

US EPA ARCHIVE DOCUMENT

**PORT OF LONG BEACH
PORT OF LOS ANGELES**

**MUNICIPAL SEPARATE STORM SEWER SYSTEM AND
CALIFORNIA INDUSTRIAL GENERAL STORM WATER
PERMIT COMPLIANCE AUDIT REPORT**



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i. Background

An audit team comprised of representatives from US EPA Region 9 and the California Regional Water Quality Control Board, Los Angeles Region (Regional Board), conducted limited-scope audits of the Municipal Separate Storm Sewer Systems (MS4) programs and implementation of the California General Industrial Storm Water NPDES Permit (General Permit) at the Ports of Long Beach (POLB) and Los Angeles (POLA).

In addition to evaluating specific compliance at each port, the respective compliance models employed were evaluated to compare and contrast their relative strengths and weaknesses. The report includes recommendations for reducing stormwater loadings from the Ports.

The team interviewed Port and municipal stormwater staff regarding MS4 storm water management program implementation and conducted oversight inspections assessing the implementation of MS4 inspection requirements. A number of individual facilities were also inspected for compliance with the requirements of the General Permit.

ii. Summary of Findings

Both Port entities appear to be in compliance with those parts of their respective MS4 permits evaluated by the team.

With respect to compliance with the General Permit, the team's inspections found violations at approximately half of the facilities inspected at each Port

iii. Recommendations

The report concludes with recommendations for reducing stormwater loadings from the Ports. The recommendations represent a hybrid approach combining the best of the POLA and POLB programs and include:

- Individual industrial facilities located within each Port's jurisdiction should be required to separately file for coverage under the General Permit;
- Individual NPDES permits should be issued to each Port authority to comprehensively oversee discharges of storm water from the industrial activities occurring within its jurisdiction, including:
 - maintaining current inventories of all tenant and non-tenant storm water dischargers within its respective jurisdiction; and

-
- development and implementation of management systems to ensure that the terms and conditions of the general or facility-specific storm water permits governing individual industrial facilities are complied with on a continuing basis; and
 - Each Port authority should develop a storm water monitoring program to ensure both a consistent approach to discharge monitoring as well as a comprehensive view of the overall effectiveness of each Port's storm water management program's efforts to improve the water quality of the Los Angeles and Long Beach Harbors.

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1.0 Introduction

An audit team comprised of staff from US EPA Region 9 and the California Regional Water Quality Control Board, Los Angeles Region (Regional Board), with technical assistance by Amendola Engineering, Inc. of Lakewood, Ohio (collectively, the audit team) conducted limited-scope audits of the Municipal Separate Storm Sewer Systems (MS4) programs and implementation of the California General Industrial Storm Water NPDES Permit (General Permit) at the Port of Long Beach (POLB) and the Port of Los Angeles (POLA). The on-site portions of the audits were conducted on May 14-15 and May 16-17, 2007, respectively. This report presents a summary of the audit findings.

Municipal Separate Storm Sewer Systems (MS4s) at the Ports of Long Beach and Los Angeles are regulated by NPDES permits issued by the Regional Board to the City of Long Beach (CAS004003) and the County of Los Angeles (and co-permitted cities) (CAS004001), respectively. The City of Los Angeles is a co-permittee under the County of Los Angeles MS4 permit.

The County of Los Angeles' MS4 permit was issued on December 13, 2001 and contains an expiration date December 12, 2006. The City of Long Beach MS4 permit was adopted on June 30, 1999 and contains an expiration of June 29, 2004. The City of Long Beach and County of Los Angeles MS4 permits have been administratively extended pending reissuance.

The General Permit (CAS000001) was issued by the California State Water Resources Control Board on November 19, 1991, and reissued on April 17, 1997. The General Permit regulates the discharge of storm water associated with certain types of industrial activities.¹

1.1 Purpose of the Audits

MS4 and General Industrial Storm Water Permit (General Permit) compliance audits were conducted at the POLB and POLA for the following purposes:

- (1) To assess compliance at the POLB and POLA with select applicable MS4 permit conditions and compliance with applicable General Permit storm water pollution prevention plan (SWPPP) and monitoring program implementation requirements;
- (2) To assess compliance of a select number of industrial facilities within each Port with applicable General Permit conditions; and,
- (3) To evaluate the effectiveness of the two distinct compliance models each Port has employed to ensure that the Ports themselves and the facilities within each Port's

¹ Facilities must self-enroll by filing a Notice of Intent (NOI) to be covered under the General Permit.

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jurisdiction comply with applicable permits. The storm water compliance models employed at each Port are discussed in the next section.

Section 308 of the Clean Water Act (CWA) and Title 40 of the Code of Federal Regulations (40 CFR) Section 122.41(i) provides the authority to conduct the program evaluation.

1.2 Port of Los Angeles (POLA) and Port of Long Beach (POLB)

The POLA and the POLB are two of the most active seaports in the United States and among the most active in the world. Each port consists of numerous commercial and industrial facilities. Types of commercial and industrial facilities at each Port include:

- | | |
|----------------------------------|---|
| Containerized Cargo | Petroleum Coke Handling |
| Dry Bulk Cargo | Marine Vessel Fueling & Maintenance |
| Liquid Bulk Cargo | Water Transportation |
| Break Bulk Cargo | Other Miscellaneous Industrial Facilities |
| Ro-Ro (Roll On – Roll Off) Cargo | Marine Vessel Construction |
| Intermodal Rail | Electrical Power Generation |

Activity and area statistics for each Port are presented below in Table 1.2.1.

**Table 1.2.1
POLA and POLB Statistics (2006)**

Statistic	POLA	POLB
Land Area (acres)	7,500	3,200
Waterfront (miles)	43	14
Cargo Handled (million tons/year)	160	85
Handled Cargo Value (billion \$)	\$180	\$100
Vessels Handled (#)	2,800	5,300
Industrial/Commercial Facilities (#)	137	53
Berths (#)	270	80
Receiving Waters	East Basin Channel Main Channel West Channel Los Angeles Harbor	Long Beach Inner Harbor Back Channel Long Beach Channel Long Beach Middle Harbor San Pedro Bay

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1.3 MS4 Permits

The POLA and POLB are municipal departments within the City of Los Angeles and the City of Long Beach, respectively, and are subject to the MS4 permit requirements held by the County of Los Angeles (and co-permitted cities) and the City of Long Beach. The MS4 Permits for the County of Los Angeles and the City of Long Beach do not contain specific requirements for port operations. In addition, there are no EPA guidelines on MS4 requirements specific to port operations.

The MS4 Permits were issued separately in 1999 and 2001 and do not contain identical requirements. For example, the Long Beach MS4 Permit issued in 1999 does not require compliance inspections of industrial and commercial facilities², but the Los Angeles MS4 Permit does require such inspections. Both MS4 Permits have been administratively extended, and the Regional Board is considering concurrent reissuance of the MS4 Permits.

1.4 California Industrial General Storm Water Permit (General Permit)

The General Permit regulates discharges from industrial activities, as defined at 40 C.F.R. 122.26(b)(14), at the Ports that have the potential to discharge contaminated storm water runoff.

Fifty-three tenant and private facilities at the POLB are covered under a single notice of intent (NOI) filed by the Port. The POLB filed for General Permit coverage in March 1992. The POLB has a comprehensive monitoring and sampling program that is conducted port-wide.

At the POLA, individual tenant facilities are responsible for filing an NOI. As of May 2007, 137 individual facilities at the POLA have filed an NOI for coverage under the General Permit. Individual facilities at the POLA are responsible for conducting monitoring and sampling of storm water discharges.

1.5 Storm Water Program Models

Port of Long Beach (POLB)

- The POLB Division of Environmental Planning manages a Master Storm Water Program which implements both the industrial component of the City of Long Beach MS4 permit as well as certain requirements of the General Permit (discussed below) for all “member facilities” (i.e., members of the Master Storm Water Program) within the POLB boundary.

Port of Los Angeles (POLA)

² The City of Long Beach MS4 permit requires that educational site visits be conducted by the permittee at industrial/commercial facilities.

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- The City of Los Angeles, Department of Public Works, Bureau of Sanitation, Watershed Protection Division (WPD) implements the MS4 inspection program of industrial/commercial “critical sources”³ located within the City of Los Angeles.
- The Port of Los Angeles does not assume any liability for General Permit compliance at facilities with the Port boundary. Each facility, whether on private property or a Port tenant, is responsible for submittal of the NOI and compliance within all portions of the General Permit.

1.6 Water Quality of Receiving Waters

As presented in Table 1.2.1, storm water from industrial and commercial facilities located with the POLA and the POLB is discharged to several basins, channels and harbors in the Los Angeles and Long Beach Harbor complex area.

The Los Angeles and Long Beach Harbor complex is listed on the 2006 Clean Water Act Section 303(d) list of water quality limited segments in California requiring development of TMDLs⁴. The pollutants / stressors for which the water body is listed include: Beach Closures, Benthic Community Effects, copper, DDT, PCBs, sediment toxicity and zinc. Although some port facilities may be contributors to water quality impairments much, if not most, of the pollution originates upstream in the Los Angeles River and Dominguez Channel watersheds.

Sediment contamination and toxicity for harbor areas were also noted in California’s Clean Water Act Section 305(b) Report for 2006⁵. Excerpts from that report follow:

“One of the sediment quality indicators, sediment chemical contamination, suggests poor conditions at less than 10 percent of the state. These areas tended to be in Southern California ports.”(pg. 8)

“Seven percent of California’s estuarine sediments had high sediment contamination. Moderate contamination (exceeding ERL guidance values for at least five contaminants) was observed in 57% of estuaries. Areas of California with the highest sediment contamination were in Southern California, particularly Los Angeles Harbor.” (pg. 25)

“Although detectable levels of pollution were widespread, sediment contaminant concentrations were generally detected below levels expected to cause adverse biological

³ This program is an element of the MS4 permittees’ Storm Water Quality Program (SQMP). Categories of critical sources are set out in the County of Los Angeles MS4 permit.

⁴ 2006 CWA Section 303(d) List of Water Quality Limited Segments Requiring TMDLs, Los Angeles Regional Water Quality Control Board; USEPA Approval Date: June 28, 2007

⁵ Clean Water Act Section 305(b) Report 2006, Water Quality Assessment of the Condition of California Coastal Waters and Wadeable Streams, October 2006.

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impacts. Eighty percent of the Southern California Bight contained sediment for which there was minimal to no toxicity concern. The greatest prevalence and severity of toxicity were in port and marina areas within bays and harbors.” (pg. 12)

As part of California Water Resources Control Board’s Surface Water Ambient Monitoring Program (SWAMP), the Los Angeles/Long Beach Harbor area was monitored at 30 sampling stations in 2003. A draft report⁶ that summarizes the 2003 sampling effort indicates that water column samples collected for metals were below water quality objectives, with the exception of silver. However, the draft report notes widespread DDT and copper sediment contamination, identifies nickel and mercury sediment contamination and also notes that sediment toxicity occurred at more than half of the stations tested in the Los Angeles / Long Beach Harbors.

2.0 Port of Long Beach (POLB)

2.1 Administrative Structure

The POLB is governed by the City of Long Beach. The City Charter created the Long Beach Harbor Department to promote and develop the Port. Under the Charter, a five-member Board of Harbor Commissioners is responsible for setting policy for the Port and managing the Harbor Department.

Environmental affairs at the Port are managed by the Environmental Planning Division. Environmental Planning is part of a three-division Environmental Affairs and Planning Bureau that also includes Master Planning and Transportation Planning.

2.2 Audit Preparation and Process

Before initiating the on-site program evaluation, the audit team reviewed the following materials:

- NPDES Permit No. CAS004003;
- MS4 Annual Report Site Inspection List (from 2005-2006 Annual report);
- List of industrial tenant facilities;
- Industrial facility Regional Board inspection records;
- POLB Web site; and
- Aerial and satellite photos of the Port.

On May 14-15, 2007, the audit team conducted the compliance audit of the Port. The audit consisted of in-office interviews of Port staff regarding MS4 storm water management program implementation and oversight inspections assessing the implementation of MS4

⁶ *DRAFT Water Quality in the Dominguez Channel and Los Angeles/Long Beach Harbor Watershed Management Area Under the Surface Water Ambient Monitoring Program Fiscal Year 2002-2003, September 2007*

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inspection requirements in the field. Individual facilities were inspected for compliance with the SWPPP development and monitoring program implementation requirements of the General Permit.

The following presents the number of tenant and non-tenant facilities inspected at the Port. A complete list of inspected facilities for the Port is presented in Figure A.

Total Facilities inspected	30
Tenant Facilities	26
Non-Tenant Facilities ⁷	4
MS4 Oversight Inspections	9
General Permit Inspections	21

Three weeks after completion of the audit (June 7, 2007), an exit conference call was conducted with the permittee and the audit team to discuss the preliminary findings, which were to be considered preliminary pending further review by the USEPA and the Regional Board.

2.3 Permit Components Evaluated

The industrial component of the Port's MS4 storm water program was evaluated. The Port was evaluated for compliance with the SWPPP development and implementation (Section A) and the Monitoring program implementation requirements (Section B) of the General Permit.

In 1992 the Port created the Port of Long Beach Master Storm Water Program in order to implement a systematic approach to storm water management throughout the Harbor Districts. The Program, as approved by the Regional Board, establishes the Port as the single permit holder for all participants, both tenants and private property owners. Under the Program the Port takes on many administrative roles and responsibilities under both the MS4 and General Permits in order to allow the facilities to focus on pollution prevention through SWPPP and BMP implementation.

2.4 Program Areas Not Evaluated and Recommended for Additional Assessments

The following areas were not included in the audit scope:

⁷ "Non-tenant facilities" are facilities located within the boundaries of the Port, but not located on port property (e.g. privately owned land surrounded by land owned by the Port).

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- Assessment of the implementation of other components of the MS4 permit (i.e. illicit discharge detection and elimination, construction and development controls, etc.);
- Assessment of public agency activities at the Port;
- Assessment of the implementation of the MS4 permits in areas outside of Port boundaries;
- Evaluation of compliance with the reporting requirements (Section B) of the General Permit;
- Evaluation of the effectiveness of the MS4 permit or the General Permit;
- Analysis on a port-wide basis of monitoring data collected by the Master Storm Water Program.

The audit team recommends the following additional assessments

- An assessment of the accuracy and reliability of storm water monitoring data collected by the Master Storm Water Program.

As is described in detail later in this report, the audit team contends that the storm water management model implemented by the POLB provides an excellent framework for collection of accurate and reliable storm water monitoring data for discharges to Long Beach Harbor and San Pedro Bay. This is because one entity familiar with the technical aspects of sampling analysis is responsible for the entire environmental monitoring process. The assessment could include a review of the following aspects of the monitoring program: proper sampling techniques, containers, holding times, sampling locations and analytical methods.
- A complete analysis of the POLB's Master Storm Water Program monitoring data.

The audits determined whether the required monitoring had been performed according to the General Permit; however, a detailed analysis of the sampling data on a port-wide basis was beyond the scope of the audit. This analysis could include a summary of exceedance of parameter benchmark values (PBVs), and review of any follow-up activities conducted in response to such exceedances. The analysis should also include a comparison of monitoring data to applicable water quality standards, especially for TMDL-related pollutants.

2.5 MS4 Permit Compliance

This section summarizes the findings of the audit organized by permit requirement (as evaluated) and includes a summary of the permit requirement, a brief description of the relevant details observed during the audit, and a summary of the findings associated with each requirement. The findings include any potential permit non-compliance, deficiencies, or positive attributes of note. Deficiencies describe portions of a program or management practices which are not necessarily in non-compliance with permit requirements, but could be improved upon to better protect water quality through recommended modifications. The audit team identified only positive attributes that were beyond permit requirements or were

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particularly innovative. Many areas were found to be adequate, meaning the applicable permit conditions appeared to be met. In those cases, no associated description or findings are included in this report.

This report is not meant to be a complete description of the Port's storm water management programs or implementation procedures. Details are provided as necessary to document compliance with a permit requirement. Program descriptions and details are included as necessary to support findings. Attachments A and B include the inspection reports for all facilities visited by the audit team during compliance or oversight inspections.

As previously stated, the Port is required to comply with the MS4 permit issued to the City of Long Beach. The MS4 permit does not have requirements specific to the Port.

MS4 Storm Water Management Program (SWMP) Industrial Component

Part III.G.6. of the permit outlines the requirements of the City of Long Beach's Industrial/Commercial Education Program component of the SWMP. The program is to include:

- ✓ Educational site visits every two years to all industrial facilities defined by EPA's Phase I storm water regulations, vehicle repair shops, vehicle body shops, vehicle parts and accessory facilities, gas stations, restaurants, and additional industrial/commercial facilities identified as priorities by the Regional Board.
- ✓ Annual update of the industrial/commercial facilities to Los Angeles County and the Regional Board.

The Port of Long Beach is a separate department within the City of Long Beach and conducts the storm water industrial/commercial educational site visits at industrial port tenants and private facilities within the Port boundary which elect to become members of the Master Storm Water Program (the Program). On behalf of each member facility (53 members at the time of the audit), the POLB obtained coverage under the General Permit and implements the required components of the MS4 permit as well as certain components of the General Permit. Four known industrial facilities as well as an unspecified number of industrial/commercial facilities within the Port boundary are not part of the Program however. The four industrial facilities⁸ have obtained coverage for their storm water discharges, either under the General Permit or an individual permit. Port staff implements the industrial/commercial component of the MS4 permit at Program member facilities only.

Port staff developed a model SWPPP and compendium of storm water BMPs to assist member facilities with the development and implementation of site specific SWPPPs and associated BMPs. Port staff conduct an annual inspection at each member facility which

⁸ The four facilities are: Cabrillo Boat Yard; JH Baxter, Morton International, Inc.; and Vopak Terminals Long Beach, Inc.;

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includes a review of the SWPPP onsite. A copy of the completed inspection form is presented to the facility at the end of the inspection, and follow up letters are sent to facilities after the inspection either indicating compliance or noting best management practices that were not being adequately implemented. The POLB requires all member facilities to certify annually that their SWPPP is adequate, and if any changes are made, a copy must be submitted to the POLB for review.

The Port maintains a geographic information system (GIS) database which includes facility information, sewersheds, discharge points and other pertinent storm water data. This database is used to track spills, compliance history, inspection findings and enforcement actions. The database is also used to help maintain the larger inventory of industrial facilities located within the City, as required in the permit.

Nine industrial facility inspections conducted by Port staff during the audit were evaluated to assess the implementation of the inspection program (oversight inspections). The permittees within the POLB were notified in advance of these inspections. Typically, industrial inspections are performed without prior knowledge of the permittee to the extent possible.

Positive Attributes:

- *Port staff perform annual compliance inspections of facilities within the Program in excess of permit requirements.*

Port staff perform annual announced inspections at all member facilities. The inspections result in follow up letters outlining required changes in order to comply with General Permit and SWPPP requirements. These inspections occur at a higher frequency than required by the MS4 permit (Part III.G.6.). The compliance focus of the POLB Program inspections is more effective at ensuring implementation of BMPs than the educational nature of the site visits required by the permit.

- *The facilities participating in the POLB Program are required to annually review their SWPPPs and certify they are adequate to manage storm water pollutant discharge. Any change to the facility or process triggers an update and review of the SWPPP by Port staff as well.*

Members of the Program are required to submit an annual certification to the POLB that they have reviewed their SWPPP and that it is still adequate to manage storm water discharge from the facility. These compliance oversight measures are not required in the MS4 permit.

- *The POLB inspectors were knowledgeable of the stormwater program requirements, were knowledgeable about each of the program facilities visited, and were familiar with the BMPs at each site.*

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Nine industrial facility inspections conducted by the POLB were evaluated as part of the MS4 audit. The POLB inspections of the facilities were thorough and included the following: a review of SWPPP, training records, a thorough inspection of the facility using a POLB checklist, and a closing briefing listing findings from the inspectors. Inspectors were generally familiar with each of the site operations, BMPs, and areas of concern. The inspection documentation (from previous inspections) was generally thorough and complete.

- *The POLB provides a comprehensive management structure for the industrial program.*

The Master Storm Water Program staff focuses on storm water-related issues for member facilities. This allows member industrial facilities without environmental staff to stay up-to-date on storm water regulations and requirements as well as BMPs. The POLB provides technical assistance to member facilities, such as model SWPPP templates and training materials.

- *The POLB is considering areas for potential BMPs.*

The POLB has identified approximately 100 acres of unused land on the Port (comprised of slivers of land in the public right of way, abandoned properties, etc.) and Port representatives indicated that these areas may have potential applications for stormwater BMPS. The audit team recommends the POLB continue this effort for potential improvements to stormwater quality.

Deficiencies Noted:

- *POLB is both the entity providing the educational visits (inspections in this case) and the General Permit holder.*

By virtue of holding the General Permit for “member facilities,” and also conducting the facility visits required by the MS4 permit, POLB may be perceived as having a conflict of interest, in that problems at visited facilities may also constitute non-compliance with the General Permit. This framework may become less desirable if “compliance inspections” are required as part of the renewal MS4 permit. In this case, POLB may be perceived as having an interest in downplaying possible non-compliance at inspected facilities because non-compliance would also subject POLB to potential enforcement under the General Permit.

The paragraph above should not be construed to question the effectiveness or integrity of any current inspections or possible future compliance inspections for MS4 purposes conducted by the POLB at Port facilities. It is included only to point out that a *potential* conflict of interest exists if POLB conducts “compliance inspections” to satisfy possible future MS4 requirements because identified non-compliance may

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subject POLB to enforcement under the General Permit (i.e., the MS4 inspecting entity will also be the General Permit Permittee).

- *Independent inspections revealed 33% of facilities to be in compliance with general permit; however, an additional 52% had minor deficiencies, and 14% had significant compliance issues.*

While this compliance rate is consistent with other industrial inspection results, the POLB, as both the MS4 entity and the industrial stormwater permit holder, has the opportunity to increase compliance rates to demonstrate the effectiveness of this unique program arrangement. Additionally, as noted previously, all POLB facilities received prior notification that inspections were to be conducted.

- *Follow up to non-compliance at member facilities is insufficient*

Where deficiencies were noted, the POLB sends a letter to the member facility indicating areas of non-compliance and requests written communication from the member facility that the BMPs were improved. The auditors reviewed several response letters, and observed that some member facility responses appeared to merely copy the inspector findings of the letter received and state that they had been fixed. The POLB does not perform follow-up inspections, and it was not clear from the documentation that the member facility understood the nature of the deficiencies or what specific actions were taken to achieve compliance. Additionally, a review of several years of correspondence indicated the POLB inspectors identified the same uncorrected problems over several years.

- *POLB does not have an enforcement escalation procedure.*

While the unique circumstances of the POLB as both MS4 and industrial permit holder may preclude a typical enforcement escalation procedure, the POLB should have a documented procedure and mechanism for addressing non-compliance. The role of the industrial inspection program appeared to be more of a compliance assistance program than one of a regulatory role, and the POLB indicated that the only mechanism they have to ensure compliance from member facilities is the threat of removing a facility from the program. The POLB should develop an escalation procedure within the context of their program, which may include additional inspection fees, fines, or lease agreements addressing liability, or referral of non-complying facilities to the Regional Board.

Potential Permit Non-Compliance:

- *No formal memorandum of understanding or delineation of responsibility exists between the City of Long Beach's overall industrial/commercial inspection program and the POLB Storm Water Program to ensure that all industrial/commercial*

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facilities within the Port's boundaries covered by the MS4 permit are documented and visited as required.

Port staff indicated that four industrial tenants do not participate in the Program as well as an unspecified number of commercial facilities in Pier S and the North Harbor areas. Documentation was not produced to demonstrate that an inventory of all industrial/commercial facilities within the Port boundary are being visited and accounted for as required. The City is required to ensure that all facilities specified in Part III.G.6. of the MS4 permit are visited at least every two years and that a complete list of all applicable facilities is maintained and submitted to the County of Los Angeles and the Regional Board. Currently only the 53 member facilities are being visited.

2.6 Industrial General Permit Compliance

The General Permit requires each facility covered under the permit to develop and implement a SWPPP (see Part A.1. of the General Permit). The SWPPP must include the following (Part A.8):

- Identification of potential storm water pollution sources specific to the facility;
- Development of site-specific best management practices, which are designed to eliminate or reduce storm water pollution;
- Implementation of the best management practices identified in its SWPPP; and
- Development of a facility site map that must include, among other items, the boundaries of the facility, the outline of storm water drainage areas including the direction of flow, storm water discharge locations and areas of industrial activity.

In addition, the General Permit requires each facility to develop a written Monitoring Program (see Part B.1 of the General Permit), which must include the following (Parts B.3.through B.5):

- Identification of non-storm water discharges from the facility and quarterly inspections for such discharges, noting characteristics of such discharges, if observed;
- Identification of storm water discharge locations, and monthly observations of storm water discharges from the facility for the period October to May, noting the characteristics of such discharges;
- Storm water discharge sampling and analysis of two rain events during the wet season (October to May).

By virtue of POLB having filed an NOI seeking permit coverage on behalf of itself and all of its tenants, each Master Storm Water Program member facility (53 members at the time of the audit), has obtained coverage under the General Permit. Four industrial facilities as well as an unspecified number of other industrial/commercial facilities within the Port boundary

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are not part of the Program and are thus required to seek separate coverage under and comply with all portions of the General Permit.⁹

SWPPP Implementation

Port staff developed a model SWPPP and compendium of storm water BMPs to assist member facilities with the SWPPP development and implementation requirements of the General Permit. Port staff conducts annual inspections at each member facility that includes a review of the SWPPP onsite. Follow-up letters are sent to facilities after the inspection indicating the best management practices or other requirements of the General Permit that were not being adequately implemented. The POLB requires all member facilities to annually certify that their SWPPP is adequate and if any changes are made, a copy must be submitted to the POLB for review.

Monitoring Implementation

The Port, working closely with the Regional Water Quality Control Board, has developed a regional or sub-watershed based sampling program that is designed to assess storm water run-off from the Port as a whole. The Port utilizes this data as well as data collected from other sampling programs to assess the effectiveness of its Master Program as well as water quality within the Harbor. As an active stakeholder, the Port has provided this data to EPA and the Regional Board for inclusion in the development of TMDLs for San Pedro Bay.

Under its monitoring program storm water sampling and analysis required by the General Permit is conducted by the POLB at 22 storm water outfalls throughout the Port. The locations of storm water outfalls are presented in Figure C of this report. The locations were not established based on individual facilities, rather on a ‘sewer-shed’ basis in order to cover multiple facilities with one monitoring location.

The POLB conducts the quarterly non-storm water discharge observations and the monthly storm water discharge observations required by the permit (Parts B.3. and B.4., respectively) at all of its storm water outfalls, including those that are sampled. The POLB also requires member facilities to conduct both the quarterly non-storm water discharge observations, and the monthly storm water discharge visual observations at their respective facilities. The POLB monitoring program is managed using a GIS database which includes layers for monitoring locations, inlets, outfalls, facility information, and spill history. POLB staff (or qualified contractors) are responsible for sampling and monitoring storm water discharge locations. All storm water data is maintained in a single database which can be analyzed to determine potential problem areas throughout the Port.

The audit team received a copy of all storm water sampling data collected in the past ten years. Although thorough reviews of the monitoring program and the monitoring data were

⁹ The four industrial facilities listed under Footnote 8 have permit coverage. The status of any other industrial/commercial facilities located within the Port boundary was not determined as part of the audit.

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not within the scope of the audit, a brief review of the data collected in 2003, 2004, and 2005 (the most recent year available) was conducted. The result of the review indicates that several monitored pollutants exceeded USEPA multi-sector parameter benchmark values. A summary of the review is presented below in Table 2.6.1:

**Table 2.6.1
Summary of 2003-2005 POLB Monitoring Data**

Pollutant	No. of Analyses	USEPA Multisector Parameter Benchmark (Note 1)	Per Cent of Data Exceeding Benchmark
pH	39	6 – 9 s.u.	8 %
Total Suspended Solids	65	100	18 %
Specific Conductance	37	200	0 %
Total Organic Carbon	60	100	7 %
Total Petroleum Hydrocarbons	39	100	0 %
Aluminum	37	0.75	18 %
Copper	52	0.064	5 %
Iron	45	1.0	22 %
Lead	55	0.082	5 %
Zinc	49	0.117	73 %

Note 1 - all units in mg/l unless otherwise specified

The monitoring data show zinc as the most frequently exceeded USEPA multisector parameter benchmark value (PBV), with approximately 73 per cent of the samples above the established level. As discussed previously, the Los Angeles and Long Beach Harbor complex is listed on the 2006 CWA Section 303(d) list of water quality limited segments in California. Zinc and copper are among the 303(d) listed pollutants for these waterbodies.

POLB Independent Facility Inspection Findings

Twenty-one industrial facilities within the POLB were inspected by the audit team to determine compliance with the General Permit SWPPP development and implementation requirements. Of these facilities, three (~ 14 percent) were judged to pose a significant threat to water quality, eleven (~ 52 percent) were determined to have some deficiencies with regard to implementation of best management practices or paperwork requirements, and seven (~ 33 percent) appeared to be in full compliance with General Permit requirements. The inspected facilities were familiar with the requirement to follow BMPs identified in the SWPPP and to conduct the observations at their facility. Individual facility inspection reports are presented as Attachment A.¹⁰

Positive Attributes:

¹⁰ Additional violations of the General Permit were also noted during some of the oversight inspections, as indicated at Attachment B.

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- *Storm water sampling, analysis and management of analytical data required by the General Permit of member industrial facilities is the responsibility of one entity, the Port of Long Beach.*

Having one entity in charge of storm water monitoring for most of the Port, and where that entity is familiar with the technical aspects and requirements of storm water monitoring as well as the management of the harbor area as a whole, presents an opportunity to obtain accurate and reliable storm water monitoring data for discharges to Long Beach Harbor and San Pedro Bay. This regional monitoring approach may result in more accurate and consistent data management.

- *No apparent industrial “non-filers” were identified from this audit.*

Deficiencies Noted:

- *The POLB has apparently improperly filed for coverage under the General Permit on behalf facilities for which it is not the owner, land owner, or operator (i.e., the LG Everist-owned facilities).*

Considering the instructions for the General Permit Notice-of-Intent, the POLB does not appear to have the authority to file for coverage under the General Permit on behalf of these facilities. The NOI application lists the facility operator, owner or land owner as the entity required to obtain coverage under the permit. See the language below from the General Permit NOI application:

NOTICE OF INTENT (NOI)
INSTRUCTIONS
TO COMPLY WITH STATE WATER RESOURCES CONTROL BOARD
WATER QUALITY ORDER NO. 97-03-DWQ
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
GENERAL PERMIT NO. CAS000001
Who Must Submit

The facility operator must submit an NOI for each industrial facility that is required by U.S. Environmental Protection Agency (U.S.EPA) regulations to obtain a storm water permit. The required industrial facilities are listed in Attachment 1 of the General Permit and are also listed in 40 Code of Federal Regulations Section 122.26(b)(14). The facility operator is typically the owner of the business or operation where the industrial activities requiring a storm water permit occur. The facility operator is responsible for all permit related activities at the facility. Where operations have discontinued and significant materials remain on site (such as at closed landfills), the landowner may be responsible for filing an NOI and complying with this General Permit. Landowners may also file an NOI for a facility if the landowner, rather than the facility operator, is responsible for compliance with this General Permit.

- *As the POLB holds the General Permit, member facilities have no apparent incentive to comply with the General Permit.*

While it is understood that a land owner may file the NOI for coverage under the General Permit, rather than a “facility operator”, the arrangement in this case is less than optimal because:

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- 1) The POLB has no apparent authority (other than dismissal from its storm water program) to require tenants' implementation of necessary site-specific BMPs to minimize the discharge of pollutants in storm water; and
 - 2) The arrangement creates a circumstance where the person responsible for the day-to-day operations of a facility where potential pollution sources are located has no apparent incentive to comply with the General Permit, and has no regulatory requirement to implement its SWPPP (i.e., implement its BMPs). This point is particularly important for the private, non-tenant facilities (i.e., the LG Everist-owned properties) for which the Port should not have filed for permit coverage. Implementation of a site specific SWPPP with site-specific BMPs is a major component of the General Permit.
- *At some inspected facilities, audit team inspectors noted that the same storm water issues had been communicated by POLB to the facility year after year.*

The POLB did not adequately follow through with the facility to ensure audit findings were adequately addressed. The POLB needs to place greater emphasis on follow-up to annual storm water audit findings.

- *The inspections conducted by the POLB are typically announced one working day prior to the inspection.*

By announcing inspections, member facilities are provided an opportunity to prepare the site prior to POLB staff arrival, and consequently, POLB staff may not be observing true day-to-day site conditions. A primary intent of the annual comprehensive site compliance evaluation is to assess whether BMPs are properly implemented and maintained. Although one-day advance notice is reasonable, the audit team contends that unannounced inspections would provide a more accurate representation of facility conditions on a day-to-day basis, and would provide a better opportunity to assess BMP maintenance and implementation. The audit team understands that under a more traditional application of the General Permit, in-house staff may provide advance notice that the annual comprehensive site evaluation will be conducted on a given day. However, given that the only formal inspection of the facility by the permit holder occurs once per year, it appears to the audit team that unannounced inspections would be more valuable for assessing BMP implementation compliance.

- *According to Port staff, information relating to parameter benchmark value exceedances has not been communicated to member facilities.¹¹*

¹¹ It should also be noted that the Regional Board has received all of the Port's monitoring data and has, to date, not compelled the Port to take any action in response to observed exceedances of parameter benchmark values.

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As the permittee, the POLB, in concert with member facilities, should be re-evaluating BMP effectiveness in light of storm water monitoring data.

Potential Permit Non-Compliance:

As noted above, 14 of the facilities inspected were judged to be deficient in some manner with respect to compliance with the General Permit. These deficiencies are identified in the individual facility inspection reports presented in Attachment A. However, potential non-compliance with the General Permit related to individual member facilities is not otherwise discussed in this report.

3.0 Port of Los Angeles (POLA)

3.1 Administrative Structure

The POLA is an independent, self-supporting department of the City of Los Angeles. The Port is under the control of a five-member Board of Harbor Commissioners appointed by the Mayor and approved by the City Council. Environmental Affairs at the Port are managed by the POLA Environmental Management Division.

3.2 Audit Preparation and Process

Before initiating the on-site program evaluation, the audit team reviewed the following materials:

- NPDES Permit No. CAS004001;
- MS4 Annual Report (2005-2006 Reporting Year);
- List of industrial tenant facilities;
- Industrial facility Regional Board inspection records;
- Port Web site; and
- Aerial and satellite photos of the Port.

On May 16-17, 2007, the audit team conducted the compliance audit of the Port. The audit consisted of in-office interviews of Port staff regarding MS4 storm water management program implementation and oversight inspections assessing the implementation of MS4 inspection requirements in the field. Individual facilities were inspected for compliance with the requirements of the General Permit.

The following presents the number of tenant and non-tenant facilities inspected at the Port. A complete list of inspected facilities for the Port is presented in Figure B.

Total Facilities inspected	25
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Tenant Facilities	22
Non-Tenant Facilities ¹²	3
MS4 Oversight Inspections	2
General Permit Inspections	23

Three weeks after completion of the audit (June 7, 2007), an exit conference call was conducted with the permittee and the audit team to discuss the preliminary findings, which were to be considered preliminary pending further review by the USEPA and the Regional Board.

3.3 Permit Components Evaluated

The industrial facility and public agency facility components of the MS4 storm water programs were evaluated. Individual facilities within the Port were evaluated for compliance with the SWPPP development and implementation (Section A) and the Monitoring program implementation (Section B) requirements of the General Permit.

3.4 Program Areas Not Evaluated and Recommended for Additional Assessments

The following areas were either not included in the audit scope:

- Assessment of the implementation of other components of the MS4 permit (i.e. illicit discharge detection and elimination, construction and development controls, etc.)
- Assessment of public agency activities outside of Port facilities storm water management
- Assessment of the implementation of the MS4 permit in areas outside of Port boundaries
- Evaluation of the effectiveness of the MS4 permit or the General Permit
- Analysis on a port-wide basis of monitoring data collected by the individual facilities within the Port

The audit team recommends the following additional assessment

- Analysis of individual facility monitoring data.
The audits determined whether the required monitoring had been performed according to the General Permit, however, a detailed analysis of the sampling data on a port-wide basis was beyond the scope of the audits. This analysis could include a summary of parameter benchmark exceedances, a review of any follow up conducted

¹² “Non-tenant facilities” are facilities located within the boundaries of the Port, but not located on port property (e.g. privately owned land surrounded by land owned by the Port).

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in response to these exceedances either by the POLA or by the individual facilities within the POLA, and comparison of monitoring data to applicable water quality standards.

3.5 MS4 Permit Compliance

This section summarizes the findings of the audit organized by permit requirement and includes a summary of the permit requirement, a brief description of the relevant details observed during the audit, and a summary of the findings associated with each requirement. The findings include any potential permit non-compliance, deficiencies, or positive attributes of note. Deficiencies describe portions of a program or management practices which are not necessarily in non-compliance with permit requirements, but could be improved upon to better protect water quality through recommended modifications. The audit team identified only positive attributes that were beyond permit requirements or were particularly innovative. Many areas were found to be adequate, meaning the applicable permit conditions appeared to be met. In those cases, no associated description or findings are included in the report.

This report is not meant to be a complete description of the Port's storm water management programs or implementation procedures. Details are provided as necessary to document compliance with a permit requirement. Program descriptions and details are included as necessary to support findings. Attachments A and B include the inspection reports for all facilities visited by the audit team during compliance or oversight inspections.

As previously stated, the Port, as an entity of the City of Los Angeles, is required to comply with the MS4 permit issued to the County of Los Angeles and the 83 co-permittees. The MS4 permit does not have requirements specific to the Port.

POLA MS4 Storm Water Quality Management Program (SQMP) Industrial Component

Part 4.C. of the MS4 permit outlines the County of Los Angeles' Industrial/Commercial Facilities Control Program. The program is to include:

- ✓ Measures to track, using a database, critical sources (e.g., restaurants, automotive service facilities, retail gasoline outlets, automotive dealerships, industrial facilities defined by EPA's Phase I storm water regulations, and other facilities such as municipal landfills, hazardous waste treatment, disposal, and recovery facilities and facilities subject to Title III of the Superfund Amendments and Reauthorization Act).
- ✓ Compliance inspections of critical sources (i.e., twice per permit term for all EPA Phase I facilities).

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- ✓ Measures to ensure implementation of all BMPs at critical sources necessary to comply with County and municipal ordinances, Regional Board Resolution 98-08, and the SQMP and those necessary to achieve water quality objectives.

The Department of Public Works, Bureau of Sanitation, Watershed Protection Division manages the industrial/commercial inspection program. The City of Los Angeles has developed a database, Watershed Protection Information Management System (WPIMS), to track critical sources. The database was populated by the previous permit term's educational site visit program and the American Business Institute list (2000). The database tracks facility information, inspection findings, self monitoring report data, and compliance history, and it assists inspectors in the generation of reports and enforcement actions. The inventory is updated through field inspection data, input from Regional Board, hotline database entries, and business licenses. Currently, the database has 22,000+ facilities identified, of which 731 are in the harbor area and 40 are Port tenants.

During the previous permit term, the City of Los Angeles prioritized facilities for inspections based on the types of facilities identified as major sources of pollutants of concern: wholesale trade (scrap recycling, auto dismantling), automotive repair/parking, fabricated metal products, motor freight, chemical and allied products, automotive dealers/gas stations, and food service facilities.

The City of Los Angeles assigns critical sources to inspection teams based on zip code. The harbor area has one dedicated team, whose responsibilities include all Port tenants. Inspectors are trained and provided an inspection standard operating procedures document. The second cycle of facility inspections is complete and all identified critical source facilities within the Port boundary have been inspected twice. During the next permit term, the City of Los Angeles plans to prioritize critical sources based on previous noncompliance and hazardous waste generation.

Inspections of Port tenants are unannounced and include assessment of BMPs, a review of the facility's SWPPP and an assessment of compliance with the applicable city storm water ordinance. The POLA staff provided model SWPPPs for facilities and distributed them to assist facility managers in their development. The inspectors use an enforcement response protocol (found in the Illicit Discharge Detection and Elimination [IDDE] Guidance Manual) to determine what enforcement actions are warranted by the findings of an inspection. The City of Los Angeles uses municipal ordinances to require compliance.

The findings of the inspections and/or enforcement actions issued are not communicated to POLA staff. In addition, there is no formal standard operating procedure for wharfingers (liaisons between the tenant and POLA) and Port police to report discharges, spills, or enforcement action issued, beyond using the City of Los Angeles's hotline.

Separate from the inspections conducted by the Watershed Protection Division staff, the Port staff has instituted an Environmental Compliance Assessment (ECA) program for the tenants

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considered to pose a high or medium environmental risk. The program is modeled after the EMS ISO 14001 paradigm. Thirty tenants were chosen to be assessed and all assessments were to be completed by August or September 2007. The ECA audits are meant to provide compliance assistance; however, if the facilities choose to not rectify any non-compliance of environmental regulations, the Port staff is committed to report them (e.g., the Port's internal ECA procedure document requires the non-compliance to be reported to the appropriate regulatory agency). The ECA audit process is a review of environmental compliance at the facilities, including many more programs than storm water management. Port staff indicated that in the future, any new tenant or existing tenant negotiating a new lease will need to complete an ECA audit.

Two industrial facility inspections conducted by the City of Los Angeles were evaluated as a part of the MS4 audit. In both cases, the MS4 inspection of the facility was thorough and included the following: a review of the NOI for coverage under the General Permit; a review of the facility's SWPPP; a detailed, thorough inspection of the facility; an assessment of compliance with the applicable city storm water ordinance, and a closing briefing listing findings from the inspections and the City of Los Angeles' plan for further follow-up, as appropriate (i.e., follow-up inspection, Notice-of-Violation (NOV) of city ordinance, Notice-To-Comply, etc.). The inspectors were clear and direct in the closing briefings regarding findings from the inspection, potential NOVs and any BMPs that may have been lacking. During these two inspections, the municipal inspectors met the inspection requirements at Part 4.C.2. of the MS4 permit.

Also, during two of the individual facility inspections led by the audit team, City of Los Angeles MS4 inspectors conducted a concurrent inspection for compliance with the applicable city storm water ordinance. In each of these cases, the MS4 inspections were observed to be thorough, and included the same elements as listed above (i.e., review of NOI, SWPPP, a thorough site inspection, clear and direct explanation of any inadequate BMPs and intentions for inspection follow-up). During these two inspections, the municipal inspectors met the inspection requirements at Part 4.C.2. of the MS4 permit.

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Positive Attributes:

- *In addition to performing the required frequency of industrial inspections within the Port, the City of Los Angeles's Port staff are also performing ECA audits at thirty Port facilities of high or medium environmental risk.*

The ECA audits are comprehensive compliance evaluations of the facilities deemed to be of the highest environmental risk within the Port. This provides for an additional level of review and oversight for facilities not necessarily included within the City of Los Angeles's overall inventory of high priority facilities (i.e., wholesale trade (scrap recycling, auto dismantling), automotive repair/parking, fabricated metal products, motor freight, chemical and allied products, automotive dealers/gas stations, and food service facilities).

Deficiencies Noted:

- *Communication between the City's Watershed Protection Division inspection staff and the Port staff does not optimally facilitate the exchange of wharfing and Port police observations, findings from the WPD's compliance inspections, or the ECA audits.*

No formal mechanism exists to consistently exchange important information about illicit discharges, spills, inspection findings or enforcement actions which are documented by either the Watershed Protection Division or the Port staff. Port staff are instructed to report incidents to their supervisor and/or call the City of Los Angeles hotline; however, a more direct means of communication does not exist. The information available to the Port staff (i.e., wharfingers, Port police, and ECA auditors) could be of value to the City inspection staff and inspection findings and enforcement actions should be part of any tenant's record with the Port. The audit team recommends that a formal mechanism (e.g., meeting, incident reporting, standard operating procedure, etc.) be developed to ensure adequate communication between the departments and to better and more actively engage Port field staff in the City of Los Angeles's storm water management program.

Potential Permit Non-Compliance:

None.

POLA MS4 SQMP Public Agency Facilities Management Component

Part 4.F.3. of the County MS4 permit outlines the County of Los Angeles' Public Agency Vehicle Maintenance/Material Storage Facilities/Corporation Yards Management Program. The program is to include:

- ✓ Development of SWPPPs for each facility which has the "potential to discharge pollutants into storm water";

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- ✓ Measures to implement good housekeeping, material storage, vehicle leak and spill control, and illicit discharge control BMPs at public facilities; and,
- ✓ Equipment wash area BMPs.

There are five public agency facilities within the Port – four fire stations and one maintenance and construction yard (Berth 161 – “the Yard”). All of the facilities were inspected at least twice during the past permit term by Watershed Protection Division staff and all have up-to-date SWPPPs.

In addition, the Yard facility has obtained certification under EMS ISO 14001, under a process that commenced two years ago through EPA grants awarded to the Port and twelve other ports around the country. Storm water management is included in the EMS objectives and measurable targets and the facility’s SWPPP is used as a resource in the process of developing applicable operational controls. The EMS Quarterly internal EMS audits are conducted by Port staff to ensure operational controls are in place and functioning.

The Yard was inspected as a part of the MS4 permit audit in order to gauge the level of SWPPP implementation as well as to ascertain the MS4 inspectors’ level of SWQMP and SWPPP awareness. Both the Watershed Protection Division inspectors and facility manager were knowledgeable about necessary BMPs and the SWPPP. The facility was very clean and all required BMPs were implemented and installed.

Positive Attribute:

- *The implementation of an EMS system at the Yard facilitates a heightened level of awareness of storm water issues and increased engagement in the implementation of BMPs on site.*

The EMS provides the impetus to more frequently consider storm water management goals and objectives. Regular manager meetings (monthly), trainings (bi-weekly), and quarterly walk-through audits exceed the requirements of the MS4 permit.

Deficiencies Noted:

None.

Potential Permit Non-Compliance:

None.

3.6 Industrial General Permit Compliance

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The General Permit requires each facility covered under the permit to develop and implement a SWPPP (see Part A.1. of the General Permit). The SWPPP must include the following (Part A.8):

- Identification of potential storm water pollution sources specific to the facility;
- Development of site-specific best management practices, which are designed to eliminate or reduce storm water pollution;
- Implementation of the best management practices identified in its SWPPP; and
- Development of a facility site map that must include, among other items, the boundaries of the facility, the outline of storm water drainage areas including the direction of flow, storm water discharge locations and areas of industrial activity.

In addition, the General Permit requires each facility to develop a written monitoring program (see Part B.1 of the General Permit), which must include the following (Parts B.3.through B.5):

- Identification of non-storm water discharges from the facility and quarterly inspections for such discharges, noting characteristics of such discharges, if observed;
- Identification of storm water discharge locations, and monthly observations of storm water discharges from the facility for the period October to May, noting the characteristics of such discharges;
- Storm water discharge sampling and analysis of two rain events during the wet season (October to May).

The POLA does not assume any liability for General Permit compliance at facilities within the Port boundary. Each facility, private or tenant, is responsible for submittal of the NOI and compliance with all portions of the General Permit.

As individual tenant facilities are responsible for sampling and monitoring storm water discharges, there is no routine comprehensive port-wide monitoring program associated with the General Permit as there is at POLB. As part of the independent facility inspections conducted at POLA, storm water discharge monitoring data was reviewed at several, but not all, of the facilities inspected. A summary of the reviewed data is not included in this report.

POLA Independent Facility Inspection Findings

Twenty-three industrial facilities within the POLA were inspected by the audit team to determine compliance with the General Permit. Of these facilities, seven (~ 30 percent) were judged to pose a significant threat to water quality, ten (~ 43 percent) were determined to have some violations with regard to implementation of best management practices or paperwork requirements, and six (~ 26 percent) appeared to be in compliance with General

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Permit requirements. As stated in Section 2.0 of this report, inspection reports are presented as Attachment A.¹³

Positive Attributes and Deficiencies:

Individual facilities at the Port of Los Angeles hold the General Permit, and have liability and responsibility with respect to compliance with the General Permit. Refer to Section 4 for additional discussion.

Potential Permit Non-Compliance:

As noted above, 17 of the facilities inspected were judged to be deficient in some manner with respect to compliance with the General Permit. These deficiencies are identified in the individual facility inspection reports presented in Attachment A. However, potential non-compliance with the General Permit related to individual facilities is not otherwise discussed in this report.

4.0 Evaluation of Port Permit Compliance Models

As previously stated in this report, the POLB and the POLA have chosen two different models to comply with their respective MS4 permit industrial program requirements and to ensure that the facilities within each port's boundary comply with the General Permit. The primary objective of both of the permits is to protect water quality by minimizing the pollutants entering surface waters through storm water runoff. This section will compare and contrast the two models' strengths and weaknesses with regard to their overall effectiveness and efficiency in achieving both compliance with applicable permits and protecting water quality. Compliance with the SWPPP development as well as SWPPP and monitoring implementation portion of the General Permit will be evaluated.

While the MS4 permit requirements for the City of Long Beach and Los Angeles County differ, the General Permit requirements are the same for all facilities. This section does not provide an assessment of the strengths or weaknesses of the permits themselves, or address the public agency component of either program.

For each of the two Ports both program strengths and weaknesses are identified, with recommendations for improvement made for most of the individual identified weaknesses. Finally, the report provides recommendations for management of storm water discharges from industrial activities at these two ports.

¹³ Additional violations of the General Permit were also noted during some of the oversight inspections, as indicated at Attachment B.

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4.1 Port of Long Beach

As previously described, the POLB manages a Master Storm Water Program which implements both the industrial component of the City of Long Beach MS4 permit and certain requirements of the General Permit for all “member facilities” within the POLB boundary.

4.1.1 POLB Strengths

- The General Permit has more stringent inspection requirements than the City of Long Beach’s MS4 permit (every two years); therefore, the POLB model facilitates more frequent (annual) inspections of member facilities within the Port.
- The City of Long Beach’s MS4 permit requires site visits of facilities to provide education regarding the development and implementation of BMPs, but does not require compliance-based inspections of industrial facilities. By conducting annual inspections at member facilities, the POLB model additionally requires development and implementation of BMPs.
- The City of Long Beach’s MS4 permit does not require the prioritization of facilities for more frequent inspections based on proximity to impaired waterbodies. By implementing the POLB model, industrial facilities which discharge directly to the Long Beach Harbor are inspected more frequently than required by the MS4 permit.
- POLB staff assigned to the Master Storm Water Program are knowledgeable and focus on storm water related issues associated with member facilities. This allows member industrial facilities lacking environmental staff to stay up to date on storm water regulations and requirements as well as BMPs. The POLB also provides technical assistance to member facilities, e.g. providing model SWPPP templates.
- Storm water sampling and management of analytical data are conducted by one entity, the Port of Long Beach. This approach better ensures a more consistent monitoring protocol, and provides the opportunity for a more regional or sub-watershed level assessment of data.
- The POLB model provides a single point of contact for regulatory agencies regarding industrial storm water pollution prevention. This creates a more desirable circumstance from a governance standpoint, in that pollution prevention activities can be relatively easily coordinated (e.g., assembly of accurate and reliable storm water monitoring data for port discharges).

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4.1.2 POLB Weaknesses

- The POLB model allows facilities that are within the Port boundary, but not in the Program, to “fall through the cracks” unless a diligent effort is made by the City of Long Beach and POLB staff to ensure that each facility which must be visited (per the MS4 permit) is accounted for.

Recommendation:

A formal memorandum of understanding or delineation of responsibility be established between the City of Long Beach’s overall industrial/commercial inspection program and the POLB Storm Water Program to ensure that all industrial/commercial facilities covered by the MS4 permit are documented and visited as required.

- According to the NOI filed by the POLB on March 26, 1992, the Port applied “for a single permit, and will accept responsibility for storm water pollution control within the Harbor District boundaries.” While the port owns the land on which many of the member facilities operate, the POLB is neither the owner nor operator of the discharging facilities listed on the NOI. The audit team contends that this allows for a separation of SWPPP implementation responsibility and compliance responsibility between the dischargers and the holder of General Permit coverage. This results in facilities having no apparent incentive to comply with the General Permit.

The General Permit states that each covered facility is to manage storm water on-site using a pollution prevention team (Section A.3.a.) “within the facility organization”. Such teams are intended to be responsible for SWPPP and BMP implementation and revision, the identification of non-storm water discharges, and inspection of potential pollutant sources. The audit team contends that by requiring the pollution prevention team and the corresponding responsibilities to be placed “within the facility organization”, the General Permit acknowledges that people “within the facility organization” can best facilitate BMP implementation. However, in the case of the POLB, the entity responsible for BMP implementation is not “within the facility organization”, and consequently may not be in the best position to implement facility-specific BMPs.

SWPPP implementation and day-to-day implementation and assessment of BMPs can best be performed by on-site personnel. By allowing the POLB to certify the NOI, the responsibility for permit compliance rests with a party who (1) is not involved in facility operations day-to-day; and, (2) has no authority to require the implementation of necessary BMPs at an individual facility. The POLB industrial compliance model relies solely on the facility’s desire to remain in the Master Storm Water Program to ensure compliance. No one “within the facility organization” or who has operational control over the facility is required to certify that “the provisions of the permit, including the development and implementation of the SWPPP and a Monitoring

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Program plan, will be complied with.” The audit team contends this is contrary to the intent of the General Permit.

Recommendation:

Member industrial facilities should obtain coverage under the General Permit individually. The POLB should remain involved in SWPPP development and implementation for the regulated facilities, continue to conduct inspections at regulated facilities and continue a port-wide monitoring program. Refer to Section 4.3 for further recommendations.

- The POLB has apparently improperly filed for coverage under the General Permit on behalf of some of the facilities operating on private property owned by LG Everist, Inc. The POLB is not the owner, land owner, or operator of these facilities. Consequently, the POLB does not appear to have the authority to file for coverage under the General Permit on behalf of these facilities.

Recommendation:

Refer to the immediately preceding recommendation.

- The POLB’s assessment of day-to-day operations at member facilities occur during a single annual comprehensive site evaluation, which is announced one day in advance. This allows for a potentially less than typical view of day-to-day activities at the facility. A more traditional implementation model ensures the facility managers are directly liable for year-round compliance. Unannounced annual comprehensive site evaluations would provide POLB staff with a more accurate picture of storm water management practices which occur as general practice at a facility.

Recommendation:

POLB should conduct the annual inspections as unannounced inspections.

- POLB monitoring data indicate a number of discharges in excess of parameter benchmark values. According to Port staff, information relating to PBV exceedances is not communicated to member facilities.¹⁴

Recommendation:

As the permittee, the POLB, in concert with member facilities, should be re-evaluating BMP effectiveness along with analysis of storm water monitoring data.

- In holding the General Permit for “member facilities”, conducting the facility visits required by the MS4 permit, and the annual comprehensive site evaluations under the

¹⁴ It should also be noted that the Regional Board has received all of the Port’s monitoring data and has, to date, not compelled the Port to take any action in response to observed exceedances of parameter benchmark values.

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General Permit, POLB may be perceived as having a conflict of interest, in that problems at visited facilities may also constitute non-compliance with the General Permit, for which POLB would have liability.¹⁵

Recommendation:

Member industrial facilities should obtain coverage under the General Permit individually. Refer also to Section 4.3 for further recommendations.

4.2 Port of Los Angeles

The City's Department of Public Works, Bureau of Sanitation, Watershed Protection Division manages the industrial/commercial MS4 inspection program of "critical sources" under the SQMP. Some of these critical sources are Port industrial facilities which therefore fall under the MS4 industrial/commercial SQMP component. Port staff are trained in basic storm water issues and illicit discharge detection.

As stated previously, neither the City nor the Port of Los Angeles assume any responsibility for General Permit compliance of facilities located within the Port's jurisdiction. Each facility, private or tenant, is responsible for submittal of the NOI and compliance with all portions of the General Permit.

4.2.1 POLA Strengths

- The same Bureau inspects all industrial facilities within the City to ensure a consistent and impartial application of municipal storm water regulations and requirements.
- The City has issued enforcement actions to compel compliance with applicable municipal storm water requirements.
- Liability for General Permit compliance lies "within the organization" responsible for the implementation of permit requirements. The audit team contends that this model better emulates the intent and spirit of the General Permit.

¹⁵ This sentence does not question the effectiveness or integrity of any current inspections or possible future compliance inspections for MS4 purposes conducted by the POLB at Port facilities. It is included only to point out that a *potential* conflict of interest exists if POLB conducts "compliance inspections" to satisfy possible future MS4 requirements because identified non-compliance may subject POLB to enforcement under the General Permit (i.e., the MS4 inspecting entity is also the General Permit Permittee).

4.2.2 POLA Weaknesses

- Communication between the City's Watershed Protection Division inspection staff and the Port staff does not optimally facilitate the exchange of wharfing and Port police observations, findings from the WPD's compliance inspections, and the Environmental Compliance Assistance audits. No formal mechanism exists to consistently exchange important information about illicit discharges, spills, inspection findings or enforcement actions which are independently documented by either the Watershed Protection Division or Port staff. Port staff are instructed to report incidents to their supervisor and/or call the City of Los Angeles hotline; however, a more direct means of communication does not exist. The information available to the Port staff (i.e., wharfingers, Port police, and ECA auditors) could be of value to the City inspection staff and inspection findings.

Recommendation:

The audit team recommends that a formal mechanism (e.g., meeting, incident reporting, standard operating procedure, etc.) be developed to ensure adequate communication between the departments and to better and more actively engage Port field staff in the City of Los Angeles's storm water management program. Enforcement actions should be part of any tenant's record with the Port.

- The results of the General Permit inspections identify 30% of the inspected POLA facilities as posing a significant threat to storm water quality compared to 14% for inspected POLB facilities. This discrepancy in potential threat to storm water quality may be due in part to the differences in management approach between the two ports. The POLB facilities are inspected annually and are in communication with the POLB regarding storm water inspections, SWPPPs and BMPs. On the other hand, the facilities at the POLA are inspected less frequently (but in accordance with the terms of the MS4 permit, as annual inspections are not required under this permit).

Recommendation:

Refer to Section 4.3 for further recommendations.

- Facility monitoring data indicate that several container terminals at the POLA exceeded parameter benchmark concentrations for metals and other parameters.

Recommendation:

The POLA should play a coordinating role in improving the quality of storm water discharges from the Port. POLA should facilitate information-sharing among marine cargo handling facilities in order to improve BMPs. POLA is fully participating with EPA and the Regional Board on TMDL development and may also be able to assist such facilities to prioritize significant threats to the Harbor, based on their knowledge of existing water and sediment quality.

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- There is not a single entity responsible for storm water discharge monitoring at the POLA. Implementing a regional monitoring approach coordinated by a single entity familiar with the requirements and technical aspects of storm water monitoring would likely result in higher quality data and could also result in more comprehensive management and analysis of that data.

Recommendation:

Refer to Section 4.3 for further recommendations.

4.3 Recommendations for Reducing Storm Water Loadings at the Ports

Based upon the audit team's review of the operating structures of the Ports of Los Angeles and Long Beach and given the established general frameworks of the industrial storm water and MS4 programs, the audit team recommends the following for regulating storm water discharges from industrial facilities located at the two ports:

- 1) Individual industrial facilities located within each Port's jurisdiction be required to separately file for coverage under the General Permit; and
- 2) Individual NPDES permits be issued to each Port authority (or to the responsible municipality if the respective municipal authority is responsible for Port operations) to comprehensively oversee discharges of storm water from the industrial activities occurring within its jurisdiction. The individual permits should:
 - Clearly designate the Port authority as the agency responsible for regulating storm water discharges from industrial, commercial and municipal operations within the Port, including all tenant and non-tenant storm water dischargers;
 - Require that the Port authority maintains current inventories of industrial, commercial and municipal operations, including all tenant and non-tenant storm water dischargers at the port. Such lists should be reviewed and updated annually. The lists should include facility name, address, contact information and responsible party, and Port facility-specific storm water identification numbers (see below);
 - Require that the Port authority maintains a current map or maps of the Port, showing the following: what is considered to be the boundaries of the Port: what is Port property and what is not; and storm sewers and sewersheds within the Port and the location of Port storm water outfalls to the receiving water. The map or maps must be reviewed and updated annually, as necessary.
 - Require that the Port authority provide facility-specific storm water discharge registration numbers for industrial, commercial and municipal operations within the Port, including all tenant and non-tenant storm water dischargers. Such dischargers should be compelled to obtain coverage under the general storm water permit, or

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individual storm water permits, if required by storm water regulations. The Port authority should establish the authority to prohibit site operations for any facility that is required to, but does not maintain coverage under the general storm water permit, or an individual storm water permit.

- Require that the Port authority develop management systems to ensure that the terms and conditions of the general or facility-specific storm water permits governing individual industrial facilities located within the Port's jurisdiction are complied with on a continuing basis. This would include:
 - A program of facility compliance inspections with appropriate follow-up for identified deficiencies. The inspections would include ensuring the facility has prepared an adequate SWPPP and BMPs identified in the SWPPP are adequate and are being implemented.
 - A requirement that the individual facility responsible officials certify semi-annually that the requirements of the general permit or individual permits are being met.
- Require that the Port authority develop a storm water monitoring program to be approved by the Regional Board. The monitoring program would include: sampling and analysis at Port storm water outfalls for 303(d) listed parameters and other pollutants likely to be present in storm water discharges considering industrial dischargers in the outfall drainage area; observation of Port storm water outfalls during dry weather; follow-up investigations for identified dry weather flows to the receiving water; a comparison of storm water monitoring data to storm water parameter benchmark values and applicable water quality criteria; and follow-up investigation and appropriate improvements to BMPs for exceedances of parameter benchmark values.
- Considering the industrial activities located at marine cargo handling facilities (Standard Industrial Classification 4491) (e.g., maintenance on large equipment, equipment washing, etc.) and their proximity to receiving waters, the Regional Board should include such facilities as "critical sources" to be managed by the Ports accordingly.

These recommendations generally combine the strengths of storm water management at the Port of Long Beach and the Port of Los Angeles. The advantage of a single point of contact for regulatory agencies (i.e., Regional Board and EPA) and routine port-wide monitoring of storm water discharges would be combined with the advantage of placing the responsibility for general permit compliance (or individual permit compliance if appropriate) on the individual facilities that have operational control over their storm water discharges.