



## **Year-End Performance Report FY2017-2018**

### **A Summary of Maintenance Facility Storm Water Compliance Reviews**

**CTSW-RT-18-366.04.2**

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**California Department of Transportation  
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<http://www.dot.ca.gov/hq/env/stormwater/index.htm>

# Table of Contents

1. Introduction.....	1
2. Maintenance Facility Compliance Program .....	2
2.1 Maintenance Facility BMPs .....	2
2.2 Facility Review .....	3
2.2.1 Review Guidelines and Reports .....	3
2.2.2 Rating System .....	4
2.2.3 Facility Pollution Prevention Plan.....	5
2.3 Reporting and Communications .....	5
2.3.1 Status Reports .....	5
2.3.2 Maintenance Facility Review Database Summary.....	5
2.3.3 On-Site Training.....	5
3. Summary of Maintenance Facility Compliance Review Results.....	6
3.1 Facility Review Results by District.....	6
3.2 Facility Review Results by T Family Activities Category .....	8
3.3 Facility Review Results by Facility Type .....	9
3.4 Facility Review Results by Facility Type Per Activities Category.....	10
4. Maintenance Facility Compliance Review Assessments.....	12
4.1 Building and Grounds Activities .....	12
4.2 Storage of Hazardous Materials (Working Stock) Activities .....	13
4.3 Material Storage Control (Hazardous Waste) Activities.....	13
4.4 Outdoor Storage of Raw Materials Activities.....	13
4.5 Vehicle and Equipment Fueling Activities.....	14
4.6 Vehicle and Equipment Cleaning Activities .....	14
4.7 Vehicle and Equipment Maintenance and Repair Activities .....	14
4.8 Aboveground and Underground Tank Leak and Spill Control Activities .....	14
5. Summary of Compliance Assistance .....	15

## List of Attachments

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- Attachment A: Maintenance Facility Compliance Review Rating Guidelines and Procedures
- Attachment B: Caltrans Maintenance Facility Storm Water Compliance Review Reports
- Attachment B-1: Maintenance Facility Storm Water Compliance Review Report
- Attachment B-2: Material Storage Facility Storm Water Compliance Review Report
- Attachment C: Maintenance Facility Review Database Summary (FY2017–2018)
- Attachment D: Maintenance Facility Review Database Summary of Activities Categories (FY2017–2018)
- Attachment E: Material Storage Facility Review Database Summary of Activities Categories (FY2017–2018)

## List of Tables

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Table 2-1: Family of Activities.....	3
Table 2-2: Maintenance Facility Compliance Review Rating Summary .....	4
Table 3-1: Facility Numeric Rating Summary by District FY2017–2018 .....	7
Table 3-2: Facility Alphabetic Rating Summary by District FY2017–2018.....	7
Table 3-3: Facility Rating Summary by T Family Activities Category FY2017–2018.....	8
Table 3-4: Facility Rating Summary by Facility Type FY2017–2018.....	9
Table 3-5: Facility Rating Summary by Facility Type Per Activities Category FY2017–2018.....	11

## Acronyms, Abbreviations, and Definitions

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**AMOCRP:** Annual Maintenance and Operation Compliance Review Plan

**BMPs:** Best Management Practices

**Department:** State of California, Department of Transportation

**DMSWC:** District Maintenance Storm Water Coordinator

**Family:** Organization of Maintenance work (activities) consistent with the Department’s methods used to record, report and monitor maintenance work as it is planned and performed.

**FPPP:** Facility Pollution Prevention Plan

**FY:** Fiscal Year

**Maintenance:** California Department of Transportation, Division of Maintenance

**Maintenance Activities:** Routine maintenance activities that may require clearing, grading or excavation to maintain original line and grade, hydraulic capacity or original purpose of the facility (SWMP [latest]).

**Maintenance Facility:** Facilities under the Department’s ownership or control that contain such areas as fueling areas, waste storage or disposal facilities, wash racks, equipment or vehicle storage and materials storage areas (SWMP [latest]).

**Maintenance Staff Guide:** Storm Water Quality Handbook: Maintenance Staff Guide (Interim, rev. September 2012)

**NPDES:** National Pollutant Discharge Elimination System

**Permit:** National Pollutant Discharge Elimination System Statewide Storm Water Permit and Waste Discharge Requirements (WDRs) for the State of California, Department of Transportation

**SWMP:** Storm Water Management Plan (latest)

**USEPA:** U.S. Environmental Protection Agency

# 1. Introduction

This Year-End Performance Report is for Fiscal Year (FY) 2017–2018. It summarizes the results of stormwater compliance reviews conducted at the State of California, Department of Transportation (Department) maintenance facilities. The independent quality assurance reviews of facilities were conducted to verify compliance with the requirements in the Department’s Statewide Storm Water Management Plan (SWMP). The SWMP was developed in accordance with the requirements prescribed in the National Pollutant Discharge Elimination System (NPDES) Statewide Storm Water Permit and Waste Discharge Requirements (WDRs) for the State of California, Department of Transportation (Permit).

The key elements of this Year-End Performance Report include:

- Description of the stormwater maintenance facility compliance program (Section 2).
- Summaries of maintenance facility compliance review results and stormwater management Best Management Practice (BMP) implementation and effectiveness (Section 3).
- Maintenance facility compliance review assessments (Section 4).
- Summary of compliance assistance (Section 5).

## 2. Maintenance Facility Compliance Program

The Maintenance Facility Compliance Program is a Departmental effort to review all maintenance facilities statewide for compliance with the Permit within a 5-year review cycle. Reviews are conducted by an independent third party consultant (third party). To meet the goal of a 5-year review cycle, compliance reviews are conducted on a minimum of 20% of the maintenance facilities in each District annually. To implement the program and meet the requirements in the SWMP, guidelines were developed and are presented in an Annual Maintenance and Operation Compliance Review Plan (AMOCR).

The reviews are conducted in accordance with the AMOCR, and in consultation and coordination with the Department’s Division of Environmental Analysis and Division of Maintenance (Maintenance) staff.

The key component of the Maintenance Facility Compliance Program is the Caltrans Stormwater Quality Handbook: Maintenance Staff Guide (Interim, rev. September 2012) (Maintenance Staff Guide). The Maintenance Staff Guide is the employee handbook that incorporates the approved Maintenance BMPs providing direction, guidance, policies and procedures for maintenance facilities. The Storm Water Maintenance Facility Compliance Program objectives are to:

- Evaluate compliance of maintenance facilities with the requirements of the Permit.
- Report compliance status to Department management.
- Evaluate BMP implementation results, suggest areas for improvement and recommend new BMP implementation methodologies.

This Year-End Performance Report summarizes the results of maintenance facilities reviewed from July 1, 2017 to June 30, 2018.

### 2.1 Maintenance Facility BMPs

Maintenance work is organized into 14 Families (Families A through T) consistent with the Department’s methods used to record, report and monitor maintenance work as it is planned and performed.

Maintenance activities are listed under Families identified in the Maintenance Staff Guide. These activities represent typical maintenance work on State highways. The activities have the potential to affect stormwater quality. There are 62 maintenance activities grouped into 14 Families that represent work of a similar nature. See Table 2-1 for details of activities within each Family.

Maintenance of the facilities is organized under the T Family – Management and Support. There are eight maintenance activities categories associated with the T Family, Building and Grounds Maintenance; Storage of Hazardous Materials; Material Storage Control; Outdoor Storage of Raw Materials; Vehicle and Equipment Fueling; Vehicle and Equipment Cleaning; Vehicle and Equipment Maintenance and Repair; and Aboveground and Underground Tank Leak/Spill Control. The Maintenance facility compliance reviews were conducted within these eight activities categories.

Table 2-1: Family of Activities	
Family of Activity	Activities
A Family – Flexible Pavement	Asphalt Cement Crack and Joint Grinding/Sealing; Asphalt Paving; Structural Pavement Failure (Digouts) Pavement Grinding/Paving; Emergency Pothole Repair; and Sealing Operations
B Family – Rigid Pavement	Portland Cement Crack and Joint Sealing; Mudjacking and Drilling; and Concrete Slab/Spall Repair
C Family – Slope/Drain/Vegetation	Shoulder Grading; Non-landscape Chemical Vegetation Control; Non-landscape Mechanical Vegetation Control/Mowing; Non-landscape Tree/Shrub Pruning, Brush Chipping, Tree/Shrub Removal; Fence Repair; Drainage Ditch/Channel Maintenance; Drain/Culvert Maintenance; and Curb/Sidewalk Repair
D Family – Litter/Debris/Graffiti	Sweeping Operations; Litter and Debris Removal; Emergency Response and Cleanup Practices; and Graffiti Removal
E Family – Landscaping	Chemical Vegetation Control; Manual Vegetation Control; Landscape Mechanical Vegetation Control/Mowing; Landscape Tree/Shrub Pruning, Brush Chipping, Tree/Shrub Removal; Irrigation Line Repair; and Irrigation
F Family – Environmental	Storm Drain Stenciling; Roadside Slope Inspection; Roadside Stabilization; Storm Water Treatment Devices; and Traction Sand Trap Devices
G Family - Public Facilities	Custodial Responsibilities at Restrooms, Fountains, and Picnic Areas; Maintenance of Appurtenances such as Roadway Surfacing, Signs, Pavement Markings, Buildings, Landscaping, and Electrical Installations
H Family – Bridges	Welding and Grinding; Sandblasting, Wet Blast (Sand Injection) and Hydroblasting; Painting; Bridge Repairs; and Draw Bridge Maintenance
J Family – Other Structures	Pump Station Cleaning; Tube and Tunnel Maintenance and Repair; Ferryboat Operations; Tow Truck Operations; and Toll Booth Lane Scrubbing Operations
K Family – Electrical	Sawcutting for Loop Installation
M Family – Traffic Guidance	Thermoplastic Stripping and Marking; Paint Stripping and Marking; Raised/Recessed Pavement Marker Application and Removal; Sign Repair and Maintenance; Median Barrier and Guard Rail Repair; and Emergency Vehicle Energy Attenuator Repair
R Family – Snow and Ice Removal	Snow Removal; and Ice Control
S Family – Storm Maintenance	Minor Slides and Slipouts Cleanup/Repair
T Family – Management and Support	Building and Grounds Maintenance; Storage of Hazardous Materials; Material Storage Control; Outdoor Storage of Raw Materials; Vehicle and Equipment Fueling; Vehicle and Equipment Cleaning; Vehicle and Equipment Maintenance and Repair; and Aboveground and Underground Tank Leak/Spill Control

The Maintenance Staff Guide describes 64 individual BMPs approved for statewide use. In addition to individual BMPs relevant to maintenance facilities, there are BMPs that are commonly applied to all maintenance activities and are defined as General BMPs. The General BMPs include Scheduling and Planning, Spill Prevention and Control, Sanitary/Septic Waste Management, Material Use, Safer Alternative Products, Vehicle/Equipment Cleaning/Fueling/Maintenance, Illicit Connection Detection/Reporting/Removal, Illegal Spill Discharge Control, and Maintenance Facility Housekeeping Practices.

In the Maintenance Staff Guide, Activity Cut-Sheets are provided to summarize the appropriate BMPs to be implemented when performing maintenance activities within the T Family.

## 2.2 Facility Review

Facility reviews were completed in FY2017–2018 for the activities within the T Family – Management and Support. At the facility, non-routine maintenance work not listed in the T Family may have also been conducted (e.g., Asphalt Cement Crack and Joint Grinding/Sealing, Thermoplastic Striping and Marking, etc.). These activity reviews, if any, are presented in the Year End Performance Report - Maintenance Activity Storm Water Compliance Reviews (CTSW-RT-18-366.04.1).

### 2.2.1 Review Guidelines and Reports

To maintain compliance with the AMOCR, Maintenance Facility Compliance Review Rating Guidelines and Procedures (Attachment A) and two each Maintenance Facility Storm Water Compliance Review

Reports (Attachment B) were developed and implemented for the two types of facility reviews. The procedures and reports were developed to evaluate the appropriateness and effectiveness of implemented Maintenance BMPs, the potential for pollutant discharge, and administrative compliance. An alpha-numeric rating was used to score the overall facility effectiveness. The appropriateness and effectiveness of the maintenance BMPs is evaluated using a numerical rating. Administrative compliance is evaluated using an alphabetical rating.

During each review, the third party auditor rates the compliance status of the facility and documents the results using the appropriate Maintenance Facility Storm Water Compliance Review Report. A rating is assigned for each applicable facility activities category along with an overall alpha-numeric rating of the facility’s compliance with the stormwater pollution prevention requirements and administrative compliance. Following each review, the third-party auditor reviews the findings and the rating with the supervisor or designated representative, as well as, the District Maintenance Stormwater Coordinator (DMSWC). The auditor subsequently completes the appropriate form in electronic format, and the report is shared with pertinent personnel electronically via email.

### 2.2.2 Rating System

The rating system consists of a numeric component (1 through 5) and a letter component (A, B and C) as defined in the Maintenance Facility Compliance Review Rating Guidelines and Procedures. See Table 2-2 for details.

Table 2-2: Maintenance Facility Compliance Review Rating Summary	
<b>Numeric Rating Summary</b>	
1	No release observed. Appropriate BMPs are implemented and effective.
2	No release observed. Appropriate BMPs are implemented but less than 100% effective.
3	No release observed. Appropriate BMPs not implemented.
4	Release (observed or evidence of a recent release) of an unauthorized substance from the facility to outside the Caltrans’ right-of-way.
5	Discharge (observed or evidence of a recent discharge) of an unauthorized substance from the facility to surface water.
<b>Letter Rating Summary</b>	
A	Overall administrative BMP compliance and documentation is current and available.
B	Overall administrative BMP compliance and documentation moderately implemented.
C	Overall administrative documentation inadequate.

Facilities that receive a 1, 2, or 3 Rating (i.e., no release or discharge) are considered to be compliant with stormwater requirements. If a facility receives the 2 or 3 Rating, the Facility Manager will be responsible to document the corrective action status on the Facility Report and electronically submit the report and photographs of corrective actions taken to Headquarters Maintenance and DEA-SWP within 2 weeks of the review. The photographs will be taken of deficiencies that were corrected to ensure corrective actions were implemented.

In contrast, the 4 or 5 Rating (i.e., release from Caltrans right-of-way or discharge to surface water) indicates the need for immediate corrective action. If a facility receives the 4 or 5 Rating, immediate corrective action(s) is required and the facility is re-inspected within 10 days to verify the corrective action(s) was implemented.

### **2.2.3 Facility Pollution Prevention Plan**

Each facility review includes a review of the site-specific Facility Pollution Prevention Plan (FPPP) and other Maintenance facility documentation in order to evaluate the facility's compliance with the Department's NPDES Permit. The third party auditor will confirm that facility managers have a copy, hard or electronic, of the Permit, an up-to-date FPPP, documented monthly facility inspections, and records of storm water training to staff. An A or B Rating indicates that the facility's administrative BMP compliance and documentation is moderately implemented or better. The C Rating indicates that the facility's administrative BMP compliance and documentation is inadequately implemented. The FPPP and documentation review results are noted in the Maintenance Facility Storm Water Compliance Review Reports.

## **2.3 Reporting and Communications**

Through the reporting period, Department Headquarters and third party auditors maintain on-going communication on the progress of the program activities and the self-audit results. Regular status meetings are conducted with Department Headquarters and the third party auditors to identify programmatic issues and BMP deficiencies identified in the field.

### **2.3.1 Status Reports**

The third party auditors prepare monthly status reports that are submitted to Headquarters staff. Each status report provides a list of District maintenance facilities reviewed and a summary of review results.

### **2.3.2 Maintenance Facility Review Database Summary**

A database is maintained to make review results and other useful information readily available to Headquarters staff. The database includes reference information, such as maintenance facility name and location, third party auditor information, overall facility rating, and BMP ratings associated with the T Family activities. A summary of the database for FY2017–2018 is provided in Attachment C.

### **2.3.3 On-Site Training**

Informal on-the-job training can occur during the compliance reviews to provide immediate site-specific guidance to facility supervisors and staff. The review schedule allows sufficient time for the third party auditor to discuss observations with the facility supervisor, DMSWC or designated facility representatives.



## 3. Summary of Maintenance Facility Compliance Review Results

This section summarizes the review results and BMP implementation results of the 238 stormwater compliance reviews that were conducted statewide from July 01, 2017 through June 30, 2018. A detailed list of results is provided in the Maintenance Facility Review Database Summary (FY2017–2018) in Attachment C.

### 3.1 Facility Review Results by District

There were 864 maintenance facilities operated by the Department in FY2017-2018. The third party auditors completed a total of 238 initial reviews (separate maintenance facilities) during the reporting period. This represents approximately 28% of the total operated facilities.

The Maintenance Facility Review Database Summary (FY2017–2018) is shown in Attachment C. In the summary, the details of the reviews, including the District, facility evaluated, compliance rating for relevant activities category, an overall facility rating and the inspection date are described. The overall numeric and letter rating results organized by District are presented in Table 3-1 and Table 3-2, respectively.

A summary of the ratings by District includes the following:

- All 238 maintenance facilities (100%) received a compliant rating during the initial review.
- 215 maintenance facilities (90.3%) received a 1 or 2 Rating during the initial review.
- 23 maintenance facilities (9.7%) received a 3 Rating during the initial review.
- None of the facilities received a 4 Rating.
- None of the facilities received a 5 Rating.

Letter rating data show the following:

- 120 facilities (50.4%) received an A Rating during the initial review.
- 58 facilities (24.4%) received a B Rating during the initial review.
- 60 facilities (25.2%) received a C Rating during the initial review.

Table 3-1: Facility Numeric Rating Summary by District FY2017-2018											
		Numeric Rating Summary									
District	No. of Facilities Reviewed	Appropriate BMPs Implemented				Appropriate BMPs not Implemented		Release from Facility		Discharge to Surface Water	
		And Effective		<100% Effective							
		1 Rating		2 Rating		3 Rating		4 Rating		5 Rating	
1	28	11	39%	13	46%	4	14%	0	0%	0	0%
2	36	8	22%	26	72%	2	6%	0	0%	0	0%
3	23	6	26%	16	70%	1	4%	0	0%	0	0%
4	25	3	12%	19	76%	3	12%	0	0%	0	0%
5	28	11	39%	10	36%	7	25%	0	0%	0	0%
6	18	5	28%	12	67%	1	6%	0	0%	0	0%
7	18	2	11%	16	89%	0	0%	0	0%	0	0%
8	21	4	19%	16	76%	1	5%	0	0%	0	0%
9	11	1	9%	8	73%	2	18%	0	0%	0	0%
10	18	9	50%	9	50%	0	0%	0	0%	0	0%
11	6	1	17%	5	83%	0	0%	0	0%	0	0%
12	6	0	0%	4	67%	2	33%	0	0%	0	0%
TOTAL	238	61	26%	154	65%	23	10%	0	0%	0	0%

Table 3-2: Facility Alphabetic Rating Summary by District FY2017-2018							
		Letter Rating Summary					
District	No. of Facilities Reviewed	Overall administrative BMP compliance and documentation is current and available		Overall administrative BMP compliance and documentation is moderately implemented		Overall administrative BMP compliance and documentation inadequate.	
		A Rating		B Rating		C Rating	
		1	28	16	57%	4	14%
2	36	23	64%	11	31%	2	6%
3	23	15	65%	6	26%	2	9%
4	25	9	36%	7	28%	9	36%
5	28	12	43%	3	11%	13	46%
6	18	8	44%	7	39%	3	17%
7	18	3	17%	9	50%	6	33%
8	21	8	38%	4	19%	9	43%
9	11	7	64%	2	18%	2	18%
10	18	14	78%	1	6%	3	17%
11	6	4	67%	1	17%	1	17%
12	6	1	17%	3	50%	2	33%
TOTAL	238	120	50%	58	24%	60	25%

### 3.2 Facility Review Results by T Family Activities Category

The T Family – Management and Support addresses the maintenance of facilities. There are eight distinct categories of activities commonly associated with the T Family. Not all activities categories are present at each facility; therefore, the number of evaluations for each activities category will be different. Based on the Maintenance Facility Review Database (FY2017–2018), the numeric ratings for BMP effectiveness, organized by the T Family activities category, are presented in Table 3-3.

A summary of the rating by activities category includes the following:

- All 822 (100%) of the activities categories evaluated received a compliant rating.
- 795 (96.7%) of the activities categories evaluated received a 1 or 2 Rating.
- 451 (54.9%) of the activities categories evaluated received a 1 Rating.

The following T Family activities categories received the higher percentages of Non-1 Ratings per the rating guideline:

- 146 (62.1%) of the Building Grounds and Maintenance activities category evaluated received a Non-1 Rating.
- 34 (51.5%) of the Vehicle and Equipment Maintenance and Repair activities category evaluated received a Non-1 Rating.
- 52 (49.5%) of the Outdoor Storage of Raw Materials activities category evaluated received a Non- 1 Rating.

**Table 3-3: Facility Rating Summary by T Family Activities Category  
FY2017–2018**

		Numeric Rating Summary									
T Family Activities Category	No. of Activities Reviewed in Each Category	Compliant						Non-Compliant			
		Appropriate BMPs Implemented				Appropriate BMPs not Implemented	Release from Facility		Discharge to Surface Water		
		And Effective		<100% Effective							
		1 Rating	2 Rating	3 Rating	4 Rating	5 Rating					
Building and Grounds Maintenance	235	89	38%	137	58%	9	4%	0	0%	0	0%
Storage of Hazardous Materials (Working Stock)	128	71	55%	56	44%	1	1%	0	0%	0	0%
Material Storage Control (Hazardous Waste)	88	74	84%	13	15%	1	1%	0	0%	0	0%
Outdoor Storage of Raw Materials	105	53	50%	37	35%	15	15%	0	0%	0	0%
Vehicle and Equipment Fueling	61	31	51%	30	49%	0	0%	0	0%	0	0%
Vehicle and Equipment Cleaning	63	39	62%	24	38%	0	0%	0	0%	0	0%
Vehicle and Equipment Maintenance and Repair	66	32	48%	34	52%	0	0%	0	0%	0	0%
Aboveground and Underground Tank Leak and Spill Control	76	62	82%	13	17%	1	1%	0	0%	0	0%
<b>TOTAL</b>	<b>822</b>	<b>451</b>	<b>55%</b>	<b>344</b>	<b>42%</b>	<b>27</b>	<b>3%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>

### 3.3 Facility Review Results by Facility Type

Various sites are termed maintenance facilities. Sand & Salt Storage Sites, Commercial Vehicle Enforcement Facilities, Safety Roadside Rest Areas, Border Protection Stations (Agricultural Stations), Toll Road Plazas, Pumping Facilities, Equipment Shops, Sales & Storage Yards, and Material Storage Facilities are all defined as maintenance facilities in the SWMP. In FY2017–2018, the Department reviewed facilities of the different types. Based on the Maintenance Facility Review Database (FY2017–2018), the numeric ratings for BMP effectiveness, organized by the facility type, are presented in Table 3-4.

A summary of the rating by facility type includes the following:

- All 238 (100%) of the facility types reviewed received a compliant rating.
- 215 (90.3%) of the facility types evaluated received a 1 or 2 Rating.

The following facility types received the higher percentages of Non-1 Ratings rating per the rating guideline:

- 83 (94.3.1%) of the Maintenance Facility types evaluated received a Non-1 Rating.
- 15 (93.8%) of the Sand & Salt Storage Site types evaluated received a Non-1 Rating.
- 8 (88.9%) of the Equipment Shop types evaluated received a Non- 1 Rating.

Did not include Sales & Storage Yard Type because only one facility type was evaluated.

**Table 3-4: Facility Rating Summary by Facility Type  
FY2017–2018**

Numeric Rating Summary											
Facility Type	No. of Facility Types Reviewed	Compliant						Non-Compliant			
		Appropriate BMPs Implemented				Appropriate BMPs not Implemented	Release from Facility	Discharge to Surface Water			
		And Effective		<100% Effective							
		1 Rating	2 Rating	3 Rating	4 Rating	5 Rating					
Maintenance Facility (MF)	88	5	6%	77	88%	6	6%	0	0%	0	0%
Equipment Shop (ES)	9	1	11%	8	89%	0	0%	0	0%	0	0%
Commercial Vehicle Enforcement Facility (CVEF)	13	8	84%	5	15%	0	0%	0	0%	0	0%
Border Patrol Station (BPS)	5	4	80%	1	20%	0	0%	0	0%	0	0%
Safety Roadside Rest Area (SRRRA)	22	6	27%	15	68%	1	5%	0	0%	0	0%
Pumping Facility (PF)	1	1	100%	0	0%	0	0%	0	0%	0	0%
Sand & Salt Storage Site (S&SS)	16	1	6%	14	88%	1	6%	0	0%	0	0%
Sales & Storage Yard (S&SY)	1	0	0%	1	100%	0	0%	0	0%	0	0%
Material Storage Facility (MSF)	83	35	42%	33	40%	15	18%	0	0%	0	0%
<b>TOTAL</b>	<b>238</b>	<b>61</b>	<b>26%</b>	<b>154</b>	<b>65%</b>	<b>23</b>	<b>9%</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>

### 3.4 Facility Review Results by Facility Type Per Activities Category

Combining the data on Table 3-3 with the data on Table 3-4 presents the facility review results by facility type per activities category. Manipulating the headings slightly presents the data so that one can see specific activities category issues for each facility type. Based on the Maintenance Facility Review Database (FY2017–2018), the numeric ratings for BMP effectiveness (1 Rating, a combined 2 or 3 Rating, and a combined 4 or 5 Rating), organized by the facility type per activities category, are presented in Table 3-5.

As stated in Section 3.2, Facility Review Results by Activity Category, not all activities categories are present at each different facility type. Even the same type of facility can have more or less activities categories depending upon the specific facility. A summary of the rating by facility type per activities category includes the following:

- 4 (80.0%) of the Buildings and Grounds Maintenance activities category for the Border Patrol Station types reviewed received a 1 Rating.
- 4 (80.0%) of the Storage of Hazardous Materials (Working Stock) activities category for the Border Patrol Station types reviewed received a 1 Rating.
- 61 (69.3%) of the Materials Storage Control (Hazardous Waste) activities category for the Maintenance Facility types reviewed received a 1 Rating.
- 9 (69.2%) of the Buildings and Grounds Maintenance activities category for the Commercial Vehicle Enforcement Facility types reviewed received a 1 Rating.
- 6 (66.7%) of the Storage of Hazardous Materials (Working Stock) activities category for the Equipment Shop types reviewed received a 1 Rating.

A summary of activities categories for certain facility types where potential improvement may be possible:

- 75 (85.2%) of the Buildings and Grounds Maintenance activities category for the Maintenance Facility types reviewed received a Non-1 Rating.
- 13 (81.3%) of the Buildings and Grounds Maintenance activities category for the Sand & Salt Storage Site types reviewed received a Non-1 Rating.
- 15 (68.2%) of the Storage of Hazardous Materials (Working Stock) activities category for the Safety Roadside Rest Area types reviewed received a Non-1 Rating.
- 14 (63.6%) of the Buildings and Grounds Maintenance activities category for the Safety Roadside Rest Area types reviewed received a Non-1 Rating.
- 35 (42.2%) of the General BMPs activities category for the Material Storage Facility types reviewed received a Non-1 Rating.

**Table 3-5: Facility Rating Summary by Facility Type Per Activities Category  
FY2017-2018**

		Numeric Rating Summary																							
Facility Type	No. of Facility Types Reviewed	Buildings & Grounds Maintenance			Storage of Hazardous Materials (Working Stock)			Materials Storage Control (Hazardous Waste)			Outdoor Storage of Raw Materials			Vehicle & Equipment Fueling			Vehicle & Equipment Cleaning			Vehicle & Equipment Maintenance and Repair			Aboveground & Underground Tank Leak and Spill Control		
		1	2 or 3	4 or 5	1	2 or 3	4 or 5	1	2 or 3	4 or 5	1	2 or 3	4 or 5	1	2 or 3	4 or 5	1	2 or 3	4 or 5	1	2 or 3	4 or 5	1	2 or 3	4 or 5
Maintenance Facility (MF)	88	13	75	0	38	46	0	61	14	0	31	21	0	29	29	0	37	21	0	27	28	0	52	13	0
Equipment Shop (ES)	9	5	3	0	6	1	0	6	0	0	0	0	0	0	0	0	0	3	0	3	6	0	2	0	0
Commercial Vehicle Enforcement Facility (CVEF)	13	9	4	0	4	1	0	2	0	0	1	0	0	1	0	0	1	0	0	1	0	0	2	0	0
Border Patrol Station (BPS)	5	4	1	0	4	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Safety Roadside Rest Area (SRRA)	22	8	14	0	15	4	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0
Pumping Facility (PF)	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sand & Salt Storage Site (S&SS)	16	3	13	0	4	4	0	1	0	0	3	6	0	1	1	0	1	0	0	1	0	0	2	0	0
Sales & Storage Yard (S&SY)	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Material Storage Facility (MSF)	83	46	35	0	0	0	0	0	0	0	18	25	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>238</b>	<b>89</b>	<b>146</b>	<b>0</b>	<b>71</b>	<b>57</b>	<b>0</b>	<b>74</b>	<b>14</b>	<b>0</b>	<b>53</b>	<b>52</b>	<b>0</b>	<b>31</b>	<b>30</b>	<b>0</b>	<b>39</b>	<b>24</b>	<b>0</b>	<b>32</b>	<b>34</b>	<b>0</b>	<b>62</b>	<b>14</b>	<b>0</b>

## 4. Maintenance Facility Compliance Review Assessments

This section summarizes the overall BMP implementation and effectiveness separated into the distinct BMP activities required at maintenance facilities as observed during the reporting period. For each maintenance facility, all observed activities are rated 1 through 5 during a compliance review. Each activity is grouped into one of eight categories discussed below. Overall category rating is represented by the highest rated BMP activity within the category. Not all activities will be observed at every facility, and the material storage facility reporting form is much different than the maintenance facility reporting form.

The activities at material storage facilities are separated in two categories, Building and Grounds and Outdoor Storage of Raw Materials. See Attachment B-2, Material Storage Facility Compliance Review Report, for details of the activities associated with each category.

The activities at all other maintenance facilities are separated in eight categories, Building and Grounds, Storage of Hazardous Materials (Working Stock), Materials Storage Control (Hazardous Waste), Outdoor Storage of Raw Materials, Vehicle and Equipment Fueling, Vehicle and Equipment Cleaning, Vehicle and Equipment Maintenance and Repair, and Aboveground and Underground Tank Leak and Spill Control. See Attachment B-1 Maintenance Facility Compliance Review Report, for details of the activities associated with each category.

Table 3-3, Facility Rating Summary by T Family Activities Category, summarizes the BMP implementation and effectiveness of activities categories, and Attachment C details each activities category compliance rating at each compliance review. Attachment D details BMP implementation and effectiveness for all of the observed activities at each maintenance facility compliance review except for the material storage facilities. Attachment E details the same for all of the observed activities at each material storage facility compliance review.

Narrative of the findings observed within each activities category are detailed below. Please note that since all activities are not encountered during each compliance review, the percentages associated with the activity ratings are based on the total observed activities for particular activities question. Percentages less than 30% were considered insignificant for this narrative discussion.

### 4.1 Building and Grounds Activities

The Building and Grounds activities include permanent maintenance facilities that need building and grounds maintenance, care of landscaped areas around each facility, cleaning of parking areas and pavements, and maintenance of the storm water drainage system. The BMPs for the Building and Grounds activities are some of the most effective stormwater management practices at facilities when implemented properly.

Overall, the BMPs for this facility activities category were found to be effectively implemented. A total of 89 (37.9%) of the facilities were completely effective and received a 1 Rating. A total of 226 (96.2%) of the facilities were in compliance and received a 1 or 2 Rating for this activities category. nine (9) facilities received the 3 Rating and no (0) facilities received a 4 or 5 Rating for the implementation of BMPs applied to the Building and Grounds activities.

Reviewing the individual activities observed at each compliance review as detailed in Attachment D, one can see that for the Building and Grounds activity, paved surfaces, pavement, 39.3% received non-1 ratings. Also for the activity, storm drainage system, BMPs are in place, 38.1% received non-1 ratings. These activities were the two highest percentages of non-1 rated activities within this activities category. The activity, pavement, is defined by the question “Pavement is free of sediment, debris and accumulation of pollutants (oil spots).” The activity, BMPs are in place, is defined by the question “BMPs are in place to detain and/or filter sediment laden stormwater runoff.”

## 4.2 Storage of Hazardous Materials (Working Stock) Activities

The Storage of Hazardous Materials (Working Stock) activities include the storage of a variety of products which may be harmful to the environment if they come in contact with surface waters. The proper storage of hazardous materials is critical to prevent potential spills and leaks of the working stock at the facility.

Overall, the BMPs for this facility activities category were found to be effectively implemented. A total of 71 (55.5%) of the facilities were completely effective and received a 1 Rating. A total of 127 (99.2%) of the facilities were in compliance and received a 1 or 2 Rating for this activities category. One (1) facility received the 3 Rating and no (0) facilities received a 4 or 5 Rating for the implementation of BMPs applied to the Storage of Hazardous Materials (Working Stock) activities.

Reviewing the individual activities observed at each compliance review as detailed in Attachment D, one can see that for the Storage of Hazardous Materials (Working Stock) activity, paved storage of hazardous materials (non-stormwater), spill containment, 38.6% received non-1 ratings. This activity is defined by the question “Hazardous materials are stored with appropriate spill containment.”

## 4.3 Material Storage Control (Hazardous Waste) Activities

The Material Storage Control (Hazardous Waste) activities include the storage of a variety of products that may adversely impact water quality if they come in contact with surface waters. The proper storage of hazardous wastes is critical to prevent potential spills and leaks of hazardous wastes at the facility.

Overall, the BMPs for this facility activities category were found to be effectively implemented. A total of 87 (98.9%) of the facilities were in compliance and received a 1 or 2 Rating. One (1) facility received a 3 Rating and no (0) facilities received a 4 or 5 Rating for the implementation of BMPs applied to the Material Storage Control (Hazardous Waste) activities.

## 4.4 Outdoor Storage of Raw Materials Activities

The Outdoor Storage of Raw Materials activities include the storage of a variety of raw materials that may adversely impact water quality if they come in contact with surface waters. Most facilities store raw materials outdoors. The BMPs for the Outdoor Storage of Raw Material activities provide guidelines for minimizing the potential for these materials from being conveyed off-site by stormwater.

Overall, the BMPs for this facility activities category were found to be effectively implemented. A total of 53 (50.5%) of the facilities were completely effective and received a 1 Rating. A total of 90 (85.7%) of the facilities were in compliance and received a 1 or 2 Rating. Fifteen (15) facilities received a 3 Rating and no (0) facilities received a 4 or 5 Rating for the implementation of BMPs applied to the Outdoor Storage of Raw Materials activities.

Reviewing the individual activities observed at each compliance review as detailed in Attachment E (for material storage facilities), one can see that for the Outdoor Storage of Raw Materials activity, stockpiles maintained properly, 41.7% received non-1 ratings. Also for the activity, BMPs appropriately maintained, 42.9% received non-1 ratings. These activities were the two highest percentages of non-1 rated activities within this activities category. The activity, stockpiles maintained properly, is defined by the question “Stockpiles, if present, are properly maintained to prevent run-on/run-off of stormwater (appropriate BMPs are in place).” The activity, BMPs appropriately maintained, is defined by the question “BMPs are appropriately maintained, and are replaced as needed.”

Reviewing the individual activities observed at each compliance review as detailed in Attachment D, one can see that for the Outdoor Storage of Raw Materials activity, BMPs appropriately maintained, 48.5% received non-1 ratings. This activity is defined by the question “BMPs are appropriately maintained, and are replaced as needed.”

Combining the maintenance of stockpile BMPs at all maintenance facilities result in 25 of 54 observed activities (46.3%) that are compliant, but the BMPs are less than completely effective.



## 4.5 Vehicle and Equipment Fueling Activities

The Vehicle and Equipment Fueling activities take place at a maintenance facility with the potential for fuel leaks or spills at the site. The BMPs for the Vehicle and Equipment Fueling activities provide guidelines for minimizing the potential release of vehicle fluids at the fueling area.

Overall, the BMPs for this facility activities category were found to be effectively implemented. A total of 61 (100%) of the facilities were in compliance and received a 1 or 2 Rating. Zero (0) facilities received a 3 Rating and no (0) facilities received a 4 or 5 Rating for the implementation of BMPs applied to the Vehicle and Equipment Fueling activities.

## 4.6 Vehicle and Equipment Cleaning Activities

The Vehicle and Equipment Cleaning activities conducted at a maintenance facility are accomplished in a controlled area to ensure wash water is not released to the stormwater drainage system or nearby watercourses. These BMPs address proper practices for managing non-stormwater pollutants (e.g., oils, excessive rinse water, and sediment) associated with the Vehicle and Equipment Cleaning activities.

Overall, the BMPs for this facility activities category were found to be effectively implemented. A total of 63 (100%) of the facilities were in compliance and received a 1 or 2 Rating. Zero (0) facilities received a 3 Rating and no (0) facilities received a 4 or 5 Rating for the implementation of BMPs applied to the Vehicle and Equipment Cleaning activities.

## 4.7 Vehicle and Equipment Maintenance and Repair Activities

The Vehicle and Equipment Maintenance and Repair activities include vehicle fluid removal, engine and parts cleaning, body repair, and painting. The BMPs applied to the Vehicle and Equipment Maintenance and Repair activities address spills and leaks associated with fuels, oils, hydraulic fluids, lead-acid batteries, antifreeze, and oil filters.

Overall, the BMPs for this facility activities category were found to be effectively implemented. A total of 32 (48.5%) of the facilities were completely effective and received a 1 Rating. A total of 66 (100%) of the facilities were in compliance and received a 1 or 2 Rating for this activities category. Zero (0) facilities received the 3 Rating and no (0) facilities received a 4 or 5 Rating for the implementation of BMPs applied to the Vehicle and Equipment Maintenance and Repair activities.

Reviewing the individual activities observed at each compliance review as detailed in Attachment D, one can see that for the Vehicle and Equipment Maintenance and Repair activity, hazardous materials stored indoors, 31.8% received non-1 ratings. This activity is defined by the question “Hazardous materials are stored indoors and/or with appropriate spill containment.”

## 4.8 Aboveground and Underground Tank Leak and Spill Control Activities

The Aboveground and Underground Tank Leak and Spill Control activities address the use of storage tanks for storage of bulk quantities of petroleum products. The BMPs applied to the Aboveground and Underground Tank Leak and Spill Control activities address practices for handling fuels, oils, de-icing chemicals and emulsions stored in tanks.

Overall, the BMPs for this facility activities category were found to be effectively implemented. A total of 62 (81.6%) of the facilities were completely effective and received a 1 Rating. A total of 75 (98.7%) of the facilities were in compliance and received a 1 or 2 Rating for this activities category. One (1) facility received the 3 Rating and no (0) facilities received a 4 or 5 Rating for the implementation of BMPs applied to the Aboveground and Underground Tank Leak and Spill Control activities.

Reviewing the individual activities observed at each compliance review as detailed in Attachment D, one can see that for the Aboveground and Underground Tank Leak and Spill Control activity, proper instructions posted, 30.4% received non-1 ratings. This activity is defined by the question “Proper fueling and spill cleanup instructions are posted at the fueling area: - Automatic shutoff valves are installed at each nozzle. - Manual/emergency shutoff valves are present.”

## 5. Summary of Compliance Assistance

This section summarizes the compliance assistance requested by the DMSWCs or other Department Storm Water Coordinators. Expert water pollution control assistance was provided by a third party from July 1, 2017 through June 30, 2018 through Statewide Contracts to conduct the maintenance evaluations, support maintenance training and update maintenance guidance documents. Concerning the Stormwater Compliance contract, no assistance was provided for maintenance activities beyond the on-site training communicated by the third party auditor during this reporting period.

# **Attachment A: Maintenance Facility Compliance Review Rating Guidelines and Procedures**

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# Maintenance Facility Compliance Review Rating Guidelines and Procedures

## Maintenance Facility Numeric Rating (BMP Compliance)

The numeric rating criteria are as follows:

### **1 Rating**

**No release observed. Appropriate BMPs are implemented and effective.**

No deficiencies noted. All of the following conditions must be met for a Rating 1:

No release to surface water or outside the Caltrans' right-of-way.

Appropriate BMPs are properly implemented for this activity and are 100% effective (i.e., installed and maintained so as to be functional).

### **2 Rating**

**No release observed. Appropriate BMPs are implemented but less than 100% effective.**

All of the following conditions must be met for a Rating 2:

No release to surface water or outside the Caltrans' right-of-way.

Appropriate BMPs are implemented for this facility; however, they are less than 100% effective.

- The BMPs that require repair or maintenance are documented and discussed with the facility manager or representative.

### **3 Rating**

**No release observed. Appropriate BMPs not implemented.**

All of the following conditions must be met for a Rating 3:

No release to surface water or outside the Caltrans' right-of-way.

Appropriate BMPs have not been implemented for this facility.

- A corrective action plan is required.

### **4 Rating**

**Release (observed or evidence of a recent release) of an unauthorized substance from the facility to outside the Caltrans' right-of-way.**

Release outside the Caltrans' right-of-way.

- This condition requires immediate corrective action and initiation of the Maintenance ERP Level 2.
- A corrective action plan is required.

### **5 Rating**

**Discharge (observed or evidence of a recent discharge) of an unauthorized substance from the facility to surface water.**

Discharge to surface water.

- This condition requires immediate corrective action and initiation of the Maintenance ERP Level 2.
- Report discharge on an Incident Report form.
- A corrective action plan is required.

BMP – Best Management Practice  
ERP – Enforcement Response Program

# **Attachment B: Caltrans Maintenance Facility Storm Water Compliance Review Reports**

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# Attachment B-1: Maintenance Facility Storm Water Compliance Review Report

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# Attachment B-2: Material Storage Facility Storm Water Compliance Review Report

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## **Attachment C: Maintenance Facility Review Database Summary (FY2017-2018)**

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# **Attachment D: Maintenance Facility Review Database Summary of Activities Categories (FY2017–2018)**

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# **Attachment E: Material Storage Facility Review Database Summary of Activities Categories (FY2017–2018)**

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