in Table 2A-2 below.

Table 2A-2
Landscaping BMP Summary

BMPs	Description	Responsible Party	Time Schedule
E1	Educate/inform the general public on the proper application and management of pesticides, fertilizers and herbicides, as well as the proper management of irrigation systems to prevent runoff drainage to municipal storm drain system. Where appropriate, coordinate with the Soil Conservation Service, Resource Conservation Districts and UC Riverside Cooperative Extension.	IVRMA City of Brawley	Ongoing
E3	Educate/inform the general public on the impacts of dumping pollutants into the storm drainage system.	City of Brawley	Ongoing

SW3	Support the efforts of the IVRMA Household Hazardous Waste Program which provides a convenient means to properly dispose of oil, antifreeze, pesticides, herbicides, paints, solvents, and other potentially harmful chemicals.	IVRMA City of Brawley	Ongoing
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2A.2.3 Home Maintenance

The City of Brawley in collaboration with IVRMA will address home maintenance related issues through the public education program, HHW Collection Events and ABOP Centers. The public education efforts will include radio and cable television campaigns, utility bill inserts, newspaper inserts, brochures, presentations, etc. to inform the general public of the proper disposal of household hazardous wastes and to offer less toxic alternative products. Home maintenance BMPs are shown below in Table 2A-3.

*Table 2A-3
Home Maintenance BMP Summary*

BMPs	Description	Responsible Party	Time Schedule
E3	Educate/inform the general public on the impacts of dumping pollutants into the storm drainage system.	IVRMA City of Brawley	Ongoing
SW3	Continue to support the efforts of the IVWMTF Household Hazardous Waste Program which provides a convenient means to properly dispose of oil, antifreeze, pesticides, herbicides, paints, solvents, and other potentially harmful chemicals.	IVRMA City of Brawley	Ongoing

2A.2.4 Illegal Dumping

The City of Brawley will implement BMPs including public education, catch basin stenciling program, Notice Of Violation(NOV) door hanger notices to curtail illegal dumping activities. Please refer to Section 3 Illicit Connections and Illegal Discharges of this report for more information. Table 2A-4 summarizes applicable BMPs.

Table 2A-4
Illegal Dumping BMP Summary

BMPs	Description	Responsible Party	Time Schedule
E2	Educate/inform the general public on the impacts of littering and other improper disposal.	IVRMA City of Brawley	Ongoing
E3	Educate/inform the general public on the impacts of dumping pollutants into the storm drainage system.	IVRMA City of Brawley	Ongoing
SW1	Provide, collect, and maintain litter receptacles in strategic public areas and during public events.	IVRMA City of Brawley	Ongoing
OM1	Develop a program, continue and/or expand an existing field program to detect and prevent dumping or routinely discharging pollutants into storm drains and drainage channels.	IVRMA City of Brawley	Ongoing

2A.2.5 Pet Ownership

The City of Brawley will use an area-wide public education program to inform pet owners of the importance of responsible pet care and to curtail the improper disposal of pet wastes. The City of Brawley will develop a "focused" brochure for pet owners on proper disposal of pet wastes. Table 2A-5 describes applicable BMPs.

Table 2A-5
Pet Ownership BMP Summary

BMPs	Description	Responsible Party	Time Schedule
E7	Educate/inform the general public regarding the need to clean-up and properly dispose of pet waste.	City of Brawley	Ongoing
R3	Implement and enforce leash laws and other pet laws (i.e., pet waste clean-up, no pets in public areas) in selected public-use areas.	City of Brawley	Ongoing

2A.3 Education

The area-wide public education program will present and offer environmental educational materials to the general public through various forms of media that include workshop, video, brochure, catch basin stenciling, NOV door hanger notices, radio and cable television campaigns, utility bill inserts and newspaper inserts. Please refer to Section 1 Public Education Program for more information.

2A.4 Evaluation/Assessment

The Permittee will use the following targets to provide consistency among the Permittee's programs to gauge effort and assess future outreach. The proposed evaluation and assessment requirements for each BMP are shown below in Table 2A-6.

Table 2A-6
Evaluation & Assessment Summary

BMPs	Assessment Target	Responsible Party	Time Schedule
SW3	Household Hazardous Waste Collection Program: (1) track event dates and number of days per event; (2) track type and amount of material collected; and (3) track advertisement expenditures by type (newspaper, television, radio, banners, flyers, etc.) for the Permittee's internal use.	IVRMA City of Brawley	Ongoing

Section 2B

Commercial/Industrial Program

The purpose of this program area is to conduct source identification and outreach to reduce discharge of pollutants from both commercial businesses and industrial operations.

The Commercial/Industrial section presents:

- Current activities that are the focus of BMP implementation (2B.1)
- BMPs to manage stormwater runoff and non-stormwater discharges for the Permit term (2B.2)
- Training for municipal staff in Commercial/Industrial BMPs (2B.3)
- Evaluation & Assessment of BMPs (2B.4)

2B.1 Current Activities and Source Identification

Activities by the City of Brawley for stormwater management are presented in this section. Continual source identification is critical to effective program implementation, as it helps the City of Brawley focus their management efforts. Four sectors targeted for outreach are restaurants, automotive businesses, mobile business operators, and industrial facilities.

2B.1.1 Public Education

The Commercial/Industrial Compliance Assistance Program (C/ICAP) builds on the expertise of two existing inspection programs to provide technical assistance to commercial operators in stormwater management and compliance. Program implementation involves focused public outreach for food service and hazardous waste permitted including auto repair, gas stations, etc.

The City of Brawley will develop a series of “focused” BMP brochures that target the commercial and industrial businesses. These brochures will provide useful guidelines on proper clean-up and waste disposal procedures. Complementary posters illustrating recommended stormwater BMPs will also be developed for automotive service facilities and restaurants to serve as visual reminders for employees. Distribution of these brochures and posters is expected to be accomplished through the C/ICAP, City of Brawley departments, and other jurisdictions that regularly deal with commercial and industrial businesses.

A brochure will be developed that will provide information on how to submit a Notice of Intent (NOI) form for industrial facilities and list certain manufacturing operations that may require coverage under the Industrial Activities Storm Water General Permit. This brochure will be circulated via the City of Brawley’s permit counters and the C/ICAP.

2B.1.2 General Industrial Permit Coordination

Many manufacturing and industrial operations are subject to the requirements of the State's General Permit for Discharges of Storm Water Associated with Industrial Activities (General Industrial Permit). BMP R14 requires the Permittee to obtain proof of compliance prior to issuance of a business license or a certificate of occupancy for new industrial facilities.

2B.2 Best Management Practices

Several of the BMPs that were developed support multiple program areas. Those that provide direct support to the commercial/industrial program are discussed in the subsections that follow.

BMP implementation in the commercial/industrial program area addresses:

- Source Identification (2B.2.2)
- Outreach (2B.2.3)

2B.2.1 Source Identification

Source identification of commercial/industrial operations will involve continuing the present program of tracking businesses specific to the Colorado River watershed that are potential pollutant sources. Table 2B-1 shows the primary BMPs for accomplishing source identification.

During the next Permit term:

1. The Permittee will annually contact the RWQCB to obtain an updated list of commercial and industrial operations covered by the General Industrial Permit in their respective jurisdiction (**BMP OM1C**). The list will supplement the County Hazardous Materials Management Division Inspection Program list to target outreach for commercial and industrial activities.
2. The Permittee will coordinate with the Imperial County Department of Environmental Health to obtain an updated list of Commercial and Industrial Facilities in the Hazardous Materials Management Division Inspection Program (**BMP OM1C**).
3. The Permittees will provide the Public Education Coordinator with the name, address, and telephone number of mobile cleaning services within their respective jurisdictions using available information sources including business license databases or telephone directories, etc., to conduct outreach (**BMP OM1C**).
4. The Permittees will require new industrial facilities subject to the General Industrial Permit to show proof of compliance prior to issuance of a business license or a certificate of occupancy (**BMP R14**).

Table2B-1
Source Identification BMP Summary

	Description	Responsible Party	Time Schedule
OM1C	Coordinate with County Health Department, local fire departments, Colorado RWQCB, and other departments as necessary to develop a target list of industries which are known to be contributing substantial pollutant loads to the storm drain system. Develop and/or enhance inspection and notification procedures for these facilities.	City of Brawley	24 Months
R14A	Develop, implement, and enforce regulations that require all new industrial facilities subject to the General Industrial Permit to show proof of compliance (such as a file number from submittal of a Notice of Intent) prior to: 1) issuance of a business license (applicable only to municipalities which require business licenses) or 2) issuance of a certificate of occupancy for new developments.	City of Brawley	48 Months

2B.2.2 Outreach

The BMPs highlighted below in Table 2B-2 support the outreach component of the commercial/industrial program. The City of Brawley in association with IVRMA will distribute educational materials with content specific to controlling stormwater quality at restaurant, automotive service, and industrial facilities.

During the Permit term:

Outreach will be started by the C/ICAP. The C/ICAP will perform outreach to commercial and industrial facilities. During the first year of the Permit term, the City of Brawley will develop a target list of businesses likely to be contributing pollutant loads (**BMP OM1C**). An implementation schedule for field visits will be developed using the County Environmental Health Department's existing inspection schedules (**BMP OM1D**). It is anticipated that restaurants will be visited once a year and HMMD facilities will be visited once every two years.

Beginning in the second year of the Permit term, City of Brawley Public Works inspections will include targeted commercial and industrial sites. These sites will be selected from the information base composed in **BMP OM1C**.

The site visits will be prioritized through **BMP OM1D**. The visits will include following elements:

- Confirm that a Stormwater Pollution Prevention Plan (SWPPP) is in place and being implemented if the activity is required to comply with the General Industrial Permit. If no SWPPP is on hand and being implemented, the owner will be informed of a potential violation and the need to comply.
- Provide general guidance on BMPs for the site.

The City of Brawley will target and direct outreach to specific activities based on the updated General Industrial Permit NOI list obtained from the RWQCB. Supplement the industrial activity list with commercial businesses from Imperial County Environmental Health Hazardous Materials Management Program Listing of Commercial and Industrial facilities.

***Table 2B-2
Outreach BMPs Summary***

BMPs	Description	Responsible Party	Time Schedule
E2	Educate/inform the general public on impacts from littering and improper waste disposal.	IVRMA City of Brawley	12 Months Ongoing
E3	Educate/inform the general public on impacts from dumping pollutants into storm drainage system.	IVRMA City of Brawley	12 Months Ongoing
E4	Educate/inform the general public on impacts from leakage or dumping of gasoline, oil and grease, antifreeze and hydraulic fluid from vehicles into the streets.	IVRMA City of Brawley	12 Months Ongoing
E9	Educate/inform the landowners, tenants, business owners, and industrial operations (with special attention to facilities known to be contributing substantial pollutant loading to the storm drain system) regarding the need to provide covers (roofs, tarps) to keep rain off of areas which contain potential contaminants (such as chemical, waste and industrial storage areas) and keep runoff from draining through areas which contain contaminants.	IVRMA City of Brawley	24 Month Initial Ongoing

2B.3 Training

Information on staff training during the Permit term is described in Section 3.3. The City of Brawley Public Works Personnel who conducts inspections through the Commercial/Industrial Compliance Assistance Program will receive an orientation pertaining to the General Industrial Permit and related BMPs.

2B.4 Evaluation/Assessment

Evaluation and assessment of BMP performance and Permittee compliance will be accomplished primarily through reporting and documentation. Assessment measures shown in Table 2B-3 below will reflect progress for Commercial/Industrial BMPs.

***Table2B-3
Evaluation & Assessment Requirements***

BMPs	Assessment Target	Responsible Party	Time Schedule
OM1C	Number of commercial and industry facilities in the source database, by type: <ul style="list-style-type: none"> • Restaurant • Automotive Service • Industrial • Mobile Cleaning Business 	City of Brawley	18 Months
OM1E	Number of commercial and industrial facilities visited (during Permit year 3, to continue each year through the Permit term): <ul style="list-style-type: none"> • Implement BMPs • Maintain a SWPPP (if required by the General Industrial Permit) 	City of Brawley	24 Months

Section 3

Illicit Connection/Illegal Discharge Program

The IC/ID program is designed to detect and eliminate improper discharges to the municipal storm drain system. The IC/ID program is incorporated in the SWMP, and implemented at both the local and area-wide levels. IC/ID issues specific to Commercial/Industrial operations are presented in Section 4.

The IC/ID program includes:

- Current activities focusing on BMP implementation (3.1)
- BMPs to manage stormwater runoff and non-stormwater discharges for the Permit term (3.2)
- Training for municipal staff in IC/ID BMPs (3.3)
- Evaluation & Assessment of BMPs (3.4)

The federal stormwater regulations (40 CFR 122.26) require that the IC/ID program include: “a description of a program, including inspections, to implement and enforce an ordinance, orders, or similar means to prevent illicit discharges to the municipal separate storm sewer system; this program description shall address all types of illicit discharges...”

Three types of releases, generally referred to as "improper discharges" to the storm drain system are addressed under this IC/ID program:

- **Illicit discharge:** An illicit discharge is any discharge that is not composed entirely of storm water except discharges pursuant to a NPDES Permit and other exempt discharges such as fire fighting flows and others. Illicit discharges can be considered any non-storm water discharges, which enter or have the potential to enter the storm drain system through illicit connections or illegal dumping.
- **Illicit connection:** An illicit connection is a direct physical connection to a storm drain, which allows prohibited discharges to enter the storm drain system. Examples include sanitary sewer connections, industrial process waters, and floor drains.
- **Illegal dumping:** Illegal dumping is the intermittent discharge of pollutants into the storm drain system through either legal connections, such as catch basins, or by direct dumping into drains, road borrow pits, and channels. This could include the disposal of used oil, paint, and wash water. In addition, illegal dumping includes the illegal disposal of pollutant material in the road borrow pits, drains, and channels throughout the Imperial

Valley drainage area such that stormwater can eventually mobilize it and carry it to other portions of the storm drain system and to receiving waters.

3.1 Current Activities and Source Identification

The City of Brawley will implement BMPs to perform public outreach, respond to field observations, and contain and clean up improper discharges when required. The specific activities used to address IC/ID issues are presented below.

3.1.1 Outreach

The purpose of this activity is to inform the public about the detrimental effects that illegal discharges have on stormwater quality. The SWMP is the primary mechanism for IC/ID outreach. The SWMP includes public education on the full scope of stormwater pollution prevention including encouraging the public to report suspected incidents of IC/ID. The SWMP outreach activities are further described in Section 1, Public Education Program.

3.1.2 Field Screening/System Surveillance

Field Screening/System Surveillance consists of three elements:

- source identification
- routine field inspection/screening of storm drain
- routine inspection of facilities

Source identification will be performed during the initial Permit term in accordance with the NPDES Permit. The source identification efforts are further described in section 2B.2.1 and 2B.2.2.

Current field inspection/screening of the storm drain system will be performed by various the City of Brawley's Public Works Department staff. The City of Brawley's code enforcement staff routinely patrol and inspect municipal facilities, and report IC/ID incidents. The City of Brawley Public Works Personnel will instruct other departments, such as building inspectors, fire department, and community service staff to report IC/ID incidents while in the field performing their specific duties. City of Brawley Public works department personnel also inspects catch basins either as part of routine maintenance, or on a periodic (semi-annual/annual) basis. The City of Brawley performs regular field inspections of their respective municipal storm drain system as part of ongoing facility maintenance programs.

City of Brawley personnel also conduct periodic facilities reconnaissance targeting commercial/industrial areas and remote areas for IC/ID. Routine facility inspections are further addressed through the Commercial/Industrial Compliance Assistance Program described in Section 2B.1.1.

In addition to field screening and surveillance, the City of Brawley will address swimming pool discharges. The City of Brawley has adequate legal authority to halt an IC/ID incident that results in the improper disposal of swimming pool discharges.

3.1.3 Reporting

The purpose of standardized reporting is to formalize the procedures followed for incident documentation and follow up. During the initial Permit term, the City of Brawley will develop a program for reporting and documenting illegal discharges, spills, and dumping.

The City of Brawley will develop and use internal log forms to document reports of IC/ID. The log forms will also be used by personnel to record observations in the field of improper discharge. Incidents involving hazardous materials are documented using a standard California Hazardous Material Incident Report form.

3.1.4 Incident Response, Investigation, and Clean up

The purpose of this activity is to address the procedures followed for incident response, investigation, and cleanup. Presently, the City of Brawley's Public Works Personnel respond to notification of illegal discharges by taking phone calls, assessing the magnitude of the discharge, and either initiating direct follow-up or referring the call to HAZMAT (if a significant quantity of hazardous materials is reported).

City of Brawley Public Works personnel handle response and initiate clean up in cases of minor spills involving non-hazardous materials. Examples include paint spills into the city streets. The HAZMAT team responds directly to accidental spills or illegal dumping of hazardous materials, and provides support services to other agencies that encounter hazardous materials in the routine of their duties. An example of support services includes assisting police during illegal narcotics investigations. The HAZMAT team operates 24 hours a day, seven days a week. The team's duties include, but are not limited to, directing the containment and clean up of spills that may enter surface waters or flow directly to the municipal storm drain system.

3.2 Best Management Practices

3.2.1 Outreach

During the Permit term, City of Brawley will develop informational materials that clearly define illegal discharges, explain their impacts on stormwater, and describe why such discharges should be prevented through the Public Education Program. These efforts support the educational BMPs shown below in Table 3-1. Available informational materials may include audio and video Public Service Announcements, utility inserts, brochures, adult and classroom presentations, catch basin stenciling, water-drop magnets, print and radio advertisement campaigns, library displays, school programs, and workshops. City of Brawley will distribute informational materials as detailed in Section 1 Public Education Program.

The City of Brawley also will support the Imperial Valley Regional Management Agency (IVRMA). The IVRMA sponsors a HHW Program that provides mobile collection events, while the ABOP provides a fixed facility for disposal. Under these programs, residents can dispose of used motor oil and other types of HHW free of charge at both mobile and permanent collection facilities throughout the Permit area as detailed in Section 1 Public Education Program.

Table 3-1
Outreach BMP Summary

BMPs	Description	Responsible Party	Time Schedule
E1	Educate/inform the general public on the proper application and management of pesticides, fertilizers and herbicides, as well as the proper management of irrigation systems to prevent runoff drainage to municipal storm drain system. Where appropriate, coordinate with the Soil Conservation Service, Resource Conservation Districts and UC Riverside Cooperative Extension.	IVRMA City of Brawley	Ongoing
E2	Educate/inform the general public on the impacts of litter and improper waste disposal.	IVRMA City of Brawley	Ongoing
E3	Educate/inform the general public on impacts from dumping pollutants into storm drainage system.	IVRMA City of Brawley	Ongoing
E4	Educate/inform the general public on impacts from leakage or dumping of gasoline, oil and grease, antifreeze and hydraulic fluid from vehicles into the streets.	IVRMA City of Brawley	Ongoing

3.2.2 Field Screening/System Surveillance

The City of Brawley is expected to be required to report additions or modifications of new outfalls, major structural controls, and the list of industrial operations subject to storm water regulations. The City of Brawley will report and update these items as required. The list of industrial operations subject to storm water regulations can be updated through the C/ICAP and General Industrial Permit Coordination activities discussed in Section 2B. Table 3-2 summarizes the BMPs for field screening/system surveillance.

1. The City of Brawley will develop and use a standardized field inspection/reporting form for documenting IC/ID incidents (**BMP OM1B**).
2. The City of Brawley will establish an implementation schedule (**BMP OM1C, BMP OM1D**) for conducting IC/ID field inspections within their respective jurisdictions. The schedule will address:
 - Hazardous Materials Management facilities database
 - RWQCB General Industrial Permit database

- Major outfalls identified during the initial Permit term

The City of Brawley will conduct and document field inspections during the performance of existing field activities, recording IC/ID observations on the standardized inspection form (**BMP OM1E**).

Table 3-2
Field Screening BMP Summary

BMPs	Description	Responsible Party	Time Schedule
OM1B	Develop forms (or other mechanism) for reporting the observations of field personnel of unauthorized dumping or spills so the information can be used to help locate the source of pollutants.	City of Brawley	12 Months
OM1C	Coordinate with Imperial County Health Department, local fire departments, Colorado RWQCB, and other departments as necessary to develop a target list of industries which are known to be contributing substantial pollutant loads to the storm drain system. Develop and/or enhance inspection and notification procedures for these facilities.	City of Brawley	12 Months
OM1D	Develop implementation schedule for conducting field inspections of storm drain system and targeted industrial facilities.	City of Brawley	12 Months
OM1E	Conduct field inspections to ensure identification and elimination of illegal dumping and discharge.	City of Brawley	12 Months Ongoing

3.2.3 Reporting

For the Permit term, the City of Brawley will develop and use the standardized reporting form described in section 3.2.2 to document IC/ID incidents. Table 3-3 summarizes the related BMP for IC/ID reporting. The present system for internal reporting will remain in effect, supported by the existing framework of routine inspections by the City of Brawley Public Works Personnel.

For the Permit term:

The City of Brawley Public Works personnel will use the standardized form described in 3.2.2 for reporting the IC/ID observations. (**BMP OM1B**).

Table 3-3
Reporting BMP Summary

BMP	Description	Responsible Party	Time Schedule
OM1B	Develop forms (or other mechanism) for reporting the observations of field personnel of unauthorized dumping or spills so the information can be used to help locate the source of pollutants.	City of Brawley	12 Months

3.2.4 Incident Response, Investigation, and Clean up

The HAZMAT Team responds directly to accidental spills and illegal dumping of hazardous materials and provides support to other agencies that encounter hazardous materials in the course of their duties. The City of Brawley's continued support of the HAZMAT Team helps ensure that spills or illegal dumping of hazardous material will be responded to in a timely and professional manner, thereby reducing the potential impact on municipal storm drain systems and receiving waters.

Over the Permit term, the City of Brawley will continue to contribute financially to support the Imperial County and local HAZMAT crews responding to IC/ID incidents. The corresponding BMP is shown below in Table 3-4.

Table 3-4
Incident Response, Investigation, and Cleanup BMP Summary

BMP	Description	Responsible Party	Time Schedule
SW4	Continue to support the existing hazardous materials incident response programs implemented by the HAZMAT Team.	City of Brawley Imperial County	Ongoing

3.3 Training

During routine maintenance facility inspections, maintenance staff may come across evidence of potential stormwater pollution and/or illicit discharges. Therefore, training personnel to recognize and respond appropriately to stormwater pollution problems is an integral part of the IC/ID program.

During the Permit term:

- NPDES coordinators will develop and document their respective staff training activities and forward the information for inclusion in the Annual Report. The documentation will

include pertinent information such as, but not limited to, the number of personnel in attendance and the type of training received.

- NPDES coordinators will attend at least one training session annually at any of the existing training forums available in the local area.
- NPDES coordinators will use municipal staff forums to hold briefings for appropriate staff on commercial/industrial stormwater issues.

The corresponding BMP is shown in Table 3-5. This BMP incorporates general training instruction for all aspects of municipal stormwater management. Training for the IC/ID program may be conducted in conjunction with training for other portions of the municipal stormwater program discussed elsewhere in this manual.

***Table3-5
Training BMP Summary***

BMP	Description	Responsible Party	Time Schedule
OM1A	Develop and conduct a training program for field personnel (including in-field workshops) to conduct inspections. Training program may include development of appropriate field manuals, training materials, and field sampling techniques and procedures.	City of Brawley	12 Month Initial Ongoing

3.4 Evaluation/Assessment

Evaluation and assessment of BMP performance and City of Brawley compliance will be accomplished primarily through reporting and documentation. The proposed evaluation and assessment requirements for each BMP are shown below in Table 3-6.

Table 3-6
Evaluation & Assessment Summary

BMPs	Assessment Target	Responsible Party	Time Schedule
OM1A, OM1B, OM1E	<p>Personnel training – number of employees trained, by department or function</p> <p>Meet present BMP standards, such as use of standardized IC/ID reporting form</p> <p>Collect information on IC/ID reports:</p> <ul style="list-style-type: none"> • Number of reports received • Number of cases investigated/responded to: • Source of IC/ID • Final outcome of case (e.g., spill/connection was terminated and cleaned up, source owner/operator educational visit, warning letter, referral to enforcement agency) • Number of enforcement actions issued/taken (e.g., notice of non-compliance, notice of violation and order to comply, referral to District Attorney for prosecution) 	<p style="text-align: center;">City of Brawley</p>	<p style="text-align: center;">12 Month Initial Ongoing</p>
E2, E3, E4	<p>Number of education events conducted, by type (e.g., workshops, fairs, public counter assistance, etc.)</p> <p>Event attendance, by event type</p> <p>Number of outreach materials distributed through newspapers, direct mailings, and utility bill inserts.</p>	<p style="text-align: center;">IVRMA City of Brawley</p>	<p style="text-align: center;">12 Months Initial Ongoing</p>

Section 4

Construction Activities

The Construction Activities section presents:

- Activities that are the focus of BMP implementation (4.1)
- BMPs to manage stormwater and non-stormwater from new development, redevelopment, and construction activities for the Permit term (4.2)
- Training for municipal staff in development/construction BMPs (4.3)
- Evaluation & Assessment of BMPs (4.4)

4.1 Current Activities and Source Identification

4.1.1 Construction Activities

The City of Brawley will implement two processes for construction as requirements of the Permit:

1. For City of Brawley public works projects, the City of Brawley will utilize BMP's as defined in the manual entitled "Water Quality Construction Best Management Practices" (attachment A).
2. For private sector (non-public works projects) that require coverage under the General Construction Permit, the City of Brawley will verify that applicants have filed a NOI prior to the issuance of a grading permit.

4.2 Best Management Practices

This section identifies and describes BMPs proposed by the City of Brawley.

4.2.1 Construction Activities

Construction related activities conducted at project sites such as storage and handling of materials, fueling, equipment maintenance, etc. present opportunities for introducing potential pollutants into the storm drain system. The City of Brawley will implement requirements set for public works related construction activities as directed by the Permit that include:

- Reporting public works construction projects to the RWQCB that would otherwise necessitate coverage under the Statewide General Permit

- Preparing SWPPPs for public works projects
- Inspecting public works construction sites
- Verifying NOI submittal for non-public works (private sector) construction projects that require coverage under the General Construction Permit prior to the issuance of grading permits.

BMPs shown in Table 4-2 will be used to reduce pollutant discharges from construction sites.

During the Permit term:

1. The City of Brawley will require proof of permit coverage by private sector construction projects that require coverage under the General Construction Permit
2. The City of Brawley will implement the requirements of the initial Municipal Permit for public works projects.

Table 4-2
Construction BMP Summary

BMPs	Description	Responsible Party	Time Schedule
E11	Inform contractors, operators, and agency staff about upcoming educational and training workshops on construction site erosion control and construction materials management sponsored by professional organizations and public agencies. Make associated public education materials available at the public counter and staff bulletin boards, as appropriate.	IVRMA City of Brawley	Ongoing
R6	Review existing grading and erosion control ordinances, if any, to determine the adequacy of existing controls for construction site erosion, sedimentation, and construction material pollutants (i.e. paints, masonry wastes, etc.). The evaluation should also include an assessment of enforcement actions.	City of Brawley	24 Months
R7	Establish a model construction site control ordinance (if determined necessary based on BMP R6) for future adoption. The ordinance will require control of pollutants from construction sites including erosion and construction material.	City of Brawley	24 Months
OM	Identify priorities for inspecting sites and enforcing control measures for construction projects that disturb greater than 5 acres (Phase I requirements), between 1 and 5 acres (Phase II requirements), and sites disturbing less than 1 acre.	City of Brawley	On Going

4.3 Training

To support effective stormwater and non-stormwater pollution prevention the City of Brawley will develop and provide informational and appropriate training sessions that can be provided to personnel who conduct construction site inspections. Training outlined in Section 2.3 will include construction related stormwater and non-stormwater issues. New development/significant redevelopment and construction training modules will contain a construction stormwater orientation for plan check staff and field inspectors. Topics will cover:

- Phase I and Phase II regulations
- SWPPP preparation
- Site inspection criteria and priorities

4.4 Evaluation/Assessment

Evaluation and assessment of BMP performance and City of Brawley compliance will be accomplished primarily through reporting and documentation. The proposed evaluation and assessment measures shown in Table 4-3 will be used to evaluate progress for each BMP as follows:

*Table 4-3
Evaluation & Assessment Requirements*

BMPs	Assessment Target	Responsible Party	Time Schedule
E11	Describe workshops and efforts to publicize them to the target audience.	IVRMA City of Brawley	12 Months
E12	Describe educational materials developed in support of the New Development Guidelines.	IVRMA City of Brawley	24 Months
R6(C)	Confirm that existing ordinances adequately address Phase I and Phase II requirements.	City of Brawley	24 Months
R7(C)	Adopt appropriate modifications, if necessary, to implement BMP R6.	City of Brawley	36 Months
OM(C)	List priorities, develop implementation schedule for inspections. Conduct site inspections within existing building/grading inspection framework based on priorities.	City of Brawley	12 Months

Legend:

C Construction

Section 5

New Development/Redevelopment and Post Construction Activities

The New Development/Redevelopment and Post Construction Activities section presents:

- Activities that are the focus of BMP implementation (5.1)
- BMPs to manage stormwater and non-stormwater from new development, redevelopment, and construction activities for the Permit term (5.2)
- Training for municipal staff in development/construction BMPs (5.3)
- Evaluation & Assessment of BMPs (5.4)

5.1 Current Activities and Source Identification

5.1.1 New Development and Redevelopment

Both stormwater peak flows and volume increase as the community is progressively built out and impervious surfaces replace the natural topography. In addition, new urban areas contribute to the runoff pollutant loads by creating new sources.

The new development and redevelopment program element is directed at reducing pollutant discharges from all types of land uses, including residential, commercial, and industrial. New development is considered construction on a previously undisturbed parcel. A redevelopment project is any project where a major modification to an existing site or structure requiring a permit is undertaken. Routine maintenance, interior remodeling, re-roofing, and parking lot maintenance are not included. A redevelopment project is not to be confused with the projects undertaken by a Redevelopment Agency.

5.2 Best Management Practices

This section identifies and describes BMPs proposed by the City of Brawley.

5.2.1 New Development and Redevelopment

The purpose of this element is to reduce pollutant discharges from developing areas within the Permit area by incorporating applicable structural and non-structural BMPs into new development projects and significant redevelopment projects.

The City of Brawley will develop and implement “Retention Basin Guidelines” to address Stormwater management measures during the planning, construction, and completion phases of a

development/redevelopment project. This guide will provide the Engineer, Architect, Contractor or Developer the following:

1. Present procedures for approval of grading and drainage/erosion control plans will be modified to include necessary BMPs.
2. The guide will be made available to development applicants as early in the permitting process as possible.
3. Implementation procedures will be developed for the new development BMP guidelines, including training and education for employees who will need to implement the plan checking, approvals and inspections.
4. Implementing staff will notify the development applicant at the earliest possible opportunity if there is a known water quality problem, which might affect the proposed development.

Table 5-1
New Development and Redevelopment BMP Summary

BMPs	Description	Responsible Party	Time Schedule
E11	Inform contractors, operators, and agency staff about upcoming educational and training workshops on construction site erosion control and construction materials management sponsored by professional organizations and public agencies. Make associated public education materials available at the public counter and staff bulletin boards, as appropriate.	City of Brawley	12 Months Initial Ongoing
E12	Inform architects, engineers, building department personnel, and local government officials on water quality problems associated with urban runoff and the requirements for meeting NPDES laws and program goals for properly managing the quality of stormwater runoff. Provide information on upcoming training workshops and distribute educational materials as appropriate.	City of Brawley	18 Months Initial Ongoing
	Adopt and implement the construction and development BMP guidelines.	City of Brawley	24 Months

5.3 Training

To support effective stormwater and non-stormwater pollution prevention the City of Brawley will develop and provide informational and appropriate training sessions that can be provided to staff who conduct construction site inspections. Training outlined in Section 2.3 will include construction related stormwater and non-stormwater issues. New development/significant redevelopment and construction training modules will contain a construction stormwater orientation for plan check staff and field inspectors. Topics will cover:

- Phase I and Phase II regulations
- SWPPP preparation
- Site inspection criteria and priorities

5.4 Evaluation/Assessment

Evaluation and assessment of BMP performance and City of Brawley compliance will be accomplished primarily through reporting and documentation. The proposed evaluation and assessment measures shown in Table 5-3 will be used to evaluate progress for each BMP as follows:

Table 5-3
Evaluation & Assessment Requirements

BMPs	Assessment Target	Responsible Party	Time Schedule
E11	Describe workshops and efforts to publicize them to the target audience.	IVRMA City of Brawley	12 Months
E12	Describe educational materials developed in support of the New Development Guidelines.	IVRMA City of Brawley	24 Months
R6(C)	Confirm that existing ordinances adequately address Phase I and Phase II requirements.	City of Brawley	24 Months
R7(C)	Adopt appropriate modifications, if necessary, to implement BMP R6.	City of Brawley	36 Months
OM(C)	List priorities, develop implementation schedule for inspections. Conduct site inspections within existing building/grading inspection framework based on priorities.	City of Brawley	24 Months

Legend:

C Construction

Section 6

Municipal Agency Activities

The Municipal Agency Activities component is directed at reducing the potential for stormwater impacts from public works operations. Municipal and public works personnel who carry out regular maintenance and operations throughout the watershed are directly involved in both source control pollution management and IC/ID detection in the field.

The Municipal Agency Activities section presents:

- Current activities that are the focus of BMP implementation (6.1)
- BMPs to manage both stormwater and non-stormwater for the next Permit term (6.2)
- Training for municipal staff in relevant BMPs (6.3)
- Evaluation & Assessment of BMPs (6.4)

Municipal operations can have various effects on stormwater quality. For example, storm drain system maintenance may remove pollutants from the storm drain system before they reach receiving waters. On the contrary, vehicle maintenance performed improperly or without adequate safeguards can result in pollutants entering the storm drain system.

This section addresses the following public facilities or municipal operations that may impact stormwater quality:

- Sewage Systems
- Municipal Facilities & Operations
- Streets and Roads
- Storm Drain Systems

6.1 Current Activities and Source Identification

6.1.1 Sewage Systems

The releases of untreated sewage (if any) contain potential pollutants that include organic matter, bacteria and other pathogens, soaps and detergents, oil and grease, and toxic substances, etc. Accidental releases of untreated sewage can be conveyed into the storm drain system that drains directly into receiving waters. The wastewater treatment plant is operated by the City of Brawley. The City of Brawley maintains a sewage response plan to prevent unintentional sewage spills from entering the municipal storm drain system. The sewage response plan

includes procedures for notifying the RWQCB and other appropriate agencies and departments, containing and cleaning up the spill.

6.1.2 Municipal Facilities & Operations

The City of Brawley will conduct employee training in both stormwater and non-stormwater BMPs related to municipal facilities and operations. The training will focus on numerous aspects of public works activities as mentioned below.

Maintenance and material storage areas that are used to conduct vehicle and equipment maintenance and store materials in areas may be exposed to rainfall or stormwater runoff. Facilities include:

- Areas used for servicing, fueling, or washing vehicles or equipment. Most often, these facilities are found at corporation yards, local or regional parks, fire stations, police stations, and municipal facility areas.
- Outdoor storage areas for chemicals, construction materials, and waste products associated with municipal activities. These materials may include fuels and equipment fluids, wash waters, paving and base materials, pesticides, herbicides, and other substances that may affect water quality if released to the storm drain system.

Maintenance activities for landscape areas have the potential to contribute several types of pollutants to stormwater runoff. Municipal staff will be briefed on proper material use and handling during landscaping operations. These topics will be included in the ongoing training for public works personnel.

Proposed BMPs for maintenance/materials storage and landscape maintenance are discussed in Sections 6.2.2 and 6.2.3.

6.1.3 Streets and Roads

The City of Brawley will sponsor municipal employees training specifically designed to educate personnel on pavement maintenance, repair, and cleaning. The City of Brawley sweeps the streets at regular intervals, usually on a daily, weekly or monthly basis.

6.1.4 Storm Drain Systems

The program elements discussed in sections 6.1.1 through 6.1.3 focus on reducing or eliminating the water quality impacts of various public agency activities. This program element focuses on proactive BMPs the City of Brawley can implement to improve stormwater quality. Specifically, the storm drainage system element focuses on inspecting, and where necessary cleaning retention/detention basins, debris basins, open channels, drain inlets, and catch basins. The primary stormwater pollution control benefits include maintaining basin performance and removing sediments and other accumulated pollutants. This element shares a common purpose with prevention and inspection activities discussed in Section 3, IC/ID. As described in Section

3.1.3, the City of Brawley performs regular maintenance and inspections of its respective storm drain system. Additionally, public works staff observes and report improper discharges to the storm drain system in the course of their regular field duties.

6.2 Best Management Practices

This section identifies and describes BMPs proposed by the City of Brawley to address Municipal Agency Activities.

6.2.1 Sewage System

The purpose of this program activity is to prevent sewage spills from reaching storm drain systems and receiving waters. This will be achieved by reviewing, modifying if necessary, and implementing sewage spill response plans for the City of Brawley with jurisdiction over a wastewater collection system.

*Table 6-1
Sewage Systems BMP Summary*

BMP	Description	Responsible Party	Time Schedule
OM	Review, revise if necessary, and implement sewage spill response plans.	City of Brawley	6 Months

6.2.2 Municipal Facilities & Operations

The BMPs proposed for Municipal Facilities & Operations address activities primarily involving maintenance and material storage and landscape maintenance. Two BMPs are proposed to reduce or eliminate pollutant discharges from outdoor facilities used by the City of Brawley for vehicle and equipment maintenance or materials storage.

*Table 6-2
Areas for Maintenance and Materials Storage BMP Summary*

BMPs	Description	Responsible Party	Time Schedule
OM	Identify storm drain facilities that serve City of Brawley fleet vehicle storage/maintenance areas.	City of Brawley	6 Months
OM(New)	Prepare a model pollution prevention plan for City of Brawley maintenance areas. Implement the plan at maintenance areas.	City of Brawley	18 Months

The City of Brawley will rely primarily on staff training and education to minimize pollutant discharges from publicly maintained landscaped areas such as parks, medians, and civic center

areas. However, the City of Brawley will adopt a BMP to reinforce state regulations for pesticide use.

Table 6-3
Landscape Maintenance BMP Summary

BMPs	Description	Responsible Party	Time Schedule
E1B	Educate/inform agency personnel responsible for parks, and highway right-of-way maintenance about the proper use and management of pesticides, fertilizers, and herbicides. Alternative methods for controlling insects and weeds such as biological controls and the use of less toxic chemicals will be encouraged through internal workshops and guidance documents.	IVRMA City of Brawley	12 Months Ongoing
OM	City of Brawley will require that pesticides are applied in conformance with existing state and federal regulations.	City of Brawley	12 Months

6.2.3 Streets and Roads

The focus of the streets and roads program is two-fold: reduce or eliminate pollutant discharges from road maintenance activities and continue the existing street sweeping program to remove accumulated pollutants that result from roadway operation. To accomplish these goals, the City of Brawley will implement a combination of BMPs.

Table 6-4
Streets and Roads BMP Summary

BMPs	Description	Responsible Party	Time Schedule
OM6	Evaluate pavement repair and maintenance programs for public streets and parking areas (e.g., fill potholes, seal cracks, and apply surface treatments).	City of Brawley	12 Months
E	Develop a model fact sheet of BMPs for common road maintenance activities. The City of Brawley will require road maintenance personnel to review periodically and implement the BMPs.	City of Brawley	24 Months
OM	Develop model specifications to incorporate appropriate elements from the fact sheet into road maintenance contracts. The City of Brawley will incorporate applicable elements into road maintenance contracts.	City of Brawley	24 Months

6.2.4 Storm Drain Systems

The storm drain element focuses on a comprehensive combination of public education, illicit discharge/illegal dumping detection and cleanup, and facility maintenance to reduce the amount of pollutants that can enter receiving waters.

Table 6-5
Storm Drain Systems BMP Summary

BMPs	Description	Responsible Party	Time Schedule
E3	Educate/inform the general public on impacts of dumping pollutants into storm drainage systems and sewer system.	City of Brawley	12 Months Ongoing
OM1	Develop a program, continue and/or expand an existing field program to detect and prevent dumping or routinely discharging pollutants into storm drains and drainage channels.	City of Brawley	24 Months
OM2	Determine effectiveness of existing stormwater drainage system maintenance programs.	City of Brawley	18 Months
OM	Establish measurable goals for stormwater drainage system maintenance programs for basins, inlets, and open channels, based on the results of OM2.	City of Brawley	36 Months

6.3 Training

To support effective stormwater education for City of Brawley personnel, the City of Brawley will provide stormwater pollution prevention training sessions that address municipal activities. The City of Brawley has training sessions that focus on all aspects of municipal facilities and roadway operations for public works staff Annual refresher workshops are proposed, and will be held in conjunction with IC/ID training described in Section 3.3.

6.4 Evaluation/Assessment

Evaluation and assessment of BMP performance and City of Brawley compliance will be accomplished primarily through reporting and documentation. The proposed evaluation and assessment requirements for each BMP are shown in Table 6-6.

Table 6-6
Evaluation & Assessment Summary

BMPs	Assessment Target	Responsible Party	Time Schedule
OM	City of Brawley has jurisdiction over the wastewater collection system and has a consultant on board to develop the sanitary sewer management plan (SSMP).	City of Brawley	Ongoing
OM (MSA)	Show compliance by ensuring that vehicle maintenance & material storage yards develop and maintain a pollution prevention plan.	City of Brawley	24 Months
OM (MSA)	The City of Brawley to show compliance by listing vehicle maintenance & materials storage areas and indicating applicable sections of model plan (described above) that have been implemented.	City of Brawley	24 Months
E1B (LM)	Develop and implement data collection form. Quantify percentage of City of Brawley landscape maintenance personnel that have received training/outreach. Document staff training activities.	City of Brawley	24 Months
OM (LM)	Provide list of pesticide application personnel and verify certification.	City of Brawley	On Going
OM6 (SR)	Develop and implement data collection form.	City of Brawley	12 Months
E(SR)	Show compliance by providing copy of BMP fact sheet. Document fact sheet review by City of Brawley personnel.	City of Brawley	12 Months
OM (SR)	Document model specification. The City of Brawley to verify that specifications included in applicable contracts.	City of Brawley	24 Months
E3B (SDS)	Verify that stencils are maintained on all inlets.	City of Brawley	48 Months
OM1 (SDS)	See Section 3.	City of Brawley	24 Months
OM2 (SDS)	Monitor statewide Phase 1 and 2 municipal program activities. Participate in evaluation activities.	City of Brawley	24 Months
OM (SDS)	Describe maintenance activities.	City of Brawley	12 Months

Legend:

SWG Sewage Systems
MSA Maintenance/Materials Storage Areas
LM Landscape Maintenance
SR Streets & Roads
SDS Storm Drain System