Department of Water and Power the City of Los Angeles

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November 16, 2006

Utility Vaults NOI – NPDES Unit
Division of Water Quality
State Water Resources Control Board
PO Box 100
Sacramento, CA 95812-0100

Attention: Erin Mustain
Division of Water Quality
Wastewater Section – NPDES Unit

Subject: Notice of Intent (NOI) Submittal Statewide General National Pollutant Discharge Elimination System (NPDES) Permit for Discharges by Utility Companies to Surface Waters, CAG990002, Order No. 2006-0008-DWQ
Lahontan Region (Region 6)

Dear Ms. Mustain:

The Los Angeles Department of Water and Power (LADWP) is submitting the NOI and Pollution Prevention Plan (PLAN) to continue coverage and comply with the provisions and conditions set forth in the NPDES General Permit CAG990002, Order No. 2006-0008-DWQ. The NOI is for discharges to surface waters in the jurisdictional area of the Lahontan Regional Water Quality Control Board (Region 6) under WDID 6000U000023. Please find enclosed **Enclosure 1**, the NOI, and **Enclosure 2**, the PLAN.

If you have any questions or require further assistance, please contact Ms. Josefa V. Esparrago at (213)367-0287.

Sincerely,

Katherine Rubin
Interim Manager of Wastewater Quality Compliance

JVE: bdc
Enclosures
c/enc.: Doug Feay, RWQCB 6
Josefa V. Esparrago

ATTACHMENT B – NOTICE OF INTENT FORM

NOTICE OF INTENT (NOI)
WATER QUALITY ORDER NO. 2006-0008-DWQ
STATEWIDE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR DISCHARGES FROM UTILITY VAULTS AND UNDERGROUND STRUCTURES TO SURFACE WATERS OF THE UNITED STATES
GENERAL PERMIT NO. CAG990002

I. NOTICE OF INTENT STATUS (See Instructions)

MARK ONLY ONE ITEM	1.☐ New Discharger	2.☒ Change of Information – WDID #	6000U000023

II. OWNER/OPERATOR *(If additional owners/operators are involved, provide the information in a supplemental page.)*

A. Name: Los Angeles Department of Water and Power			Owner/Operator Type (Check One): 1.☒ City 2.☐ County 3.☐ State 4.☐ Gov. Combo 5.☐ Private
B. Mailing Address: 111 N. Hope St., Room 1213			
C. City: Los Angeles	D. County: Los Angeles	E. State: CA	F. Zip Code: 90012
G. Contact Person: Katherine Rubin	H. Title: Interim Manager Wastewater Quality Compliance	I. Phone: (213)367-0346	

☐ **ADDITIONAL OWNERS** _____

III. BILLING ADDRESS *(Enter information only if different from above)*

Send to: ☒ **Owner/Operator** ☐ **Other**	A. Name	B. Title	
	C. Mailing Address		
D. City	E. County	F. State	G. Zip Code

IV. RECEIVING WATER INFORMATION

A. Receiving water(s): multiple locations gutters and storm drains	B. Describe the types of receiving waters affected: Los Angeles River, Ballona Creek
C. Regional Water Quality Control Board(s) where discharge sites are located List all regions where discharge of wastewater is proposed, i.e. Region(s) 1, 2, 3, 4, 5, ☒ 7, 8, and/or 9:	

V. LAND DISPOSAL/RECLAMATION

The State Water Resources Control Board's water rights authority encourages the disposal of wastewater on land or re-use of wastewater where practical. You must evaluate and rule out this alternative prior to any discharge to surface water under this Order.

Is land disposal/reclamation feasible? ☐ **Yes** ☒ **No**

If **Yes**, you should contact the Regional Water Board. This Order does not apply if there is no discharge to surface waters. If **No**, explain: Contained waters exist in numerous locations in small volumes.

VI. VERIFICATION

Have you contacted the appropriate Regional Water Board or verified in the appropriate Basin Plan that the proposed discharge will not violate prohibitions or orders of that Regional Water Board? ☒ **Yes** ☐ **No**

VII. TYPE (Check All That Apply)

☒ Electric	☐ Natural Gas	☐ Telephone	☐ Other:

VIII. POLLUTION PREVENTION PRACTICES PLAN INFORMATION

A. Company Name: Los Angeles Department of Water and Power			B. Contact Person: Josefa V. Esparrago	
C. Street Address Where PLAN is Located: 111 N. Hope St.			D. Title of Contact Person: Environmental Specialist	
E. City: Los Angeles	F. County: Los Angeles	G. State: CA	H. Zip Code: 90012	I. Phone: (213)367-0287

IX. DESCRIPTION OF DISCHARGE

Describe the discharge(s) proposed. List any potential pollutants in the discharge. Attach additional sheets if needed.

Intruded water or subterranean seepage contained in substructures including but not not limited to electrical vaults, cable trenches, facility basements, transformer spill containment areas, and various sumps and pits. Some oil and grease, Total Suspended Solids (TSS), and Total Dissolved Solids are present. These pollutants may be present in untreated discharges. When using appropriate PPPs, pollutant levels in the discharge should be drastically reduced or eliminated.

X. VICINITY MAP AND FEE

A. Have you included vicinity map(s) with this submittal? Separate vicinity maps must be submitted for each Region where a proposed discharge will occur.	☒ Yes	☐ No	
B. Have you included payment of the filing fee (for first-time enrollees only) with this submittal?	☐ Yes	☐ No	☒ N/A
C. Have you included your PLAN?	☒ Yes	☐ No	

XI. CERTIFICATION

" I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those directly responsible for gathering the information, the information submitted is true, accurate, and complete to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. In addition, I certify that the provisions of the permit, including the criteria for eligibility and the development and implementation of Pollution Prevention Practices, if required, will be complied with."

A. Printed Name: Katherine Rubin	
B. Signature: Katherine Rubin	C. Date: 11/16/06
D. Title: Interim Manager, Wastewater Quality Compliance	

PLEASE SUBMIT THE NOI, FIRST ANNUAL FEE, PLAN AND MAP TO THE FOLLOWING ADDRESS:

UTILITIES NOI
NPDES UNIT
DIVISION OF WATER QUALITY
STATE WATER RESOURCES CONTROL BOARD
P.O. BOX 100
SACRAMENTO, CA 95812-0100

STATE USE ONLY

WDID:	**Regional Board Office**	**Date NOI Received:**	**Date NOI Processed:**
		Fee Amount Received: $	**Check #:**

Statewide General National Pollutant Discharge Elimination System Permit for Discharges by Utility Companies to Surface Waters

Pollution Prevention Plan

for the

Los Angeles Department of Water and Power
Region 6 – Lahontan Region
(WDID 6000U000023)

I. DISCHARGES

A. Scheduled Discharges

The vast majority of Los Angeles Department of Water and Power (LADWP) discharges from subterranean structures are scheduled (i.e., observation of the accumulated water is made and pumping arrangements are scheduled prior to the date of removal). Examples of these discharges include, but are not necessarily limited to, water accumulated in the following structures:

Electrical Vaults

These are concrete-walled, subterranean structures that can range in size from approximately 2'x 3'x 2' to as large as 10' x 20' x 20'. They usually contain energized electrical equipment. Because they are underground, water can intrude from subterranean seepage (such as groundwater) or run in from the surface (such as storm water). Vaults containing water are commonly found to hold volumes of 50 to 3,000 gallons. Once pumping crews arrive, the evacuation of a vault depends on the volume of water encountered but normally does not take longer than a few hours. The pollutants that can be found in this water as a result of LADWP activities and operations are oil and grease, suspended solids, dissolved solids, particulates with heavy metals, and turbidity. Currently, no structural controls are used. The Sensory Checklist Method (SCM) (see Attachment 1) is the Best Management Practice (BMP) used in the handling of this water.

Cable Trenches

These are long, shallow, concrete-lined trenches that contain mainly electrical cables. They are almost always covered and are usually no more than four feet wide and a few feet deep. Water usually enters only from the top and is commonly storm water. Very often, these structures are located well within the property boundaries of larger facilities and the discharging of the water contained by them seldom enters the storm drain. However, in all cases, the SCM BMP is used before discharging to the surroundings. The pollutants that can be found in this water as a result of LADWP activities and operations are oil and grease, suspended solids, dissolved solids, particulates with heavy metals and turbidity. The SCM is the BMP that is used in the handling of this water.

Facility Basements/Tunnels

At many of the larger LADWP facilities, some buildings have basements and cable tunnels that are used to house energized electrical equipment such as emergency backup generators and battery racks. The basements/tunnels are concrete-walled and floored and can be quite large. Intruding water, which is almost exclusively the

result of a large storm, usually runs in from the surface and the surrounding saturated ground, through cable trenches and raceways, and begins to fill the basement/tunnel. Due to the unusual and unexpected nature of the water intrusion, it is not possible to estimate a range of volumes or discharge durations. The pollutants that can be found in this water as a result of LADWP activities and operations are oil and grease, suspended solids, dissolved solids, particulates with heavy metals, and turbidity. The SCM is the BMP that is used in the handling of this water.

Transformer Spill Containment Areas

At the larger LADWP facilities, such as distributing stations, receiving stations, and generating stations, there is oil-filled equipment that, in certain events, can rupture due to equipment failure or earthquakes. Around this equipment are surface and subsurface oil spill containment areas. These subsurface containment areas are permanent, concrete-walled (and usually lined) substructures. They are covered but not filled with gravel over a grate which rests above the pit. These areas must be kept empty of water, dirt, etc., to maintain their containment capacity in the event of a rupture. They can range in size up to 10,000 gallons in capacity or more. They are not completely subsurface in that there is usually a raised curb, slightly above grade, around the perimeter. Because this curb prevents surface water run in and the pits are water tight, storm water intrusion is by direct rainfall through the gravel bed. The pollutants that can be found in this water as a result of LADWP activities and operations are oil and grease, suspended solids, dissolved solids, and turbidity. Some of these facilities have manual drain valves that require visual inspection prior to draining, at which time the SCM BMP is used.

Some subsurface spill containment areas are equipped with "oil-stop" drain valves which allow the draining of water but close upon detecting oil. Since these valves do not reopen automatically after detecting oil, a small "pocket" of oil attempting to pass through the valve would halt the draining process even though there may be a large volume of water behind it. At that time, a visual inspection would be required and the SCM BMP employed.

Various Sumps and Sand Pits

There are miscellaneous structures throughout the LADWP service territory that may or may not have been built for the containment of water but nevertheless do. Sometimes sumps that are designed to hold a specific kind of water (for example, distilled water) become filled with another type (intruded storm or groundwater). Due to the unusual and unexpected nature of the water intrusion, it is not possible to estimate a range of volumes or discharge durations. The pollutants that can be found in this water as a result of LADWP activities and operations are oil and grease, suspended solids, dissolved solids, particulates with heavy metals, and turbidity. From time to time, LADWP personnel need to remove this water in the

course of servicing the electrical system. The SCM is the BMP that is used in the handling of this water.

B. Unscheduled Discharges

See Section D, Emergency Operation Discharges below.

C. Reservoir Discharges

LADWP is an electric utility and does not discharge from a reservoir under this NPDES permit.

D. Emergency Operation Discharges

LADWP, as a public agency, is committed to providing the public with a safe, reliable source of power. At the same time, LADWP is also dedicated to the protection of the environment in the course of conducting its daily operations. In some emergency situations, these two commitments cannot always both be met. Electric services at residences and facilities operating life-preserving equipment may depend on the immediate restoration of power. Similarly, even when life-preserving equipment is not involved, the expedited restoration of power may still be essential for public safety. For example, a dead traffic light at a busy intersection can create enormous hazards and delays. While LADWP's electrical equipment and substructures are assigned to function under water, repair or maintenance work (whether an emergency or not cannot be performed in water due to the great danger posed to employee safety. Thus, although every attempt is made to prevent pollution in emergency situations, it will not always be possible.

Emergency Responses by Field Crews

Whenever field crews respond to a condition that threatens an outage or is an outage itself, they sometimes find the facility filled with water. Under routine, scheduled events, time is available for the water to be handled using the SCM BMP; however, in critical events, the crews may need to evacuate the structure in the most rapid manner possible. In these cases, every attempt would be made to utilize the SCM BMP and/or pump the water to a containment structure for proper offsite handling. However, the need to mitigate a threatening situation and/or restore essential services would supersede any BMP.

Temporary Automatic Sump Pumps

In a similar manner, unattended facilities that should not, under any circumstances, be allowed to fill with water are fitted with temporary automatic sump pumps. Because of the low moisture tolerance of the electrical equipment in these facilities and/or of the gravity of a failure of that equipment (such as large station basements,

or electrical vaults feeding hospitals), the sump pumps will discharge any water rising above a certain level to insure the integrity of the equipment.

To safeguard the integrity of the discharged water, the following BMPs are included in the Guidance for the Installation and Maintenance of Automatic Sump Pumps (ASPs) within the LADWP Distribution System:

- Application for ASP installation with justification needs to be approved by District Superintendent.
- More frequent inspections are scheduled such that any water encountered during an inspection can be evaluated using the SCM BMP and handled accordingly.
- An ASP is used only as a temporary fixture, to be removed once a permanent fix has been done on the failed equipment, but shall not exceed an installation period of more than six (6) months.
- Documentation and database information are monitored by a designated person.

II. POLLUTION PREVENTION TEAM

The following persons are responsible to assist LADWP with the Plan's implementation, maintenance and revision:

Team Member: Title:	Eric Tharp Director of Generation
Responsibilities:	Directs subordinate supervisors within the Electrical Generation Business Group with responsibility for compliance reviews and training implementation programs for the Plan. The Generation Division includes power supplied from coal, oil, natural gas, hydroelectric, nuclear plants and renewable sources.
Team Member: Title:	Andrew Sparks Electrical Services Manager for Power System Operations and Maintenance, Southern District
Responsibilities:	Directs subordinate supervisors within the Electrical Transmission and Distribution Group, Southern District, with responsibility for compliance reviews and training implementation programs for the Plan.
Team Member: Title:	Daryl Buckley Electrical Services Manager for Power System Operations and Maintenance, Northern District
Responsibilities:	Directs subordinate supervisors within the Electrical Transmission and Distribution Group, Northern District, with responsibility for compliance reviews and training implementation programs for the Plan.
Team Member: Title:	Nelson Liu Environmental Coordinator, Integrated Support Services
Responsibilities:	Coordinates and/or facilitates contact for environmental compliance, training, and record keeping responsibilities for the Integrated Support Services.
Team Member: Title:	Josefa V. Esparrago Environmental Specialist, Wastewater Quality Compliance
Responsibilities:	Administers and oversees the Vault Wastewater Discharge Permit, updates the Pollution Prevention Plan as needed.

III. DESCRIPTION OF POTENTIAL POLLUTANT SOURCES

A. Drainage Map

See Attachment 2 for a map showing the distribution system for the service area within the Los Angeles Regional Water Quality Control Board (Region 4) and corresponding surface waters to which water may be discharged.

B. Inventory of Exposed Materials

Not applicable. The structures identified in Section I do not contain materials exposed to precipitation.

C. Spills and Leaks

Not applicable. There were no spills or leaks within the last 3 years from vaults and underground structures that entered a surface water body.

D. Sampling Data

See Attachment 3 for annual sampling data, 2003-2006.

E. Risk Identification and Summary of Potential Pollutant Sources

Pollutant	*Source*	*Best Management Practice*
Oil and grease	Oil-filled electrical equipment and cables	SCM; Oil-stop valves; Pig absorbent; Observations for the presence of an oil sheen or odor
Suspended solids, Turbidity	Soil particulates associated with intruded groundwater and/or stormwater; wind blown dust or leaves entering the substructure	SCM
Particulates with heavy metal	Electrical equipment maintenance activities; electrical cable and equipment corrosion	SCM
Dissolved solids	Dissolved minerals	SCM
Total Petroleum Hydrocarbons	Gasoline or solvents due to illegal third party dumping or intrusion with stormwater run on into the substructures	SCM

*SCM = Sensory Checklist Method (See Attachment 1)

IV. MEASURES AND CONTROLS

A. Good Housekeeping and Preventive Maintenance

The SCM is the main BMP used in the handling of all water accumulated in LADWP substructures applicable to this permit (See Attachment 1). Where applicable, additional BMPs have been listed in the above table. Record keeping and documentation are coordinated between each district, a geographical division responsible for distribution, construction and maintenance work within the LADWP territory, and the Wastewater Quality Compliance Group.

B. Spill Prevention and Response Procedures

Any spills from LADWP vaults from equipment failures or other incidents discovered by LADWP personnel shall be properly managed by LADWP personnel. Any employee who discovers a spill shall notify his/her District Supervisor. Employees who are involved with the clean up of the spills must be properly trained and utilize the proper protective equipment in handling spills. All spills shall be cleaned up to visible traces, unless otherwise directed.

In case of discovering a spill, the discoverer shall avoid ingesting or contacting the spill and immediately notify the Control Operator if at a facility at (213)367-5600 or (213) 936-4288 or his/her District Supervisor if in a public domain.

The Control Operator or District Supervisor shall then immediately contact the Senior Load Dispatcher on duty at the Energy Control Center (ECC) at extension 16500. ECC will initiate internal DWP notification procedures in accordance with Department guidelines; this includes Electrical Station Maintenance (ESM) and Environmental Affairs (EA). Notification to the ECC at all times will initate EA's responsibility to immediately notify the appropriate regulatory agencies and the Department's current emergency response contractor.

C. Inspections

Substructure inspections are done based on maintenance schedule and/or as needed. Before any discharge from a subterranean structure is made, the pump crew inspects the water utilizing the SCM. Only when it passes the SCM criteria can it be drained into a gutter or storm drain. If the water does not pass the SCM, the crew notifies LADWP's Hazardous Materials group which then pumps the water into a vacuum truck for offsite handling. Vaults containing ASPs are installed only after satisfying the installation criteria and then are inspected weekly using the SCM until the ASP is removed. In case of suspected contamination, the ASP is disabled.

D. Employee Training

The training of personnel for compliance with the Plan shall be the responsibility of the Facility Manager and the District Superintendents. They shall designate persons accountable for environmental compliance. Training shall include employees engaged in the operation and maintenance of equipment related to vault dewatering and emergency personnel. Training, at a minimum, includes familiarity with the SCM and the corresponding implementation procedures, as well as with the ASP procedures, and any additional BMPs intended to prevent the discharge of pollutants into waterways. Training shall also include discharge procedure protocols, applicable pollution control laws, and the contents of this Plan.

E. Record Keeping and Internal Reporting Procedures

In case of an oil spill, the procedure given in Section IV(B), Spill Prevention and Response Procedures, shall be followed using the table in Attachment 4.

Inspection and maintenance records are documented through the SCM (Attachment 1). All SCM inspection reports are retained onsite for up to one year and then are forwarded to the Wastewater Quality Group (JFB Rm. 1213) for database entry.

For ASPs, installation application forms, approved by the District Superintendent, shall be faxed to the database administrator for tracking and the original sent to the Wastewater Quality Compliance Group. Subsequent weekly inspection records of ASPs shall follow directions for SCM record keeping.

F. Sediment and Erosion Control

Not applicable. No structural controls are installed since LADWP's vaults and subterranean structures are on city facilities and paved streets. For any sediment intruded into the substructure, the SCM is the BMP used to control the discharge of suspended solids.

G. Management of Runoff

Not applicable. No water runs off. It is trapped in the substructure which serves as a containment.

V. COMPREHENSIVE SITE COMPLIANCE EVALUATION

The SCM, the main BMP used by LADWP to handle substructure dewatering under this permit, is a reliable and cost-effective way of detecting pollutants that could enter the storm drain system. Proper use of the sensory observations has historically been validated, with parallel laboratory tests, to be an effective means to detect the potential pollutants mentioned in Section III (E). For example, a rainbow sheen seen on the surface of the water indicates oil, grease and/or gasoline; floating, suspended material denotes the presence of debris, tar, or other suspended solids; discoloration and/or cloudiness indicates sediments, minerals, and/or particulates with heavy metals; a strong chemical odor indicates gasoline or infrequent foreign contaminants, while sulfurous smells denote sewage intrusion.

The SCM is used at every substructure dewatering operation. It has been in use since late 1989 and is currently implemented Department-wide. Through the use of the SCM, a comprehensive evaluation can be done on the water before it is discharged to the waterway.

LIST OF ATTACHMENTS

The Sensory Checklist Method Best Management Practice

The Sensory Checklist Method (SCM) is the main Best Management Practice (BMP) used in the handling of all water accumulated in Los Angeles Department of Water and Power (LADWP) substructures applicable to this permit.

HISTORY

The SCM is the product of LADWP's long-standing efforts to create a reliable, but cost-effective way of detecting pollutants in substructure waters so as to quickly determine whether the water is suitable for discharge to the storm drain system. Initially, a survey determining the pollutants that could be encountered in the substructure waters was conducted by examining historical analyses of those waters. After examining over 100 such analyses, a reliable potential pollutant "profile" was developed. Field crews could generally expect to encounter up to five pollutants in these waters as a result of LADWP activities and operations. The five contaminants identified were oil and grease, suspended solids, dissolved solids, particulates with metals, and turbidity. Since water polluted with any one of these contaminants could not be discharged to the storm drain system, a method was sought that would allow field crews to make quick and reliable on-site pollutant checks.

LADWP evaluated various methods to perform these checks. One such method involved the use of field wastewater test kits. LADWP found that the test kits were not a practical field tool in identifying potential vault water pollutants. The commercially available test kits were often found to be too complex, inconvenient, time demanding, and/or costly to implement. LADWP further determined that the cost of personnel training associated with the proper use of the field test kits also deemed them inappropriate.

In search of a more simplified approach to determining substructure water constituents, LADWP also evaluated "test strips" which utilized litmus paper-like indicators to show the presence of pollutants of concern. Although relatively inexpensive and easy to use, "test strip" type kits proved to be inaccurate and inconclusive.

Ultimately, LADWP began to look inward, to its own expertise and familiarity with its facilities. Drawing upon its knowledge of pollutants in these waters and combining it with its decades of field experience, a formal "sensory" checklist was created. LADWP's already conservative handling methods were raised to new heights by informing field personnel of the formalized pollutant checklist process through company memorandums and issuing a standardized SCM checklist to be completed in the field both before and during pumping. The SCM BMP allows the field crews to not only identify the presence of one or more pollutants, but also the nature of that/those pollutants. For example, a rainbow sheen seen on the surface of the water indicates oil and grease product contamination; floating, suspended material denotes the presence of debris, tar or other suspended solids. Discoloration and/or cloudiness of the water indicates pollutants such as sediment, minerals, and/or particulates with heavy metals. In addition, infrequent, foreign contaminants can be identified by a strong chemical odor as for gasoline or solvents while sulfurous smells denote sewage intrusion. Particularly, sensory detection of these contaminants

can be enhanced or even anticipated by inspection of the surrounding area, such as near a gas stations for gasoline, main sewer line for sewage intrusion, and in identified geographical areas for tar.

While the careful inspection of the water contained in each substructure is a vital part of the SCM process, existing LADWP activity scheduling techniques augment the SCM process into a quick, effective, and environmentally sound BMP. Through an aggressive substructure monitoring practice which identifies water infiltration weeks before the scheduled servicing of a facility, the full range of handling options becomes available to the field crews (from storm drain discharge to containment, lab analysis, proper treatment, and disposal) without impacting daily operations or increasing costs.

The conservative water discharge practices of the SCM BMP are further bolstered by the engineered redundancies in the LADWP electrical system. The LADWP system is one of the most extensive and reliable of its kind. Part of the reason for this reliability is redundancy. Redundancy is the condition whereby customers may be served by more than one electrical source. The great reliability of the LADWP system is partly accomplished through redundancy. By allowing those customers to be served from more than "feeder" and outage on the existing feeder does not always demand immediate, urgent action. By simply switching the customer(s) to the second feeder, the emergency restoration situation is resolved. Routine, scheduled repair of the faulty facility can then be conducted, thereby conserving a great deal of resources and money. This ability has the conjunctive environmental benefit of greatly reducing the number of "emergency discharges" of water by field crews. In the remaining instances of true emergency discharges, while every effort is made to control the discharge of pollutants, the restoration of service to the customer and the safety of the field crew justifiably take precedence over environmental concerns. By eliminating the urgent nature of the repair, any environmental concerns would now be fully addressed at the lowest cost, resulting in a win-win situation for both LADWP and the environment.

The SCM BMP, due to its versatility, seamless integration into company practice, and its anticipated effectiveness at mitigating pollutant introduction to the environment, has made it the BMP of choice for LADWP for all water contained in substructures. Initiated in late 1995, and currently implemented company-wide, LADWP is confident that it will be validated in the case studies concurrently being conducted.

The following is an overview of the SCM BMP process and includes an actual SCM Checklist:

The Sensory Checklist Method Process (SCM)

The SCM should be used by any Energy Services Organization crew that needs to discharge accumulated substructure water to the storm drain system. The SCM Checklist must be completed and kept for every instance where this water is pumped directly into the storm drain system and has not been evaluated by formal chemistry laboratory analyses. The SCM will determine whether the water is polluted. Water suspected of being contaminated must be pumped into containment for later laboratory testing and proper management. Water that passes the SCM shall be deemed "clean" and may be pumped directly to the street/storm drain system. For any discharge entering the storm drain system, an SCM checklist should be completed and retained at your base reporting location for one year. It should be emphasized that the SCM is a tool for determining whether vault water may be pumped directly to the storm drain system and in no way should prevent the field personnel from pursuing more conservative handling methods (i.e., containment and formal lab testing).

The SCM Checklist – What is it ?

There are generally several contaminants that may be present in substructure water as a result of Los Angeles Department of Water and Power (LADWP) activities and operations that could influence the handling procedure. These contaminants are chemicals, oil, tar, sewage, and soil (dirt). In addition to these contaminants, due to surface water run in or outright vandalism, infrequent occurrences of foreign pollutants may occur, such as gasoline or sewage. LADWP has developed a Best Management Practice (BMP) SCM that utilizes a simple, one-page, sensory checklist that determines the existence of contaminants in a given volume of water. The SCM directs field crews on the proper handling of water encountered to ensure environmental compliance. **An SCM Checklist must be completed for any partial or full discharge of vault water to the street/storm drain system.**

Procedures

CHECK 1 - Conditions Requiring Containment of the Vault Water

This first check identifies vault water conditions that would require it to be contained and formally tested by a chemistry laboratory to determine the proper handling procedures. These water conditions include, but are not limited to, cloudiness, discoloration, and odors (sewage, chemicals, solvents, gasoline, etc.). If any of the aforementioned conditions are present, discontinue use of the SCM and pump the contents of the substructure into containment for further testing and proper handling. This water shall not be discharged to the storm drain system.

Water that passes this initial screening shall be further inspected per Check 2.

CHECK 2 - Oil, Tar, and Soil

If an oil sheen, oil layer, tar, and/or a sediment layer on the bottom of the substructure is found to be the only contaminants in the water, the vault water may be discharged per CHECK 3 to the street/storm drain **provided none of the contaminants are discharged along with it**. This may allow the water to be pumped down to a workable level. If the pumping cannot be done without disturbing the pollutants (such that they are discharged to the street/storm drain) or the vault must be pumped completely dry, the remaining oil, tar, and/or sediment must be pumped, removed and contained for formal laboratory testing to determine the proper handling procedures. In some instances, the collected oil, tar, and/or sediment can be recycled.

CHECK 3 - Pumping Clean Water/Monitoring the Discharge

Some or all of the vault water may be pumped to the storm drain system. Monitor the discharge and enter the required information when appropriate (date pumped, amount pumped, and where it was pumped to [(alley, street, etc.)]. **If any contaminants are detected during discharge, immediately stop pumping.** Return to CHECK 1 to reassess the situation. If it is subsequently determined that containment is necessary, an SCM Checklist must still be completed and the line labeled "Storm drain Discharge Stopped" marked. Give a detailed description of the condition that prompted the stopping of the discharge.

Completed SCM Checklists

Completed SCM Checklists are kept on file for one year.

Other Important Items

Holding Containers

If vault water has been pumped into a small holding container, such as a 55-gallon drum, the container must be clearly labeled as such and then be transported as soon as possible to the nearest LADWP facility. Arrangements should be made immediately for formal laboratory analysis and the ensuing recommended handling procedures.

SCM Checklist

Must be Completed for Every Discharge to the Street/Stormdrain System

DATE : _____ VAULT LOCATION : _____

TIME : _____ VAULT SIZE : _____

RECENT RAIN : Yes ___ No ___ ESTIMATED WATER DEPTH : _____

CHECK 1. Conditions Requiring Containment of Vault Water

1. Is the vault water cloudy, discolored, and/or has an unusual odor ? No ___ Yes ___

NO. Go on to CHECK 2.

YES. The vault water must be pumped to containment for formal chemistry laboratory testing to determine proper handling.

CHECK 2. Oil, Tar, and/or Soil

2. Is there any oil, tar or soil particles ? No ___ Yes ___

NO. Go on to CHECK 3.

YES. Can the water be pumped without disturbing the pollutants such that they **are not discharged to the street ?**

NO. The vault water must be pumped to containment for formal chemistry laboratory testing to determine proper handling.

YES. Go on to CHECK 3. If needed, the remaining contaminants must be pumped to containment for formal laboratory testing to determine proper handling.

CHECK 3. Pumping Clean Water / Monitoring the Discharge (Form must be completed)

3. **While monitoring the discharge** begin pumping the vault water to the street/stormdrain system. Fill in only the information directly below (date, amount, and destination). If any of the following conditions appear during discharge, immediately stop pumping. Return to CHECK 1 to reassess the situation. If it is determined that containment is necessary, mark "Storm Drain Discharge Stopped" and describe the condition that prompted the stopping of the discharge and the new condition of the vault water itself.

Date pumped _____ Amount (gal) _____ Discharge destination (alley, etc.) _____

STOP IF : Oil, Tar, Soil, Cloudy Discharge, and/or Unusual Odors Occur

_____ **Storm Drain Discharge Stopped**

Describe conditions : _____

_____

_____

The information provided is true and correct to the best of my knowledge.

_____ _____

Print Name Signature

- Maintain this sheet at your reporting location for one year -

Forward to SHEPBU, Water Quality (GOB 1121) after one year for permanent record keeping

The SCM Checklist - A step-by-step walk-through

An SCM Checklist must be completed for any partial or full discharge of vaultwater to the street/stormdrain system.

CHECK 1 - Conditions Requiring Containment of the Vaultwater

This first check identifies vaultwater conditions that would require it to be contained and formally tested by a chemistry laboratory to determine the proper handling procedures. These conditions include but are not limited to cloudiness, discoloration and odors (sewage, chemicals, solvents, gasoline, etc.). If any of the aforementioned conditions are present **and no vaultwater has already been discharged to the street/stormdrain system**, an SCM Checklist does not need to be completed since the vaultwater must be contained and will not be discharged to the stormdrain system.

CHECK 2 - Oil, Tar, and Soil

If an oil sheen, oil layer, tar, and/or soil are found to be the only contaminants in the vault water, the vaultwater may be discharged per CHECK 3 to the street/stormdrain **provided none of the contaminants are discharged with it**. This may allow the water to be pumped down to a workable level. If the pumping cannot be done without disturbing the pollutants such that they are discharged to the street/stormdrain, or the vault must be pumped completely dry, the remaining oil, tar, and/or soil must be pumped/removed to containment for formal chemistry lab testing to determine the proper handling procedures. In some instances the collected oil, tar, and/or soil can be recycled.

CHECK 3 - Pumping Clean Water / Monitoring the Discharge

Some or all of the vaultwater may be pumped to the stormdrain system. Monitor the discharge, and enter the required information when appropriate (date pumped, amount pumped, and where it was pumped to (alley, street, etc.)). **If any contaminants are detected during discharge, immediately stop pumping.** Return to CHECK 1 to reassess the situation. If it is subsequently determined that containment is necessary, an SCM Checklist must still be completed and the line labeled "Stormdrain Discharge Stopped" marked. Give a detailed description of the condition that prompted the stopping of the discharge.

Completed SCM Checklists

Completed SCM Checklists should be kept on file for one year. After one year, they may be forwarded to the SHEPBU Water Quality Group of EHSSS in Room 1121 of the General Office Building, for permanent record keeping.

Other Important Items

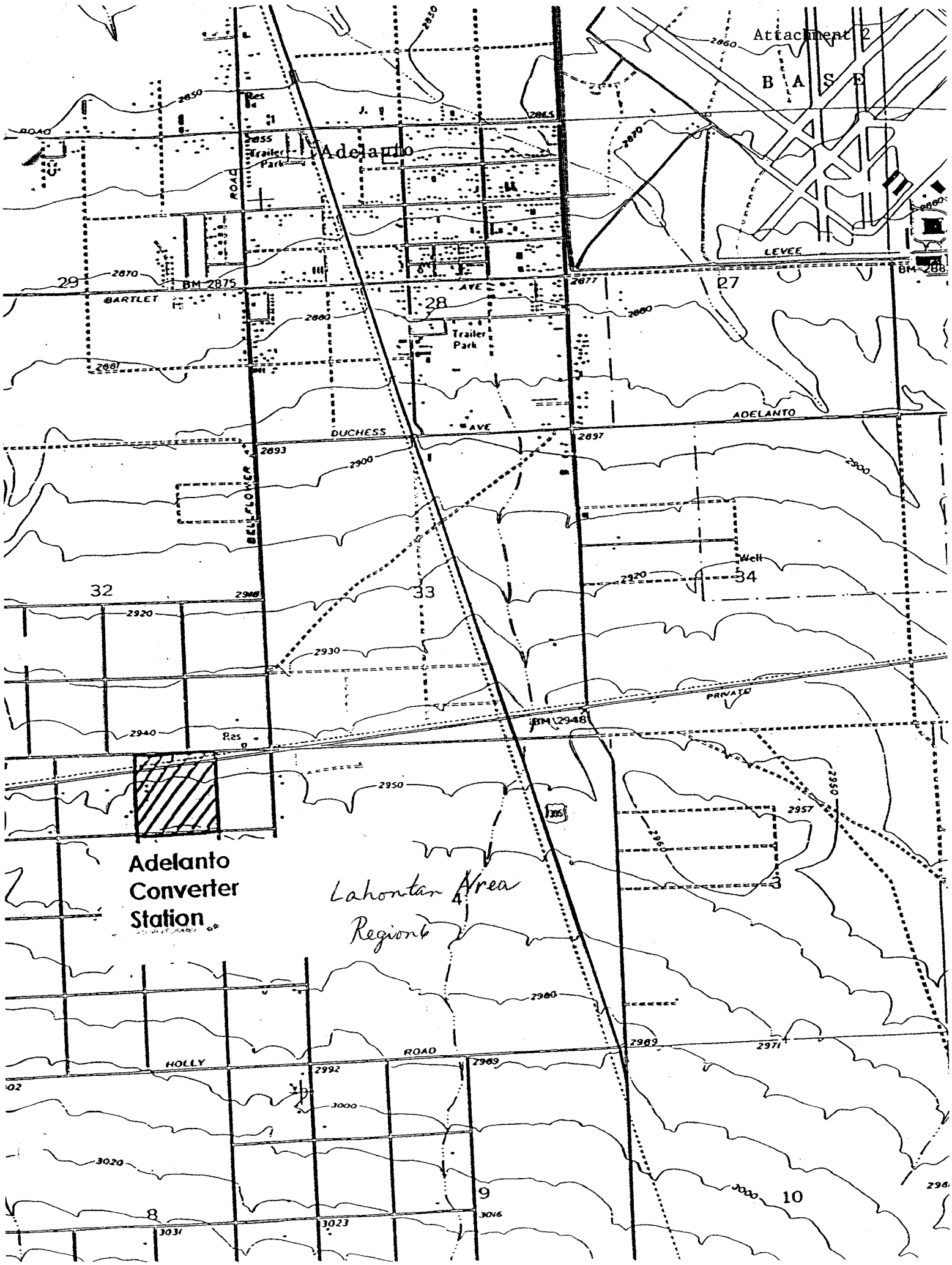
Holding Containers

If vaultwater has been pumped into a small holding container, such as a 55-gallon drum, it must be identified with an "Awaiting Characterization" label. The labels may be obtained from Stationary Stores at (213) 580-3930 (Material Code 87-00-069). The labels should read "Contaminated Vault Water" on the "(Material Description)" line (Attachment 4).
The containers should then be transported to the nearest DWP facility and ESM notified at (213) 367-7600.

Cleaning Vaults

EHSSS has found that materials used during cleanup, including absorbent material used to dry off vault floors or rags used to wipe down equipment can contaminate what would otherwise be clean vault water requiring it to be contained and tested as opposed to being expediently discharged to the stormdrain. EHSSS recommends that care be taken in ensuring that all of these materials have been removed from the vault.

Attachment 2



Los Angeles Department of Water and Power

UTILITY VAULT DISCHARGES

NPDES GENERAL PERMIT CAG990002 ORDER NO. 2001-11-DWQ

SUMMARY OF ANNUAL NPDES MONITORING REPORTS

LAHONTAN AREA - REGION 6

SAMPLING EVENT		ANALYTICAL RESULTS **			
Sample Location	Sample Date	**Oil and Grease (O & G)** EPA WW Mth 1664	**Total Suspended Solids (TSS)** EPA WW Mth 160.2	**Total Petroleum Hydrocarbons (TPH)** EPA WW Mth 8015B	**pH** EPA WW Mth 150.1
		mg/L	*mg/L*	*mg/L*	*pH unit*
		2006			
Adelanto Converter Station 16800 Aster Road Adelanto, CA 92301	*07/02/06*	0.7	2.3	<0.02	6.50
		2005			
same	*01/09/06*	0.9	1.9	<0.02	7.94
		2004			
same	*12/28/04*	<0.5	12.3	<0.02	8.00
	02/18/05	0.7	29.5	<0.02	8.50
		2003			
same	*NO DISCHARGE*		*NO DISCHARGE*		

* Vault samplings and analyses were performed by the Los Angeles Department of Water and Power's Certified Analytical Laboratory (LTSS), located at 1630 Main Street, Los Angeles, CA (Certificate No. 1207, Department of Health Services)

**All were grab samples

LOS ANGELES DEPARTMENT OF WATER AND POWER

GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES PERMIT) FOR DISCHARGES FROM UTILITY VAULTS AND UNDERGROUND STRUCTURES TO SURFACE WATERS
NPDES No. CAG990002, ORDER NO. 2006-0008-DWQ

POLLUTION PREVENTION PLAN
Internal Reporting Procedures

SPILL NOTIFICATION AND INFORMATION CHECKLIST

I. DESCRIPTION OF INCIDENT

Date _____ Time_____
Address/Location_____
Description of spills/discharges/leaks_____
Duration_____
Substance(s) released_____ Amount _____ gal
Cause of leakage_____
Responsible party(ies)_____
Weather condition_____
Response procedure_____
Mode of clean up_____
Entered the water way (Yes / No) _____
Resulting environmental problem_____
Reported by_____ Title_____
Signature
Name_____ Date/Time_____

II. NOTIFICATION

	Phone Number	Person Contacted/Title	Date/Time Notified	Notified By
LADWP District Superintendent	_____	_____	_____	_____
Control Room (if applicable)	_____	_____	_____	_____