Attachment C: Manufacturer Documentation

Will be provided as part of final OMMP

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Attachment C.1: UV/H_2O_2 AOP

Will be provided as part of final OMMP

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2.05 UV System Alarms and Warnings

All Alarms and Warnings are subject to the specified delay times. The following table depicts the available Alarms and Warnings by device; (refer to section 1.05 for device quantities).

Device	Alarm	Class	Description	Control Action	Delay	Latched	Device Health
System (SCC)	SCC Power Lost	Alarm	The SCC is running on UPS power	No control action taken	None	No	-
	SCC Controller Fault	Alarm	The SCC controller has encountered a critical failure	No control action possible	None	No	-
	Flow Signal Out of Range	Alarm	The analog signal from the Flow Meter is out of range	Last known flow shall be used and all operating UV Sections in the Train will run at maximum power.	30s	No	Train Unhealthy
	UVT # Signal Out of Range	Alarm	The analog signal from the UVT Analyzer is out of range	If available switch UVT priority otherwise last known UVT shall be used and all operating equipment will run at maximum power.	30s	No	-
	UVT # Discrete Fault	Alarm	The UVT Analyzer is reporting a device fault	If available switch UVT priority otherwise last known UVT shall be used and all operating equipment will run at maximum power.	None	No	-
	pH Signal Out of Range	Warning	The analog signal from the pH meter is out of range	No control action taken	None	No	-
	SCC Controller Battery Fault	Warning	The controller battery is low and will not be able to maintain the program in the event of power failure	No control action taken	None	No	-
	SCC UPS Fault	Warning	The UPS backup is reporting a device fault.	No control action taken	None	No	-
	SCC Panel Intrusion	Warning	The SCC Intrusion Alarm input is in alarmed state	No control action taken	None	No	-
	SCC 24VDC Power Supply # Failed	Warning	The Power Supply # OK input is in alarmed state	No control action taken	None	No	-
	SCC Power Supply Redundancy Module Failed	Warning	The Redundancy Module OK input is in alarmed state	No control action taken	None	No	-
	SCADA Communication Fault	Alarm	The SCC controller is not communicating with the plant supervisory controls.	If SCADA is the configured source for UVT, then last known UVT shall be used and all operating equipment will run at maximum power.	30s	No	-
	T# LCP Communications Fault	Alarm	The SCC controller is not communicating with the LCP controller.	Train is deemed unhealthy. The last known flow and operating status of the Train is maintained until replacement equipment is brought on.	30s	No	-
	SCC Controller Module Fault	Alarm	A controller module is reporting a fault.	No control action taken	None	No	-
	UVT Below Design	Warning	UVT from one or more Trains is below the design parameters for this system.	No control action taken	None	No	-
	SCC UVT Override Active	Warning	UVT is in manual override	No control action taken	None	No	-
	SCC Flow Target Override Active	Warning	Flow Target is in manual override	No control action taken	None	No	-
	Not Enough Healthy Trains	Warning	The System requires more UV Trains for treatment than are available.	No control action taken	None	Yes	-

Device	Alarm	Class	Description	Control Action	Delay	Latched	Device Health
	T# Unhealthy	Alarm	A UV Train is Unhealthy	The next healthy UV Train will be started in priority sequence.	None	No	-
	T# in Maintenance	Warning	A user has placed the UV Train into Maintenance	Train is de-energized	None	No	Train Unhealthy
	T# Inlet Valve Not in Remote - Auto	Warning	Inlet valve is not in remote	No control action taken	None	No	Train Unhealthy
	T# Inlet Valve Failed to Open	Alarm	Inlet valve did not indicate opened within the specified travel time.	No control action taken	None	Yes	Train Unhealthy
	T# Inlet Valve Failed to Close	Alarm	Inlet valve did not indicate closed within the specified travel time	No control action taken	None	Yes	-
	T# Outlet Valve Not in Remote - Auto	Warning	Outlet valve is not in remote	No control action taken	None	No	Train Unhealthy
	T# Outlet Valve Failed to Open	Alarm	Outlet valve did not indicate opened within the specified travel time.	No control action taken	None	Yes	Train Unhealthy
	T# Outlet Valve Failed to Close	Alarm	Outlet valve did not indicate closed within the specified travel time	No control action taken	None	Yes	-
	T# Outlet Valve Failed to Reach Position	Alarm	Outlet valve is not at the commanded position	No control action taken	None	Yes	Train Unhealthy
	T# Outlet Valve Position Signal out of Range	Alarm	The analog position signal from the Outlet Valve is out of range	No control action taken	None	No	Train Unhealthy
	AOP Chemical Dosing Skid E-Stop	Alarm	The E-stop for Chemical dosing skid has been pressed	Oxidant injection operations are stopped	None	No	-
	AOP Chemical Tank Level Low	Alarm	The measured level is less than the low alarm set point.	Oxidant injection operations are stopped	30s	Yes	-
	AOP Chemical Tank Level Signal Out of Range	Warning	The analog level signal from the Chemical Storage Tank is out of range	No control action taken	30s	No	-
	AOP Chemical Dosing Skid All Pumps Faulted	Alarm	All the chemical dosing skid injection pumps have failed to run.	No control action taken	None	No	-
	AOP Chemical Tank Level Low Warning	Warning	The measured level is less than the warning alarm set point.	No control action taken	30s	No	-
	AOP Chemical Tank Level High Warning	Warning	The measured level is greater than the warning set point.	No control action taken	30s	No	-
	AOP Chemical Tank Level Bypass Active	Warning	Chemical Storage Tank level low alarm has been bypassed.	Chemical storage tank level low alarm control actions are muted	None	No	-
	AOP Chemical Tank Leak Detected	Warning	Chemical Storage Tank drip tray has detected a high fluid level	No control action taken	30s	No	-
	AOP Chemical Dosing Skid Leak Detected	Warning	Chemical Dosing Skid drip tray has detected a high fluid level	No control action taken	30s	No	-
	AOP Chemical Dosing Skid Pump 1 Fault	Alarm	Chemical Dosing Skid Pump 1 failed to run	Standby pump is started	10s	Yes	-
	AOP Chemical Dosing Skid Pump 2 Fault	Alarm	Chemical Dosing Skid Pump 2 failed to run	Standby pump is started	10s	Yes	-
	AOP Chemical Dosing Skid Flow Higher Than Expected	Warning	The measured Chemical flow rate is higher than the high threshold value	No control action taken	120s	No	-
	AOP Chemical Dosing Skid Flow Lower Than Expected	Warning	The measured Chemical flow rate is lower than the low threshold value	No control action taken	120s	No	-
	AOP Chemical Dosing Skid Flow Signal Out of Range	Warning	The analog flow signal from the Chemical Dosing Skid is out of range	No control action taken	30s	No	-
	AOP Chemical Dosing	Warning	The analog pressure signal	No control action taken	30s	No	-

Device	Alarm	Class	Description	Control Action	Delay	Latched	Device Health
	Skid Pressure Signal Out of Range		from the Chemical Dosing Skid is out of range				
	AOP Chemical Dosing Skid Not In Auto	Warning	The Chemical Dosing Skid is not operating in automatic	No control action taken	None	No	-
Train (LCP)	LCP Controller Fault	Alarm	The LCP controller has encountered a fault	All lamps are de-energized due to communications loss with the lamp drivers.	None	No	Train Unhealthy
	LCP Controller Module Fault	Alarm	A controller module is reporting a fault.	All lamps are de-energized due to communications loss with the lamp drivers.	None	No	Train Unhealthy
	LCP Power Lost	Alarm	The LCP is running on UPS power. All Train equipment is assumed to have lost power.	No control action taken	None	No	Train Unhealthy
	LCP UPS Fault	Warning	The UPS backup is reporting a device fault.	No control action taken	None	No	-
	LCP Panel Intrusion	Warning	The SCC Intrusion Alarm input is in alarmed state	No control action taken	None	No	-
	LCP 24VDC Power Supply # Failed	Warning	The Power Supply # OK input is in alarmed state	No control action taken	None	No	-
	LCP Power Supply Redundancy Module Failed	Warning	The Redundancy Module OK input is in alarmed state	No control action taken	None	No	-
	PDC## Temperature High	Alarm	The PDC cabinet is indicating High Temperature.	Affected Lamps will extinguish after the “Safety Shutdown Delay” time.	5s	Yes	PDCx Sections Unhealthy
	Chamber Temperature # High	Alarm	The UV Chamber is indicating High Temperature.	Affected Lamps will extinguish after the “Safety Shutdown Delay” time.	5s	Yes	Train Unhealthy
	Water Level # Low	Alarm	The UV Chamber is indicating Water Level low.	Affected Lamps will extinguish after the “Safety Shutdown Delay” time.	30s	Yes	Train Unhealthy
	PDC## Fan Fault	Alarm	The PDC Fan CT Monitor input is indicating a cooling device failure.	Affected Lamps will extinguish after the “Safety Shutdown Delay” time.	30s	Yes	PDCx Sections Unhealthy
	AOP Treatment Below Compliance Target	Alarm	A Contaminant Treatment Compliance Target is not being met.	All healthy UV Sections in the Train will be called to operate at maximum power.	30s	Yes	Train Unhealthy
	AOP Below Operating Target	Warning	A Contaminant Treatment Operating Target is not being met.	No control action taken	120s	No	-
	Not Enough Healthy Sections	Alarm	The Train requires more UV Sections for treatment than are available.	All healthy UV Sections in the Train will be called to operate at maximum power.	None	Yes	Train Unhealthy
	Disinfection Treatment Below Compliance Target – Off Specification	Alarm	A Disinfection Compliance Target is not being met. The Train is Off-Specification	All healthy UV Sections in the Train will be called to operate at maximum power.	30s	Yes	-
	Flow - Off Specification	Alarm	Flow is above the validation limit or the Flow meter has an analog signal fault active. The Train is Off-Specification	All healthy UV Sections in the Train will be called to operate at maximum power and Train will be deemed unhealthy	30s	No	-
	UVT - Off Specification	Alarm	UVT is below the validation limit. The Train is Off-Specification.	All healthy UV Sections in the Train will be called to operate at maximum power and Train will be deemed unhealthy	30s	No	-
	Disinfection Treatment Below Operating Target	Warning	A Disinfection Operating Target is not being met.	No control action taken	120s	No	-
	UVI Sensor CMB## Communication Fault	Alarm	The LCP CMB is not communicating	Associated UVI data is cleared	30s	No	-

Device	Alarm	Class	Description	Control Action	Delay	Latched	Device Health
	PDC## Temperature High Warning	Warning	The PDC is indicating a High Temperature Warning.	PDC cooling devices will be called to operate	None	No	-
	SCC Communications Fault	Alarm	The LCP controller is not communicating with the SCC controller.	The last known UVT and flow will be used and operating equipment will run at maximum power. The train that is not in operation will remain same.	30s	No	Train Unhealthy
	PDC## Communication Fault	Alarm	The LCP controller is not communicating with the PDC	Affected sections will shut off after 1 minute.	30s	No	PDC Sections Unhealthy
	PDC## CMB Power On Reset	Warning	The PDC has experienced a power on reset condition	Indicated for 5 minutes	None	No	-
	PDC## DI Module 01 Communication Fault	Alarm	The T-ARC 8DI module in the specified PDC is faulted	Affected Sections will extinguish lamps after the “Safety Shutdown Delay” time.	30s	No	PDC Sections Unhealthy
	PDC## DO Module 01 Communication Fault	Alarm	The T-ARC 8DO module in the specified PDC is faulted	Affected Sections will extinguish lamps after the “Safety Shutdown Delay” time.	30s	No	PDC Sections Unhealthy
	Flow Low	Warning	Flow is below the low alarm set point.	No control action taken	30s	No	-
	Flow High	Alarm	Flow is above the maximum hydraulic limit.	Wiping is inhibited	30s	No	-
	Flow Override Active	Warning	Flow is in manual override.	No control action taken	None	No	-
	UVT Override Active	Warning	UVT is in manual override.	No control action taken	None	No	-
	Flow Target Override Active	Warning	Flow Target is in manual override	No control action taken	None	No	Train Unhealthy
	Inlet Valve Not In Remote - Auto	Warning	Inlet valve is not in remote	No control action taken	None	No	Train Unhealthy
	Inlet Valve Failed to Open	Alarm	Inlet valve did not indicate opened within the specified travel time.	No control action taken	None	Yes	Train Unhealthy
	Inlet Valve Failed to Close	Alarm	Inlet valve did not indicate closed within the specified travel time	No control action taken	None	Yes	-
	Outlet Valve Not In Remote - Auto	Warning	Outlet valve is not in remote	No control action taken	None	No	Train Unhealthy
	Outlet Valve Failed to Open	Alarm	Outlet valve did not indicate opened within the specified travel time.	No control action taken	None	Yes	Train Unhealthy
	Outlet Valve Failed to Close	Alarm	Outlet valve did not indicate closed within the specified travel time	No control action taken	None	Yes	-
	Outlet Valve Failed to Reach Position	Alarm	Outlet valve is not at the commanded position	No control action taken	None	Yes	Train Unhealthy
	Outlet Valve Position Signal Out of Range	Alarm	The analog position signal from the Outlet Valve is out of range	No control action taken	None	No	Train Unhealthy
	Lamp End of Lamp Life	Warning	One or more lamps have exceeded their lifetime run hours.	No control action taken	None	No	-
	UVI Reference Check Active	Warning	A UVI sensor reference check is active.	No control action taken	None	No	Train Unhealthy
	UVI Reference Check Required	Warning	A UVI sensor reference check is required to validate the sensor readings.	No control action taken	None	No	-
	UVI Correction Factor Applied	Warning	A UVI sensor has a correction factor applied	No control action taken	None	No	-

Device	Alarm	Class	Description	Control Action	Delay	Latched	Device Health
	Influent Peroxide Concentration Lower Than Expected	Warning	The Influent Peroxide Concentration (ppm) is less than the Required Influent Concentration (ppm).	None	120s	No	-
Section	S## UVI Communication Fault	Alarm	The UVI Sensor is not communicating with the LCP CMB.	All operating UV Sections in the Train will run at maximum power until the faulted UV Section is replaced with another healthy Section.	30s	No	Section Unhealthy
	S## Driver Communication Fault	Alarm	The UV Section contains a lamp driver which is not communicating.	All operating UV Sections in the Train will run at maximum power until the faulted UV Section is replaced with another healthy Section.	Failed Read/ Writes >10	No	Section Unhealthy
	S## Driver Fault	Alarm	The UV Section contains a lamp driver which is reporting a fault condition.	All operating UV Sections in the Train will run at maximum power until the faulted UV Section is replaced with another healthy Section.	None	No	Section Unhealthy
	S## Lamp Fault	Alarm	The UV Section contains a lamp which is reporting a fault condition.	All operating UV Sections in the Train will run at maximum power until the faulted UV Section is replaced with another healthy Section.	None	No	Section Unhealthy
	S## UVI Lower Than Expected	Warning	The UVI sensor is reading a value lower that the theoretical low threshold value.	No control action taken	60s	No	-
	S## UVI Higher Than Expected	Warning	The UVI sensor is reading a value higher that the theoretical high threshold value.	No control action taken	60s	No	-
	S## Possible Lamp/Sleeve Breakage	Warning	A lamp driver is reporting a lamp ground leakage warning. Lamp operation is not affected.	No control action taken	None	No	-
	S## Not in Remote Auto	Warning	The UV Section is not set to Remote at the LCP	No control action taken	None	No	-
HSC	HSC## Communication Fault	Alarm	The HSC controller is not communicating with the LCP controller.	Remote wiping disabled for this HSC	30s	No	-
	HSC## WG# Jammed	Alarm	The wiper pressure switch has indicated high pressure within the Minimum Wiper Travel Time.	The wiper group is inhibited from wiping	None	Yes (at HSC)	-
	HSC## WG# Travel Time Exceeded	Alarm	The wiper has exceeded the maximum travel time while extending or retracting.	The wiper group is inhibited from wiping	None	Yes (at HSC)	-
	HSC## WG# Not in Remote Auto	Warning	The wiper group is not set to remote at the HSC.	No control action taken	None	No	-
	HSC## WG# Mode Switch Error	Alarm	The wiper group Local/Off/Remote selector switch is indicating multiple selections	Wiping is disabled for this HSC	None	No	-
	HSC## WG# Position Unknown	Alarm	The wiper position is unknown due to a Wiper Group Jammed fault or Wiper Retract Travel Time Exceeded fault.	The wiper group is inhibited from wiping	None	Yes (at HSC)	-

Device	Alarm	Class	Description	Control Action	Delay	Latched	Device Health
	HSC## Remote Wipe Inhibited	Warning	Conditions exist that will prevent remote wiping requests.	Remote wiping is disabled for this HSC	None	No	-
	HSC## Low Level	Alarm	The hydraulic tank has a low fluid level.	HSC turns hydraulic pump off immediately. Wiper groups are inhibited from operating.	None	Yes (at HSC)	-
	HSC## Pump Fault	Alarm	The hydraulic pump fails to turn on/off when requested.	HSC turns hydraulic pump off immediately. Wiper groups are inhibited from operating.	None	Yes (at HSC)	-

2.06 Security

The SCC and LCP Operator Interfaces will be configured with security access restrictions according to the three (3) different access levels defined in the table below.

Level	User	Description of Access	User Name	Password
1	No Login* (Default)	User may view all unrestricted data.	- - -	- - -
2	Operator	User may view all unrestricted data and enter process data, control process equipment and adjust process control set points. User has access to Basic configuration parameters.	OP	11111
3	Technician /Maintenance	User has access to configuration of process control strategies and displays, as well as advanced configuration parameters.	OP1	12345

* The Login button will show “LOGIN” when there are no users logged in.

Attachment D: Water Quality Emergency Notification Plan

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State Water Resources Control Board
Division of Drinking Water

WATER QUALITY EMERGENCY NOTIFICATION PLAN

Name of Utility: City of Santa Monica

Physical Location/Address: 1228 S. Bundy Drive, Los Angeles, CA 90025

The following persons have been designated to implement the plan upon notification by the Division of Drinking Water (DDW) of the State Water Resources Control Board (SWRCB) that an imminent danger to the health of the water users exists:

Water Utility: Contact Name & Title	Email Address	Telephone Day	Evening	Cell
1. Geo Herrera, Water Production & Treatment Administrator	geohvanny.herrera@smgov.net	310-434-2674	310-339-5874	310-339-5874
2. Gary Richinick, Water Production & Treatment Plant Supervisor	gary.richnick@smgov.net	310-434-2672	310-979-4554	213-709-1888
3. Jack Miyamoto, Lead Water Chemist	jack.miyamoto@smgov.net	310-458-8920	818-802-7328	818-802-7328
4. Oscar Teller, Water Quality Analyst	oscar.teller@smgov.net	310-458-2208		

The implementation of the plan will be carried out with the following State DDW and County Health Department personnel:

State DDW & County Health Department: Contact Name & Title	Telephone Day	Evening
1. Sutida Bergquist, P.E., District Engineer SWRCB, Division of Drinking Water	(818) 551-2048 Fax:(818) 551-2054	(213) 210-7100
2. Grazyna Newton, P.E., Associate Sanitary Engineer	(818) 551-2029	(818) 970-1319
James Willis, P.E., Associate Sanitary Engineer	(818) 551-2031	(707) 718-0800
Milagros Alora, Sanitary Engineer	(818) 551-2026	(818) 993-9351
Terry Kim, P.E., Associate Sanitary Engineer	(818) 551-2044	(818) 209-0667
Yun Hui Park, Water Resource Control Engineer	(818) 551-2032	(661) 755-5379
Matthew Megill, Water Resource Control Engineer State Water Resources Control Board	(818) 551-2033	(562) 881-8485
3. Scott Abbott, Branch Director	(626) 430-5260	(213) 270-5568
Gary Hirschtick, Service Manager	(626) 430-5816	(213) 270-5568
Lusi Mkhitaryan, Chief, Drinking Water Program	(626) 430-5420	(213) 270-5568
LA County DPH-Environmental Health Environmental Protection Branch–Local Primacy 5050 Commerce Drive, Baldwin Park, CA 91706-1423		

4. If the above personnel cannot be reached, contact:

Office of Emergency Services Warning Center (24 hrs.) (800) 852-7550 or (916) 845-8911
When reporting a water quality emergency to the Warning Center, please ask for the California State Water Resources Control Board – Division of Drinking Water Duty Officer.

NOTIFICATION PLAN

Attach a written description of the method or combination of methods to be used (radio, television, door-to-door, sound truck, etc.) **to notify customers in an emergency.** For each section of your plan give an estimate of the time required, necessary personnel, estimated coverage, etc. Consideration must be given to special organizations (such as schools), non-English speaking groups, and outlying water users. Ensure that the notification procedures you describe are practical and that you will be able to actually implement them in the event of an emergency. Examples of notification plans are attached for large, medium and small communities.

The City of Santa Monica Water Treatment and Distribution section, which is part of the Water Resources Division in the Public Works Department, is available 24 hours a day, 7 days a week. In an event of a water-related emergency, this section is the first responders and coordinators in the City of Santa Monica. When an emergency has been reported, staff on duty will inform the acting supervisor or the section manager about the emergency. The supervisor or the section manager will assess the severity of the event and will contact the City's Office of Emergency Management (OEM) to initiate the City's Emergency Notification System. This system is comprised of the following:

1. SM Alert: An automated system that will notify residents and business affected by the emergency through phone, email, and text messages in a short period of time. Initiate public outreach efforts where the City's public safety officers, the City's public information center and community outreach section will disseminate the message throughout the affected areas.

2. OEM and/or Water Resources Division will initiate the public media notification of which the City will contact the personnel of the radio stations, TV stations, and newspapers in the attached Exhibit A informing them of the emergency. These personnel and the associated media companies provide coverage for areas including the City of Santa Monica and the greater West Los Angeles area.

Report prepared by:

Deborah Kimura
Signature and Title

5/13/21
Date

PLAN I (Medium Community)

During regular working hours our people will contact the news media at television station KXYZ to broadcast the necessary warning. The local radio stations will also be contacted. The television and radio personnel are available at all hours. As a follow-up measure, we will also contact the Daily Bee, a local newspaper that serves both Ourtown and Hometown.

The warnings will be issued in both English and Spanish to cover all members of the community. Outlying areas of the water service area (such as Isolated Canyon and Lonesome Mountain subdivisions) will also be notified by sound truck and/or handbill distributed to their respective areas. Both of these areas are very small and this can be done quite quickly.

A special telephone answering service can also be quickly set up at the utility headquarters (using the regular company numbers) to answer questions that will come in from consumers. Questions are anticipated, especially from the Hometown area, because that area is served by three different water companies. A map will be available to the telephone answering personnel to determine the water company serving the caller.

It is anticipated that the time for notification to the television and radio audiences will be very short. The areas served by handbill and sound truck will also be notified within an hour. For notification to be issued in other than normal hours, the same media will be contacted, and an announcement will be scheduled for as long as is necessary. A sound truck(s) will be used in the early morning hours to quickly alert the people not listening to their radio or television.

PLAN II (Small Community)

Our community is very small and the most efficient means of notification will be both sound truck and handbill. It is estimated that the entire service area can be covered in less than three hours.

PLAN III (Large Community)

The same plan as implemented in Plan I should be used here with the exceptions noted. All the news media will be contacted in the entire metropolitan area. This includes all television and radio stations and all local and general area newspapers. Maps have been prepared to be distributed to the media to locate the boundaries of the water company. This system is large enough that it may only be necessary to notify some of the water users. This information will be transmitted to the media and an answering service at the water company will respond to consumers' calls. Unless the problems are limited to isolated areas it is unreasonable to assume that contact can be made through sound truck or handbill.

Exhibit A

Media List

NEWS

Argonaut, The

gary@argonautnews.com

joe@argonautnews.com

Canyon News

pressrelease@canyon-news.com

City News Service, Inc.

lori@socalnews.com

news@socalnews.com

Curbed LA

bianca@curbed.com

jenna@curbed.com

LA@curbed.com

LA Focus

lafocus@aol.com

LA Observed

editor@laobserved.com

LAist

editor@laist.com

mgarvey@scpr.org

tips@laist.com

Los Angeles Times

sonja.sharp@latimes.com

Mirror Media Group LA

sam@mirrormediagroupla.com

Santa Monica Daily Press

madeleine@smdp.com

matt@smdp.com

Santa Monica Observer

editor@smobserver.com

Santa Monica Star, The

smstarnewspaper@gmail.com

RADIO

DnA: Design & Architecture - KCRW-FM

frances.anderton@kcrw.org

WEB MEDIA

Patch

paige.austin@patch.com

Santa Monica Lookout

jcasuso@santamonicalookout.com

Santa Monica Next

damien@streetsblog.org

Streetsblog LA

joe@streetsblog.org

TV

ABC7News Online

pr@abc7.com

KCET-TV

socalconnected@KCET.org

Spectrum News 1 SoCal

kate.cagle@charter.com

CITY OF SANTA MONICA

constance.farrell@smgov.net

lindsay.call@smgov.net

Attachment E: Industrial Waste Permits

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City of Santa Monica, California

Industrial Waste Permit - **Government**

Permit No. **61-1006-01**

In accordance with the provisions of Santa Monica City Ordinance #1825(CCS)

Business Name: ARCADIA WTP

Is authorized to discharge wastewater from a facility located at:

Business Address: 1228 BUNDY DR 1, LOS ANGELES CA 90025

Part - General Provisions

1) The permittee is allowed to discharge wastewater to the sanitary sewer system with the limitatio set in Santa Monica Municipal Code (S.M.M.C.) Sections 5.20.040 and 5.20.050. Sections of S.M.M.C. are displayed at the City web-site: http://www.qcode.us/codes/santamonica

2) Noncompliance with the terms and conditions of this permit shall constitute violation(s) of S.M.M. Section 5.20.220. This permit becomes void upon any change of ownership or location.

3) The permittee shall allow the Director, or an authorized City representative, upon presenting credentials, to enter the permittee's premises and conduct an inspection, take samples, and monitor activities. Access to any records required as a condition of this permit must be provided upon

4) The permittee shall notify City staff immediately upon the occurrence of an accidental discharge substances prohibited by S.M.M.C., Section 5.20.330 or any slug loads or spills that may enter the public sewer. City staff shall be notified by telephone at (310) 458-8235.

5) The Director of Public Works may suspend or revoke this permit for violation of any provision herei or of City ordinance # 1825 (CCS) as amended, or assess a fine ($500-$1000 per code violation) for Santa Monica Municipal Code violations.
For permit provisions, please visit
www.smgov.net/uploadedfiles/Departments/Public_Works/Water/Permit%20Provisions_2016.pdf

The permit shall expire at midnight on June 30, 2021

Signed this 1st day of July, 2020

George Rodriguez

Water Resources Protection Programs Coordinator

Water Resources Protection Program
1212 5th Street, 3rd Floor
Santa Monica, CA 90401
310-458-8235

Industrial Wastewater Permit

Arcadia Water Treatment Plant
Permit # 61-1006-01

PART 1 - DISCHARGE LIMITATIONS

A. Description of Discharge Process

The permittee discharges brine generated from the treatment of brackish groundwater from the Santa Monica Groundwater Basin (Charnock Sub-Basin, Arcadia Sub-Basin, and Olympic Sub-Basin). Brine is the by-product of treatment via a reverse osmosis (RO) filtration system. There are four separate brine connections from each RO system that combine at a common main within the RO building; this main eventually discharges to a line that is used exclusively for brine discharge into the City of Santa Monica's sewer collection system. Please see Attachment A for the path of the brine discharge line into Santa Monica. No other discharge occurs at this brine discharge line.

Up to three brine connections operate at a time where flows average about 378 gallons per minute. Each respective connection is individually flow monitored.

B. Description of Sampling Point(s)

The permittee is authorized to discharge brine to the City of Santa Monica sewer system from the following sampling point(s):

PERMIT NO. 66-1006-01: The sampling port located at the main brine discharge line will serve as the sample compliance point before discharge into the sanitary sewer system.

C. Discharge Limitations

The permittee must comply with the following City of Santa Monica local limits at the designated sampling locations specified above and shall not exceed the following discharge limitations:

Constituents	Units	Instantaneous Maximum
Arsenic	mg/L	3.0

Cadmium	mg/L	15.0
Copper	mg/L	15.0
Cyanide (Total)	mg/L	10.0
Cyanide (Free)	mg/L	2.0
Dissolved Sulfides	mg/L	0.1
Lead	mg/L	5.0
Nickel	mg/L	12.0
pH Range	units	5.5 - 11.0
Silver	mg/L	5.0
Chromium (Total)	mg/L	10.0
Zinc	mg/L	25.0
Dispersed Oil & Grease	mg/L	600.0
Floatable Oil & Grease		None Visible
Temperature	°F	140°F

PART 2 - MONITORING REQUIREMENTS

A. The permittee shall monitor the sampling locations specified in Part 1B for the following parameters, at the indicated frequency:

Measurement Constituents[4]	Sample Units	Frequency	Type
Flow	GPD	Continuous[1]	Report
Arsenic	mg/L	1/6 mo.[2]	Grab or Composite[3]
Cadmium	mg/L	1/6 mo.[2]	Grab or Composite[3]
Copper	mg/L	1/6 mo.[2]	Grab or Composite[3]
Cyanide (Total & Free)	mg/L	1/6 mo.[2]	Grab
Dissolved Sulfides	mg/L	1/6 mo.[2]	Grab
Lead	mg/L	1/6 mo.[2]	Grab or Composite[3]
Nickel	mg/L	1/6 mo.[2]	Grab or Composite[3]
pH	units	1/6 mo.[2]	Grab
Silver	mg/L	1/6 mo.[2]	Grab or Composite[3]
Chromium (Total)	mg/L	1/6 mo.[2]	Grab or Composite[3]
Zinc	mg/L	1/6 mo.[2]	Grab or Composite[3]
Dispersed Oil & Grease	mg/L	1/6 mo.[2]	Grab

Constituents[4]	Units	Measurement Frequency	Sample Type
Floatable Oil & Grease	mg/L	1/6 mo.[2]	Visual observation
Semi-Volatile Organic Compounds	mg/L	1/6 mo.[2]	Grab
Volatile Organic Compounds	mg/L	1/6 mo.[2]	Grab
Temperature	˚F	1/6 mo.[2]	Grab

FOOTNOTES TO MONITORING REQUIREMENTS

[1] Flow is metered.

[2] The sample shall be taken on a day when these substances are likely to be present in their maximum concentration.

[3] Unlike Federal Categorical Pretreatment standards, the local limits can be compared to the results from grab sampling as well as composite sampling.

4 Data will be analyzed on a 5 day turnaround except for those analytes that require more expedited turnaround times to ensure sample quality and or integrity. All laboratory data and reports are to be submitted to the City by the 1st day of the sixth month of the reporting period. Exceptions are weekly or Quarterly data or reporting requirements, if any. Weekly data is due three business days after receipt of the data from the laboratory. Quarterly data/reports are due to the City ten business days prior to the end of the Quarter.

B. All handling and preservation of collected samples and laboratory analyses of samples shall be performed in accordance with 40 CFR Part 136 and amendments thereto unless specified otherwise in the monitoring conditions of this permit. The

handling, storage, and analyses of all samples taken for the determination of the characteristics of wastewater discharged shall be performed by laboratories certified by the State of California.

PART 3 - REPORTING REQUIREMENTS

A. Self-Monitoring

The permittee is not required to self-monitor unless requested to do so by the Director. All sampling will be performed by the City of Santa Monica Water Resources Protection Programs Division. In instances that the permittee is required to self-monitor or where the permittee samples more often than their permit requires, a self-monitoring report shall be completed. The report shall include results of any monitoring conducted in accordance with 40 CFR 136 and shall be submitted to WRPP by June 1st and by December 1st of each year. The report shall include, at a minimum, the sample custody record, the analysis results, a determination of compliance with discharge limitations, and, if any parameter is reported in excess of discharge limitations, an explanation of the violation, a description of how the user mitigated the violation, and a plan to prevent recurrence of the violation.

If required, the report shall indicate the nature and concentration of all pollutants in the effluent for which sampling and analyses were performed including measured or estimated maximum and average daily flows. The report shall be based upon data obtained through appropriate sampling and analyses performed during the period covered by the report, which data is representative of conditions occurring during the reporting period.

B. If the permittee monitors any pollutant more frequently than required by this permit, using test procedures prescribed in 40 CFR 136 or amendments thereto, or otherwise approved by EPA or specified in this permit, the results of such monitoring shall be reported in the compliance report and submitted to the Director.

Commented [SW1]: Did we already define who this is? Director of Public Works?

Commented [GR2R1]: The Director of the Public Works Department of the City of Santa Monica or the duly authorized representative thereof. According to SMMC.

C. Automatic Re-sampling

If the results of the permittee's wastewater analysis indicate a violation has

occurred, the permittee must:

1. Inform the Director of the violation within 24 hours; and

2. Repeat the sampling and pollutant analysis and submit, in writing, the results of this second analysis within thirty (30) days after becoming aware of the violation.

D. Pre-notification of Monitoring and Sampling

The permittee shall notify the Director by telephone at least forty-eight (48) hours in advance of any monitoring or sampling, to be done. Notification shall include the date, time and location of proposed monitoring or sampling. Monitoring and sampling shall be carried out during a period of normal operations. Prior to the commencement of any sampling or monitoring the Director may request that the permittee furnish to the Director a split sample and all supporting data (e.g., methodology, flow measuring data, strip chart recordings, and other pertinent information). The Director reserves the right to refuse any data developed from the monitoring or sampling activity if the permittee fails to comply with the pre-notification procedure.

E. Slug/Accidental Discharge Notification

The permittee shall notify the Director immediately upon the occurrence of an accidental discharge of substances prohibited by S.M.M.C., Section 5.20.330, or any slug loads or spills that may enter the public sewer. The Director shall be notified by telephone at (310) 458-8235. The notification shall include location of discharge, date and time thereof, type of waste, including concentration and volume, and corrective action taken. The permittee's notification of accidental cases in accordance with this section does not relieve it of other reporting requirements that arise under local State, or Federal laws.

Within five (5) days following an accidental discharge, the permittee shall submit to the Director a detailed written report pursuant to S.M.M.C., Section 5.20.330. The report shall specify:

1. Description and cause of the slug or accidental discharge, the cause thereof, and the impact on the permittee's compliance status. The description should

also include location of discharge, type, concentration and volume of waste.

2. Duration of noncompliance, including exact dates and time of noncompliance, and if the noncompliance continues, the time by which compliance is reasonably expected to occur.

3. All steps taken or to be taken to reduce, eliminate, and prevent recurrence of such a slug, accidental discharge, or other conditions of noncompliance.

F. Bypass of Treatment Facilities

1. Bypass is prohibited unless it is unavoidable to prevent loss of life, personal injury or severe property damage or no feasible alternatives exist.

2. The industrial user may allow bypass to occur which does not cause effluent limitations to be exceeded, but only if it is also for essential maintenance to assure efficient operation.

3. Notification of bypass:

   a. Anticipated bypass. If the industrial user knows in advance of the need for a bypass, written notice shall be submitted to the Director at least ten (10) days prior to the anticipated date of bypass.

   b. Unanticipated bypass. The industrial user shall provide oral notice of an unanticipated bypass that exceeds applicable Pretreatment Standards to the Director at (310) 458-8235 within twenty-four (24) hours from the time the industrial user becomes aware of the bypass. A written notice shall also be provided within five (5) days of the time the industrial user becomes aware of the bypass. The written notice shall contain the following:

      1. A description of the bypass including its cause and duration;
      2. Whether the bypass has been corrected; and
      3. The steps taken or to be taken to reduce, eliminate and prevent reoccurrence of bypassing

G. Operating Upsets

Any permittee that experiences an upset in operations that places the permittee in a temporary state of noncompliance with the provisions of on compliance with the provisions of either this permit or with S.M.M.C., Section 5.20.010 et. seq. shall inform the Director immediately upon the first awareness of the commencement of the upset at (310) 458-8235.

A written follow-up report of the upset shall be filed by the permittee with the Director within five (5) days. The report shall specify:

1. Description of the upset or slug load, the cause(s) thereof and the upset's or slug load's impact on the permittee's compliance status:

2. Duration of noncompliance, including exact dates and times of noncompliance, and if the noncompliance continues, the time by which compliance is reasonably expected to occur; and

3. All steps taken or to be taken to reduce, eliminate and prevent recurrence of such an upset, slug load or other conditions of noncompliance.

The report must also demonstrate that the treatment facility was being operated in a prudent and workmanlike manner.

H. All reports required by this permit shall be submitted to the Director at the following address:

City of Santa Monica
Water Resources Protection Programs
1212 5th Street 3rd Floor
Santa Monica, CA 90401

PART 4 - SPECIAL CONDITIONS: COMPLIANCE SCHEDULE

A compliance schedule for implementing appropriate technology to monitor and treat process waste streams will be agreed upon by the permittee and the City of Santa Monica.

A compliance schedule shall provide for reporting increments of progress in the form of dates for commencement and completion of major events leading to the construction and operation of additional pretreatment necessary, for the discharger to meet the applicable regulation (e.g., completing preliminary and final plans, executing contract for major components, commencing construction, and completing construction).

PART 5 - STANDARD CONDITIONS

A. DEFINITIONS AND CONDITIONS

1. Definitions

a. Bi-Weekly - Once every other week.

b. Bi-Monthly - Once every other month.

c. Bypass - Means the intentional diversion of wastes from any portion of a treatment facility.

d. Categorical Pretreatment Standards - Limitations on pollutant discharge to POTWs promulgated by EPA in accordance with Section 307 of the Clean Water Act, that apply to specified process wastewaters of particular industrial categories [40 CFR 403.6 and Parts 405-471].

e. Composite Sample - A sample that is collected over time, formed by continuous sampling or by mixing discrete samples. The sample may be composite either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increases while maintaining a constant time interval between the aliquot; or as a time composite sample: composed of discrete sample aliquot collected in one container at constant time intervals providing representative samples irrespective of stream flow;

f. Cooling Water

1. Uncontaminated: Water used for cooling purposes only which has no direct contact with any raw material, intermediate, or final product and which does not contain a level of contaminants detectably higher than that of the intake water.

2. Contaminated: Water used for cooling purposes only which may become contaminated either through the use of water treatment chemicals used for corrosion inhibitors or biocides, or by direct contact with process materials and/or wastewater.

g. Daily Maximum - The maximum allowable discharge of pollutant during a calendar day. Where daily maximum limitations are expressed in units of mass, the daily discharge is the total mass discharged over the course of the day. Where daily maximum limitations are expressed in terms of a concentration, the daily discharge is the arithmetic average measurement of the pollutant concentration derived from all measurements taken that day.

h. Four (4) - Day Average – The maximum allowable value for the average of four (4) consecutive sampling days.

i. Director - The Director of the City of Santa Monica's Public Works Department duly authorized representative thereof.

j. Grab Sample - An individual sample collected in less than fifteen (15) minutes, without regard for flow or time.

k. Industrial Wastewater (Industrial Waste) - Any water bearing waste excluding domestic wastewater.

l. Instantaneous Maximum - The allowable maximum concentration determined from the analysis of any discrete or composite sample collected, independent of the industrial flow rate and the duration of the sampling event.

m. Interference - A discharge which alone or on conjunction with a discharge or discharges from other sources, both:

1. Inhibits or disrupts the POTW, its treatment processes or operations or its sludge processes, use, or disposal; and

2. Therefore is a cause of a violation of any requirement of

the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued there under (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA) and including State regulations contained in any State sludge management plan prepared pursuant to Subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research, and Sanctuaries Act [40 CFR 403.3].

n. Monthly Average - The maximum allowable value for the average of all observations obtained during one calendar month.

o. Pass Through - A discharge which exits the POTW in waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) [40 CFR 403.3(n)].

p. Publicly Owned Treatment Works (POTW) - A treatment works as defined by Section 212 of the Clean Water Act which is owned by the State or municipality. This definition includes any devices and systems used in the storage, treatment, recycling, and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes, and other conveyances only if they convey wastewater to a POTW treatment plant [40 CFR 403.3(O)].

q. Resource Conservation and Recovery Act (RCRA) - A Federal statute regulating the management of hazardous waste from its generation through ultimate disposal. The Act contains requirements for waste generators, transporters, and owners and operators of treatment, storage, and disposal facilities [42 USC 6901 et. seq.].

r. Slug Load - Any pollutant (including Biochemical Oxygen Demand)

released in a discharge at a flow rate or concentration which will cause a violation of the specific discharge prohibitions in 40 CFR 403.5(b) to 403.12(f).

s. Total Toxic Organic (TTO) - The sum of the masses or concentrations of the specific toxic organic compounds regulated by specific categorical pretreatment regulations which is found in the discharge at specific quantifiable concentrations.

t. Upset - Means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee, excluding such factors as operational error, improperly designed or inadequate treatment facilities, or improper operation and maintenance or lack thereof.

2. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

3. Duty to Comply

The permittee must comply with the provisions of S.M.M.C., Section 5.20.010, et seq. and all conditions of this permit. Failure to comply with the requirements of this permit may be grounds for administrative action, or enforcement proceedings including civil or criminal penalties, injunctive relief, and summary abatements.

4. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or correct any adverse impact to the public treatment plant or the environment resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.

5. Modification or Revision of the Permit

   This permit may be modified, revoked and reissued, or terminated for good causes including, but not limited to, the following:

   a. To incorporate any new or revised Federal, State, or local pretreatment standards or requirements;

   b. Material or substantial alterations or additions to the discharger's operation processes, or discharge volume or character which were not covered in the effective permit;

   c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge;

   d. Information indicating that the permitted discharge poses a threat to the City of Santa Monica collection system or Hyperion Wastewater Treatment Plant, POTW personnel or the receiving waters;

   e. Violation of any terms or conditions of this permit;

   f. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or

   g. Revision of or a grant of variance from such categorical standards pursuant to 40 CFR 413.13;

   h. Upon request of the permittee, provided such request does not create a violation of any existing applicable requirements, standards, laws, or rules and regulations;

   i. To correct typographical or other errors in the permit.

6. Property Rights

   The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any violation of federal, state or local laws or regulations.

7. Limitation of Permit Transfer

   An Industrial Wastewater Permit shall not be transferable by operation of law or otherwise, either from one location to another or from one person to another. Statutory mergers or name changes shall not constitute a transfer or a change in ownership.

8. Dilution

   The permittee shall not increase the use of potable or process water or, in any way attempt to dilute an effluent as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit.

9. General Prohibitive Standards

   The permittee shall comply with all the general prohibitive discharge standards in S.M.M.C., Section 5.20.040, except as expressly allowed in this Industrial Wastewater Permit.

   a. No person shall contribute or cause to be contributed, directly or indirectly to the POTW, the storm drain system or the waters of the State, any pollutant or wastewater which may cause interference or pass through. These general prohibitions apply to all users of the POTW and storm drain system whether the user is subject to categorical pretreatment standards or any other national, State, or local pretreatment standards or requirement. Furthermore, no person may contribute the following substances to the POTW, storm drain system or waters of the State:

      1. Gasoline, mercury, total identifiable chlorinated hydrocarbons, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, ketones, aldehydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides, petrochemical or carbon-based solvents, pesticides, or jet fuel.

      2. Any liquids, solids or gases which by reason of their nature or may be, sufficient, either alone or by interaction with other substances, to cause fire or explosion or be injurious in any other way to the POTW

or storm drain system. Included in this prohibition are wastestreams with a closed cup flashpoint of less than 140°F (60°C). At no time shall two (2) successive readings on an explosion hazard meter at the point of discharge into the system or at any point in the system be more than five percent (5%) nor any single reading over ten percent (10%) of the lower explosive limit (LEL) of the meter.

3. Any solid or viscous substances in amounts which will cause interference with the flow or operation of the POTW or the storm drain system, but in no case solids greater than one-half (1/2") inch (1.27 centimeters) in any dimension.

4. Any fats or greases, including but not limited to petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin, in amounts that will cause interference or pass through;

5. Any wastewater having a pH less than 5.5 or more than 11.0, or otherwise cause corrosive structural damage to the system, city personnel or equipment.

6. Any wastewater containing pollutants in sufficient quantity (flow or concentration), either singly or by interaction with other pollutants, to pass through or interfere with the POTW process, or constitute a hazard to human, animal, plant or fish life, or to exceed any limitation set forth in this section.

7. Any noxious or malodorous liquids, gases, or solids or other wastewater which, either singly or by interaction with other wastes, are sufficient to create a public nuisance or hazard to life or are sufficient to prevent entry into the POTW or the storm drain system.

8. Any substance which may cause the POTW effluent or any other residues, sledges, or scums, to be unsuitable for reclamation and reuse or to interfere with the reclamation process. In no case, shall a substance discharged to the POTW or storm drain system cause the POTW to be in noncompliance with sludge use or disposal regulations or permits issued under section 405 of the Act; the Solid Waste Disposal Act, the Clean Air Act, the Toxic Substances Control Act, or other State requirements applicable to the sludge use and

disposal practices being used.

9. Any substance which will cause the POTW to violate its NPDES permit, or applicable Federal or State statutes, rules, or regulations.

10. Any wastewater which imparts color which cannot be removed by the treatment process, such as, but not limited to, dye wastes and vegetable tanning solutions, which consequently imparts color to the POTW by violating the POTW's NPDES permit. Color (in combination with turbidity) shall not cause the treatment plant effluent to reduce the depth of the compensation point for photosynthetic activity by more than ten percent (10%) from the seasonably established norm for aquatic life.

11. Any wastewater having a temperature greater than 140°F (60°C), or which will inhibit biological activity in the POTW resulting in interference, but in no case wastewater which causes the temperature at the introduction into the POTW to exceed 104°F (40°C).

12. Any wastewater containing any radioactive wastes or isotopes except as specifically approved by the Director in compliance with applicable State or Federal regulations.

13. Any pollutants which result in the presence of toxic gases, vapors or within the POTW or the storm drain system in a quantity that may cause worker health and safety problems.

14. Any trucked or hauled pollutants, except at discharge point designated by the City in accordance with Section 5.20.170.

15. Storm water, surface water, ground water, artesian well water, roof runoff, subsurface drainage, swimming pool drainage, condensate, deionized water, cooling water and unpolluted industrial wastewater, unless specifically authorized by the Director.

16. Any industrial wastes containing floatable fats, waxes, grease or oils, or which become floatable at the wastewater temperature at the introduction to the treatment plant during the winter season; but in no

case, industrial wastewater containing more than 600 mg/l of emulsified oil or grease.

17. Non-biodegradable cutting oils, commonly called soluble oils, which form a persistent water emulsion, and non-biodegradable complex carbon compounds.

18. Any sludges, screenings, or other residues from the pretreatment of industrial wastes.

19. Any medical wastes, except as specifically authorized by the Director in a wastewater permit and found in conformity with Section 5.20.050 (c).

20. Any material containing ammonia, ammonia salts, or other chelating agents which will produce metallic complexes that interfere with the POTW or storm drain system.

21. Any material identified as hazardous waste according to 40 CFR Part 261 except as may be specifically authorized by the Director.

22. Any wastewater causing the POTW effluent to show a lethal concentration of fifty percent (50%) (LC50) as determined by a toxicity test ninety-six (96) hours or less, using a percentage of the discharge and aquatic test species chosen by the Director.

23. Recognizable portions of the human or animal anatomy.

24. Any wastes containing detergents, surface active agents, or other substances which may cause excessive foaming in the POTW or storm drain system.

b. Wastes prohibited by this section shall not be processed or stored in such a manner that these wastes could be discharged to the POTW or the storm drain system. All floor drains located in process or materials storage areas must discharge to the industrial user's pretreatment facility before connecting with the system.

10. Compliance with Applicable Pretreatment Standards and Requirements

The permit shall comply at all times with any and all applicable local, State and Federal pretreatment standards and requirements including any such standards or requirements that may become effective during the term of this permit. Payment of Industrial Waste Permit fees are pursuant to the most current approved City billing rates and are subject to change. Failure to pay permit charges/ fees when due is a violation of Santa Monica Municipal Code section 5.20.480.

11. Confidentiality

Information and data on an industrial user obtained from reports, questionnaires, permit applications, permits, and monitoring programs, and from City inspection and sampling activities shall be available to the public without restriction unless the industrial user specifically requests and is able to demonstrate to the satisfaction of the City that the release of such information would divulge information, processes or methods of production entitled to protection as trade secrets under applicable State law.

a. Wastewater constituents and characteristics and other "effluent data" as defined by 40 CFR 2.302 will not be recognized as confidential information and will be available to the public without restriction.

b. When requested and demonstrated by the industrial user furnishing a report that such information should be held confidential, the portions of a report which might disclose trade secrets or secret processes shall not be made available for inspection by the public but shall be made available immediately upon request to governmental agencies for uses related to this Ordinance, the National Pollutant Discharge Elimination System (NPDES) program, and in enforcement proceedings involving the person furnishing the report.

B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems for treatment and control (and related appurtenances) which are

installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance include but is not limited to: effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

2. Duty to Halt or Reduce Activity

   Upon reduction of efficiency of operation, or loss or failure of all or part of the pretreatment facility, the permittee shall, to the extent necessary to maintain compliance with its permit, control its production or discharge (or both) until operation of the pretreatment facility is restored or an alternative method of pretreatment is provided. This requirement applies, for example, when the primary source of power of the pretreatment facility fails or is reduced. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Removed Substances

   Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in accordance with section 405 of the Clean Water Act and Subtitles C and D of the Resource Conservation and Recovery Act.

C. MONITORING AND RECORDS

1. Representative Sampling

   Sample and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this permit. All equipment used for sampling and analysis must be routinely calibrated, inspected and maintained to ensure their accuracy. Monitoring points shall not be changed without

notification to and the approval of the Director.

2. Flow Measurements

   If flow measurement is required by this permit, the appropriate flow measurement devices and methods consistent with approved scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than ten percent (10%) from true discharge rates throughout the range of expected discharge volumes.

3. Analytical Methods to Demonstrated Continued Compliance

   All sampling and analysis required by this permit shall be performed in accordance with the techniques prescribed in 40 CFR Part 136 and amendments thereto, otherwise approved by EPA, or as specified in this permit.

4. Additional Monitoring by the Permittee

   If the permittee monitors any pollutant more frequently than required by this permit, using test procedures identified in Section C.3, the results of this monitoring shall be included in the permittee's self-monitoring reports.

5. Inspection and Entry

   The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

   a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

   b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit;

d. Sample or monitor, for the purposes of assuring permit compliance, any substances or parameters at any location; and

e. Inspect any production, manufacturing, fabricating, or storage area where pollutants, regulated under the permit, could originate, be stored, or be discharged to the sewer system.

The applicant by accepting any permit issued, does hereby consent and agree to entry upon the premises as described herein. Any person violating this authority shall be guilty of a misdemeanor.

6. Retention of Records

a. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report or application. This period may be extended by request of the Industrial Waste Section at any time.

b. All records that pertain to matters that are the subject of special orders or any other enforcement or litigation activities brought by the Industrial Waste Section shall be retained and preserved by the permittee until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired.

7. Record Contents

Records of sampling and analyses shall include:

a. The date, exact place, time, and methods of sampling or measurements, and sample preservation techniques or procedure;

b. Who performed the sampling or measurements

c. The date(s) analyses were performed;

d. Who performed the analyses;

e. The analytical techniques or methods used; and

f. The results of such analyses.

8. Falsifying Information

No person shall knowingly make any false statement representation or certification in any application, record, report, plan or other document filed with the City of Santa Monica or required to be maintained or tamper with or knowingly render inaccurate any monitoring device required under this permit.

D. ADDITIONAL REPORTING REQUIREMENTS

1. Planned Changes

The permittee shall give notice to the Director ninety (90) days prior to any facility expansion, production increase, or process modifications which results in new or substantially increased discharges or a change in the nature of the discharge.

2. Duty to Provide Information

The permittee shall furnish to the Director, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

3. Signatory Requirements

All application, reports, or information submitted to the Director, must contain the following certification statement and be signed as required in Sections (a), (b), (c), or (d) below:

> "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 assure 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 persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

a. By a responsible corporate officer, if the industrial user submitting the reports is a corporation. For the purpose of this paragraph, a responsible corporate officer means:

   1. a president, secretary, treasurer, or vice-president of the corporation in charge of principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or;

   2. the manager of one or more manufacturing, production, or operation facilities employing more than 25-0 persons or having gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

b. By a general partner or proprietor if the industrial user submitting the reports is a partnership or sole proprietorship respectively.

c. By a duly authorized representative of the individual designated in paragraph (a) or (b) of this section if:

   1. the authorization is made in writing by the individual described in paragraph (a) or (b);

2. the authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the industrial discharge originates, such as the position of plant manager, operator of a well, or a well field Director, or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company; and

3. the written authorization is submitted to the City.

d. If an authorization under paragraph (c) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or overall responsibility for the environmental matters for the company, a new authorization satisfying the requirements of paragraph (c) of this section must be submitted to the City prior to or together with any reports to be signed by an authorized representative.

4. Annual Publication

A list of all industries which were subject to enforcement proceedings during the twelve (12) previous months shall be annually published by the Director in the largest daily newspaper within the service area. Accordingly, the permittee is apprised that noncompliance with this permit may lead to an enforcement action and may result in publication of its name in an appropriate newspaper in accordance with S.M.M.C., Section 5.20.490.

5. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee form civil and/or criminal penalties for noncompliance under S.M.M.C. Sections 5.20.600 and 5.20.610 or State or Federal laws and regulations.

6. Penalties for Violations of Permit Conditions

The S.M.M.C., Section 5.20.600 provides that any person who violates a permit condition is subject to a civil penalty of at least $1000.00 per violation per day. Any person who willfully or negligently violates permit conditions is subject to criminal penalties of up to $5000.00 per violation per day, or by

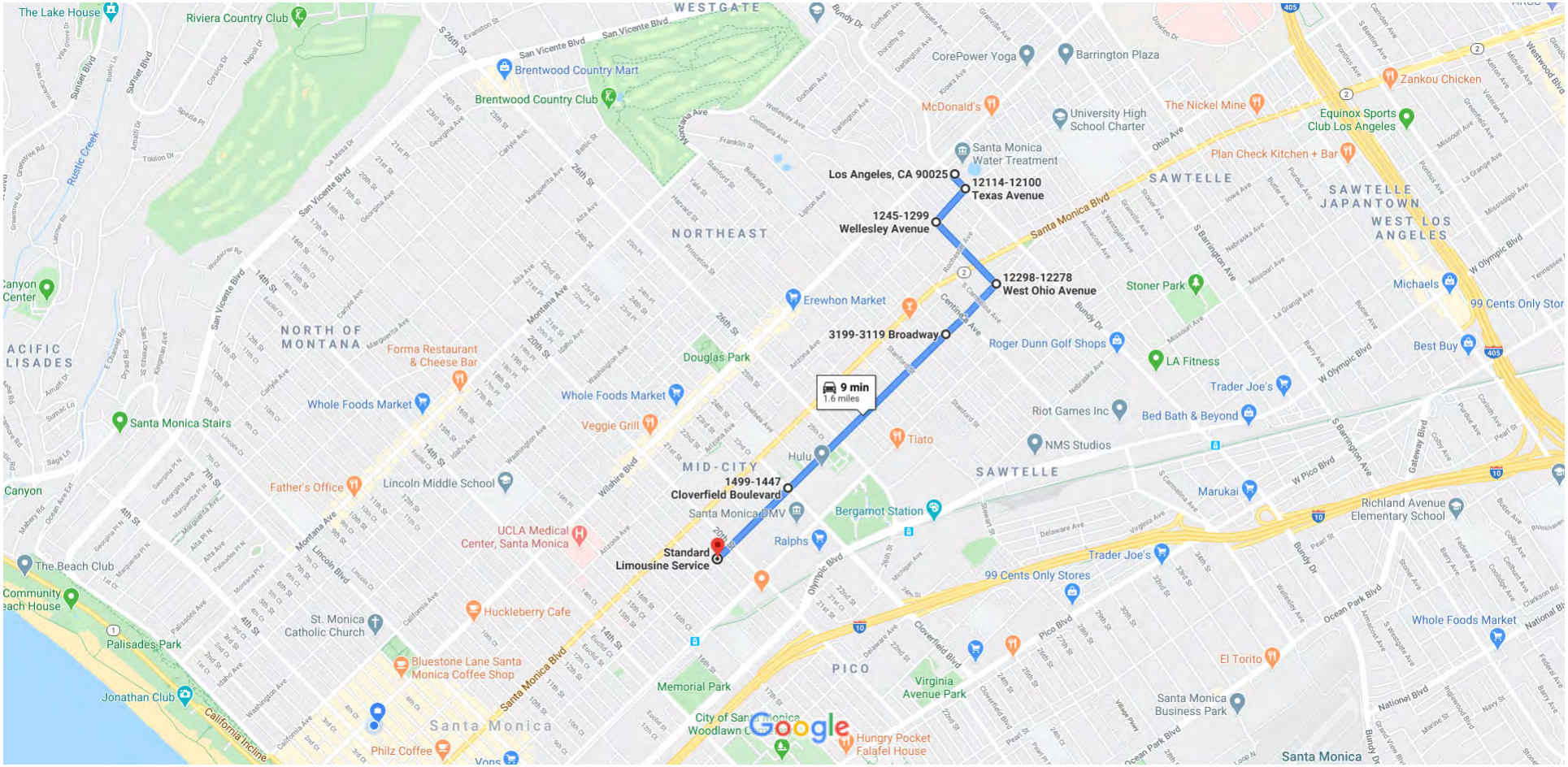
imprisonment in the County Jail of a period of not more than six (6) months, or by both such fine and imprisonment. The permittee may also be subject to sanctions under State and/or Federal law.

7. Recovery of Costs Incurred

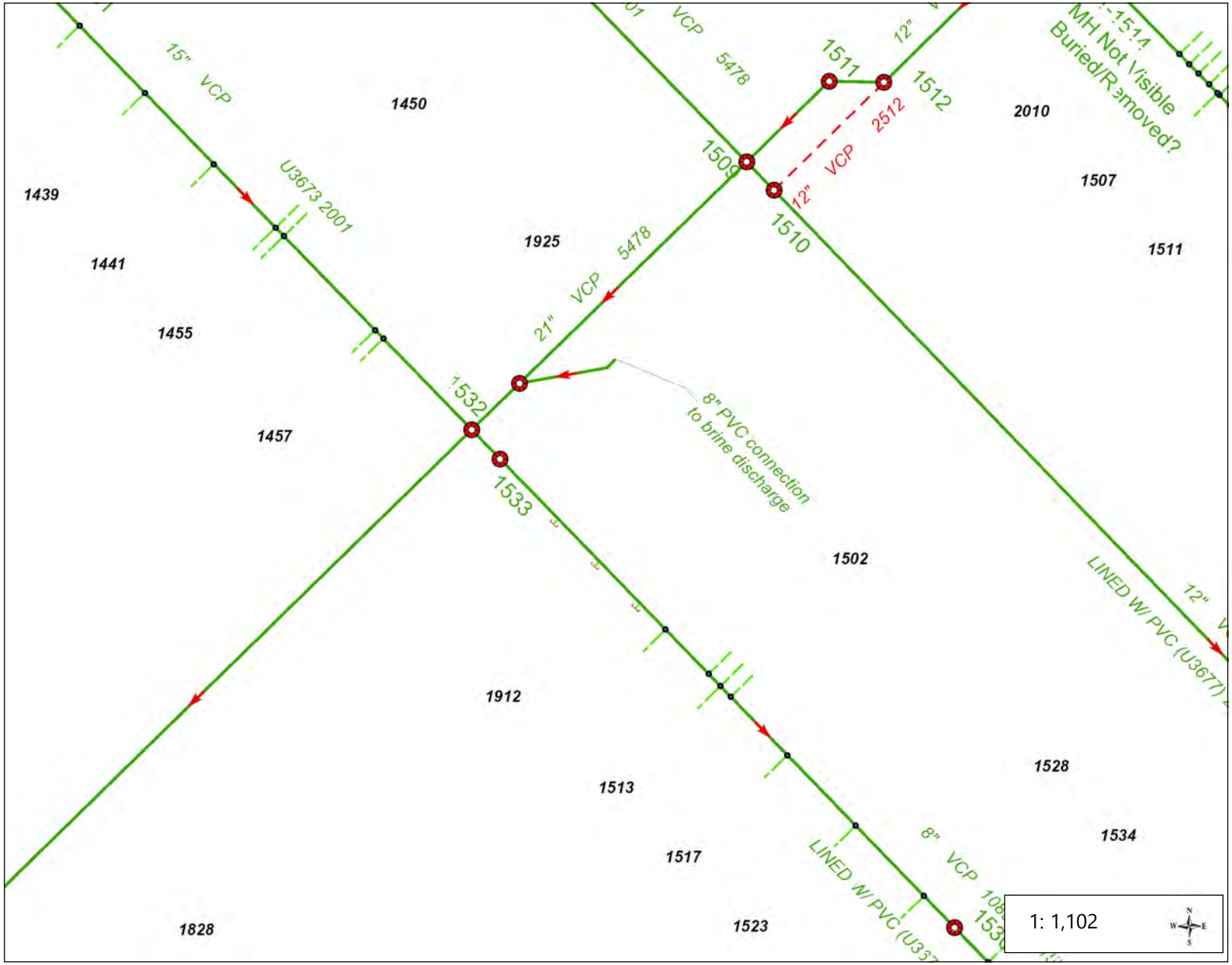
In addition to civil and criminal liability, the permittee violating any of the provisions of this permit or S.M.M.C. Section 5.20.010 et. seq. or causing damage to or otherwise inhibiting the City of Santa Monica wastewater disposal system shall be liable to the City of Santa Monica for any expense, loss, or damage caused by such violation or discharge pursuant to S.M.M.C., Section 5.20.550.

The City of Santa Monica shall bill the permittee for the costs incurred by the City for any cleaning, repair, or replacement work caused by the violation or discharge. The permittee shall also be liable for the costs of monitoring and investigation by the City arising from any unlawful discharge. Refusal to pay the assessed costs shall constitute a separate violation of S.M.M.C., Sections 5.20.590 and 5.20.600.

Attachment A


Los Angeles, CA 90025
12114-12100 Texas Avenue
1245-1299 Wellesley Avenue
12298-12278 West Ohio Avenue
3199-3119 Broadway
1499-1447 Cloverfield Boulevard
Standard Limousine Service
9 min
1.6 miles
Santa Monica Water Treatment
Brentwood Country Mart
Brentwood Country Club
Riviera Country Club
The Lake House
CorePower Yoga
Barrington Plaza
McDonald's
University High School Charter
The Nickel Mine
Zankou Chicken
Equinox Sports Club Los Angeles
Plan Check Kitchen + Bar
Erewhon Market
Stoner Park
Michaels
Roger Dunn Golf Shops
LA Fitness
Best Buy
Trader Joe's
Riot Games Inc
Bed Bath & Beyond
NMS Studios
Tiato
Hulu
Douglas Park
Forma Restaurant & Cheese Bar
Whole Foods Market
Veggie Grill
Santa Monica Stairs
Father's Office
Lincoln Middle School
Santa Monica DMV
Bergamot Station
Ralphs
UCLA Medical Center, Santa Monica
Marukai
Richland Avenue Elementary School
Trader Joe's
99 Cents Only Stores
Whole Foods Market
El Torito
Santa Monica Business Park
Virginia Avenue Park
Memorial Park
Huckleberry Cafe
St. Monica Catholic Church
Bluestone Lane Santa Monica Coffee Shop
Jonathan Club
Philz Coffee
Hungry Pocket Falafel House
The Beach Club
Palisades Park
NORTH OF MONTANA
NORTHEAST
MID-CITY
SAWTELLE
SAWTELLE JAPANTOWN
WEST LOS ANGELES
PICO
WESTGATE
Santa Monica
Google
Map data ©2020
1000 ft

Arcadia Brine Discharge Connection



Legend

- Address Numbers
- Public Places
- City Boundary
- Sewer Flow
- Sewer Fitting
  - <all other values>
  - Wye
  - Tap
  - Saddle
  - Cap(Lat)
  - Coupling
  - Plug
- Sewer Manhole
- Sewer NetworkStructure
  - <all other values>
  - GaugingStation
  - JunctionChamber
  - PumpStation
- Sewer Abandoned
- Sewer Gravity Main
- Sewer Lateral
- World Street Map

Notes

Enter map description here

0.0 0 0.02 0.0

Miles

CITY OF LOS ANGELES
CALIFORNIA

INDUSTRIAL WASTE MANAGEMENT DIVISION
2714 MEDIA CENTER DRIVE
LOS ANGELES, CA 90065
OFFICE: (323) 342-6200
FAX: (323) 342-6111

September 1, 2018

ARCADIA WATER TREATMENT PLANT
1228 S Bundy Drive
Los Angeles, Ca 90025

In Reply Refer to: IU002138.prm/td

Attn: Geo Herrera, Water Production and Treatment Administrator

RENEWAL OF INDUSTRIAL WASTEWATER PERMIT FOR IU002138
PERMIT: W-521696

The Bureau of Sanitation (LA Sanitation) has completed a review of ARCADIA WATER TREATMENT PLANT's application to discharge industrial wastewater to the City of Los Angeles sewer system. Pursuant to LA Sanitation's audit, it has been determined that this facility is subject to the Non-Categorical Significant Industrial User, and other applicable Federal, State and Local wastewater discharge requirements. Therefore, in accordance with provisions of the Los Angeles Municipal Code (L.A.M.C.) Section 64.30, this Industrial Wastewater Permit is being issued to include comprehensive permit conditions which identify the requirements that are applicable to ARCADIA WATER TREATMENT PLANT. All discharges from this facility and actions and reports relating thereto shall be in accordance with the terms and conditions of this permit.

This permit shall become effective at midnight on **September 1, 2018** and shall expire at midnight on **August 31, 2021**. During the term of this permit, the permittee shall immediately notify LA Sanitation of any changes to the facility, process, production, or pretreatment system that may change the characteristics which causes it to be different from that expressly allowed under this permit.

If there are any questions regarding these permit conditions, please contact Tony Du of my staff at (323) 342-6091.

Sincerely,

ENRIQUE C. ZALDIVAR, Director
LA Sanitation

By

Michael Simpson, Division Manager
Industrial Waste Management Division

cc: SIU Permitting Section
Bhupendra Patel, Chief Environmental Compliance Inspector II

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Appendix A: Fact Sheet

Appendix B: Attachments

Attachment 1- Site Plan
Attachment 2- Process Flow
Attachment 3- Tank Schedule

Appendix C: Self-Monitoring Report Form and Instructions

Appendix D: Slug Discharge Control Plan

Appendix E: Approved Sewer Capacity Availability Request

INDUSTRIAL USER
PERMIT REQUIREMENTS AND CONDITIONS

Legal Name: CITY OF SANTA MONICA
dba Name: ARCADIA WATER TREATMENT PLANT
Industrial User No: IU002138

INDUSTRIAL WASTEWATER PERMIT NO.
W-521696

CITY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS
LA SANITATION

INDUSTRIAL WASTE MANAGEMENT DIVISION
2714 MEDIA CENTER DRIVE
LOS ANGELES, CA 90065
(323) 342-6200

INDUSTRIAL WASTEWATER PERMIT

INDUSTRIAL USER NO:	IU002138
PERMIT NO:	W-521696
EFFECTIVE DATE:	09/01/2018
AMENDED DATE:	NA
EXPIRATION DATE:	08/31/2021

LEGAL BUSINESS NAME:	CITY OF SANTA MONICA
DOING BUSINESS AS:	ARCADIA WATER TREATMENT PLANT
MAILING ADDRESS:	1228 S BUNDY DRIVE LOS ANGELES, CA 90025
LOCATION ADDRESS:	1228 S BUNDY DRIVE LOS ANGELES, CA 90025
CATEGORY:	NON-CATEGORICAL SIU
POINT OF DISCHARGE:	PUBLIC SEWER

In accordance with the provisions of the Los Angeles Municipal Code (L.A.M.C.) Section 64.30, the above identified industrial user is hereby authorized to discharge industrial wastewater through the approved point of discharge identified herein in accordance with the discharge limitations, conditions, and requirements set forth in this permit and the L.A.M.C. Compliance with this permit does not relieve the industrial user of its obligation to comply with all pretreatment regulations, standards or requirements under local, State and Federal laws, including any such laws, regulations, standards or requirements that may become effective during the term of this permit.

The industrial user must comply with the provisions of L.A.M.C. Section 64.30 and all terms and conditions of this permit. Noncompliance with the terms and conditions of this permit shall constitute a violation of the L.A.M.C. Section 64.30 and may subject the industrial user to administrative actions or other legal proceedings. This permit becomes void upon any change of ownership or location whatsoever.

Enrique C. Zaldivar, Director
LA Sanitation

BY: _____

PART 1 - SAMPLE POINT DESCRIPTION AND FACILITY FLOW INFORMATION

A. Sample Point

The industrial user is authorized to discharge industrial wastewater to the City of Los Angeles sewer system from the sample point listed below.

INDUSTRIAL WASTEWATER PERMIT	SAMPLE POINT	FLOW PER OPERATIONAL DAY (GPD)		DESCRIPTION
		TOTAL	PROCESS	
W-521696	01	44,317	44,317	SAMPLE POINT AT SEWER MH LOCATED NORTH SIDE OF THE FACILITY

B. Industrial User Flow

Facility Flow Information [1]	Total (GPD)	Process (GPD)
	44,317	44,317

Footnotes to Sample Point Description and Industrial User Flow Information

[1] Flows indicated are average operational day values based on information evaluated by LA Sanitation and are not intended as maximum limits on the discharge allowed. However, the industrial user shall give notice to LA Sanitation if wastewater flows are significantly different than so indicated.

PART 2 - DISCHARGE LIMITATIONS

The discharge from the designated sample points shall not exceed the following discharge limitations:

A. Industrial Wastewater Permit W-521696

1. Sample Point 01-001

DISCHARGE LIMITATIONS		
Constituent	**Local Instantaneous Maximum**	
Arsenic, Total	3	mg/l
Cadmium, Total	15	mg/l
Chromium, Total	10	mg/l
Copper, Total	15	mg/l
Cyanide (Free)[1]	2	mg/l
Cyanide (Total)	10	mg/l
Dissolved Sulfides	0.1	mg/l
Lead, Total	5	mg/l
Nickel, Total	12	mg/l
Oil & Grease (Total)	600	mg/l
pH (Standard Units)	5.5 - 11	SU
Silver, Total	5	mg/l
Zinc, Total	25	mg/l

Footnotes to Discharge Limitations

[1]Cyanide (Free) shall mean cyanide amenable to chlorination as defined by 40 CFR 136.

PART 3 – MONITORING REQUIREMENTS

The industrial user shall monitor the designated sample point, for the following constituents, at the indicated frequency and by the indicated sample type.

A. Industrial Wastewater Permit W-521696

1. Sample Point 01-001

MONITORING REQUIREMENTS FOR REGULATED PARAMETERS		
Constituent	**Measurement Frequency**	**Sample Type**
Daily Sample Flow	Continuous	Flow
Arsenic, Total	Semi-Annual	Grab or Composite[1]
Cadmium, Total	Semi-Annual	Grab or Composite[1]
Chloride[2]	Semi-Annual	Grab or Composite
Chromium, Total	Semi-Annual	Grab or Composite[1]
Copper, Total	Semi-Annual	Grab or Composite[1]
Cyanide (Free)	Semi-Annual	Grab
Cyanide (Total)	Semi-Annual	Grab
Dissolved Sulfides	Semi-Annual	Grab
Lead, Total	Semi-Annual	Grab or Composite[1]
Nickel, Total	Semi-Annual	Grab or Composite[1]
Oil & Grease (Total)	Semi-Annual	Grab
pH[3]	Semi-Annual	Grab
Silver, Total	Semi-Annual	Grab or Composite[1]
Zinc, Total	Semi-Annual	Grab or Composite[1]

B. Representative Monitoring and Sampling

1. Monitoring and sampling shall be carried out during a period of normal operations.

2. All handling and preservation of collected samples and laboratory analyses of samples shall be performed in accordance with 40 CFR Part 136 and amendments thereto unless specified otherwise in the monitoring conditions of this permit. The handling, storage and analyses of all samples taken for the determination of the wastewater characteristics discharged shall be performed by laboratories certified by the State of California or approved by the Director of the LA Sanitation.

3. The detection limits employed for wastewater analysis shall be lower than the permit limits established for a given parameter.

4. The industrial user is responsible for maintaining and cleaning the designated sample point(s) to prevent any build-up of oil and grease, sediment or sludge. Failure to do so does not invalidate sampling test results. Analytical results from samples taken from designated sample points according to accepted sampling procedure shall be accepted as binding.

5. Sample Points identified in the Industrial Wastewater Permit shall not be changed without notification and approval by the Director.

FOOTNOTES TO MONITORING REQUIREMENTS

[1]The local limits for heavy metals can be compared to the results from grab sampling as well as composite sampling.

[2]The City of Los Angeles is establishing a database for chlorides.

[3]The pH of the wastewater discharge to the sewer system shall be monitored and recorded continuously using a pH meter and recorder. A logbook for calibration of the pH meter shall be maintained. The pH charts shall be initialed daily by an operator at the facility.

PART 4 – REPORTING REQUIREMENTS

A. Self-Monitoring

1. The industrial user shall implement a self-monitoring program for the designated Industrial Wastewater Permit. Monitoring results obtained shall be summarized and reported on the enclosed report form entitled "Periodic Compliance Report" and submitted with a US Post Office postmark date by the 15th day of the month following the monitoring period. Facsimiles (faxes) of self-monitoring reports shall not be accepted. Reports with original signatures must be submitted by the due date.

   The first self-monitoring report for the monitoring period of **July 1, 2018 to December 31, 2018** shall be submitted by **January 15, 2019**. Subsequent reports shall be submitted in accordance with the following schedule:

SELF-MONITORING REPORT SCHEDULE			
Industrial Wastewater Permit	**Type of Report**	**Monitoring Period**	**Report Due Date**
W-521696 Sample Point 01	Self-Monitoring Local Limits	Jan 1 - Jun 30 Jul 1 - Dec 31	Jul 15 Jan 15

2. All portions of the Periodic Compliance Report form must be completed or the report may not be accepted.

3. The report shall indicate the nature and concentration of all pollutants in the effluent for which sampling and analyses were performed including measured or estimated maximum and average daily flows. The report shall be based upon data obtained through appropriate sampling and analyses performed which represents the conditions occurring during the period covered by the report.

4. Copies of all laboratory results shall be submitted with each report.

5. LA Sanitation will not accept reports where monitoring was conducted outside the monitoring period specified in this permit.

B. Self-Monitoring Report Submittal

All self-monitoring reports required by this permit shall be submitted to the Director at the following address:

City of Los Angeles
LA Sanitation
Industrial Waste Management Division
2714 Media Center Drive
Los Angeles, CA 90065

C. Additional Monitoring

If the industrial user monitors any pollutant more frequently than required by this permit, using test procedures prescribed in 40 CFR 136 or amendments thereto or otherwise approved by EPA or specified in this permit, the results of such monitoring shall be reported in the compliance report and submitted to the Director.

D. Automatic Resampling

If the results of the industrial user's wastewater analysis indicate a violation has occurred, the industrial user must comply with the following:

1. Inform the Director of the violation within 24 hours by contacting the LA Sanitation Industrial Waste Management Division SIU Inspection Group at (323) 342-6200; and

2. Repeat the sampling and pollutant analysis and submit, in writing, the results of this second analysis within 30 days after becoming aware of the violation.

E. Pre-notification of Monitoring and Sampling

The industrial user shall notify the SIU Inspection Group by telephone at (323) 342-6200 at least 48 hours in advance of any monitoring or sampling to be performed. Notification shall include the date, time and location of proposed monitoring or sampling. Monitoring and sampling shall be carried out during a period of normal operations. Prior to the commencement of any sampling or monitoring, the Director may request that the industrial user furnish to the Director a split sample and all supporting data (i.e., methodology, flow measuring data, strip chart recordings and other pertinent information). The Director reserves the right to refuse any data developed from the monitoring or sampling activity if the industrial user fails to comply with the pre-notification procedure or other requirements of sampling and analysis.

PART 5 – SPECIAL CONDITIONS

A. FLOW METER MAINTENANCE AND CALIBRATION

To ensure proper operation and continued accuracy of the industrial wastewater flow monitoring system, Arcadia Water Treatment Plant shall clean, maintain, and calibrate the flow monitoring system periodically in accordance with the manufacturer's requirements. If there are no stated requirements, the flow meter shall be calibrated annually at a minimum. A maintenance record shall be available at all times for LA Sanitation review.

B. SUBMITTAL OF WATER FLOW METER READING DATA

Arcadia Water Treatment Plant is required to submit flow meter reading data by the 10th day of each month following the previous month of discharge. The flow meter reading data shall be summarized in a letter on the Arcadia Water Treatment Plant's letter head signed by the Water Resources Manager or Plant Manager/ Supervisor with the following certification language:

"I certify that the usage readings provided are correct, and unless otherwise mentioned in the data sheets attached, the wastewater gauging and metering facilities were installed and operated per manufacturer's recommendations."

The letter shall indicate the following information:

i.) Applicant/Company;
ii.) Service Address;
iii.) Mailing Address;
iv.) Initial Meter Reading Data at the beginning of the month;
v.) Final Meter Reading Data at the end of the month;
vi.) Total volume of discharge in hundred cubic feet (HCF); and
vii.) Department of Water and Power Account Number.

Arcadia Water Treatment Plant is to E-mail the letter as a PDF file or as a Doc. File to:

Candelario.Eguia@lacity.org, and copy to Dolores.Duke@ladwp.com and Lonnie.Ayres@lacity.org

and send a hardcopy of the letter to:

The City of Los Angeles
Department of Water and Power
111 North Hope Street, Room L63
Los Angeles, CA 90012.
Attention: Ms. Dolores Duke, Customer Service Representative V

PART 6 – STANDARD CONDITIONS

A. Prohibitions

1. General Prohibitive Standards

The Industrial User shall comply with all the general prohibitive discharge standards in the General Pretreatment Regulations, 40 CFR 403, and the L.A.M.C. Section 64.30. Except as expressly allowed in an Industrial Wastewater Permit, no Industrial User shall introduce or cause to be introduced into the POTW any of the following:

a) Gasoline, mercury, total identifiable chlorinated hydrocarbons, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, ketones, aldehydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides, solvents, pesticides or jet fuel;

b) Liquids, solids or gases which by reason of their nature or quantity are flammable, reactive, explosive, corrosive, or radioactive, or by interaction with other materials could result in fire, explosion or injury. Pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, wastewater with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40CFR261;

c) Solid or viscous materials which could cause obstruction to the flow or operation of the POTW;

d) Toxic pollutants in sufficient quantity to injure or interfere with any wastewater treatment process, including private pretreatment systems, to constitute a hazard or cause injury to human, animal, plant or fish life, or to exceed any limitation set forth in this Permit;

e) Noxious or malodorous liquids, gases, or solids in sufficient quantity either singly or by interaction with other materials to create a public nuisance, hazard to life, or to prevent entry of any person to the POTW;

f) Pollutants which result in the presence of toxic gases, vapors or fumes within the POTW in a quantity that may cause acute worker health and safety problems;

g) Material of sufficient quantity to interfere with any POTW treatment plant process or to render any product thereof unsuitable for reclamation and reuse;

h) Material in sufficient quantity to cause the POTW to be in noncompliance with biosolids use or disposal criteria, guidelines or regulations in conjunction with Section 405 of the Act, the Solid Waste Disposal Act (SWDA), the Clean Air Act, the Toxic Substances Control Act, the Marine Protection Research and Sanctuaries Act, or State criteria (including those contained in any state sludge management plan prepared pursuant to Title II of SWDA) applicable to the biosolids management method being used;

i) Material which will cause the POTW to violate its NPDES Permit, applicable Federal and State statutes, rules or regulations;

j) Wastewater containing pigment which is not removed in the ordinary POTW treatment process and which creates a visual contrast with the material appearance of the POTW discharge observable at the point of POTW discharge;

k) Wastewater having a heat content in such quantities that the temperature of the wastewater at the introduction into the POTW Collection system exceeds 140 degrees Fahrenheit, or at the introduction into the POTW treatment plant exceeds 104 degrees Fahrenheit;

l) Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;

m) Pollutants, including oxygen demanding pollutants, released at a flow rate or pollutant concentration which will cause or contribute to interference;

n) Storm water collected and discharged to the POTW;

o) Single pass cooling water in excess of 200 gallons per day discharged to the POTW;

p) Wastewater which constitutes a hazard or causes injury to human; animal, plant or fish life or creates a public nuisance;

q) Recognizable portions of the human or animal anatomy;

r) Floatable material which is readily removable;

s) Radioactive wastes or isotopes;

t) Grinder food wastes from commercial kitchens, markets, or food plants;

u) Trucked or hauled pollutants, except at discharge points designated by the City;

v) Human or animal blood suspected or known to contain bloodborne pathogen(s);

w) Pharmaceutical wastes;

x) Medical wastes; or

y) Sharps.

B. Permit Provisions

1. Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

2. Duty to Comply

The Industrial User must comply with the provisions of L.A.M.C. 64.30 and all conditions of this permit. Failure to comply with the requirements of this permit may be grounds for administrative action or enforcement proceedings, including civil or criminal penalties, injunctive relief and summary abatements.

3. Duty to Mitigate

The Industrial User shall take all reasonable steps to minimize or correct any adverse impact to the public treatment plant or the environment resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

4. Modification or Revision of the Permit

This permit may be modified, revoked and reissued or terminated for good causes including, but not limited to, the following:

a) The incorporation of any new or revised Federal, State or Local pretreatment standards or requirements;

b) Material or significant alterations or additions to the Industrial User's operational processes or discharge volume or character which were not covered in the effective permit;

c) A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge;

d) Information indicating that the permitted discharge poses a threat to the City of Los Angeles' collection and treatment systems, POTW personnel or the receiving waters;

e) A violation of any terms or conditions of this permit;

f) Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;

g) A revision of or a grant of variance from such categorical standards pursuant to 40 CFR 403.13.

h) A request of the Industrial User, provided such request does not create a violation of any existing applicable requirements, standards, laws or rules and regulations; or

i) A correction of typographical or other errors in the permit.

5. Property Rights

The issuance of this permit does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor does it authorize any violation of Federal, State or Local laws or regulations.

6. Limitation of Permit Transfer

An Industrial Wastewater Permit shall not be transferable by operation of law or otherwise, either from one location to another or from one person to another. Statutory mergers or name changes shall not constitute a transfer or a change in ownership.

7. Duty to Reapply

To continue an activity regulated by this permit after the expiration date, the Industrial User must file an application for permit renewal at least 90 days before the expiration date of this permit.

8. Dilution

The Industrial User shall not increase the use of potable or process water or, in any way, attempt to dilute an effluent as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit.

9. Compliance with Applicable Pretreatment Standards and Requirements

The Industrial User shall comply at all times with any and all applicable Local, State and Federal pretreatment standards and requirements including Best Management Practices and any such standards or requirements that may become effective during the term of this permit. In addition, the Industrial User may be required to prepare a pollution prevention plan.

10. Confidentiality

a) Any information, except for discharge and effluent data, submitted to the City pursuant to this Permit may be claimed by the Industrial User to be confidential. Any such claim must be asserted at the time of submission of the information or data to the City. The claim may be asserted by stamping the words "Confidential Business Information" on each page containing such information or by other means; however, if no claim is asserted at the time of submission, the City may make the information available to the public without further notice. If such a claim is asserted, the information will be treated in accordance with the procedures set forth in 40 CFR Part 2 (Public Information).

b) Information and data provided to the City which is effluent data shall be available to the public without restriction.

C. Operation and Maintenance of Pollution Controls

1. Proper Operation and Maintenance

The Industrial User shall at all times properly operate and maintain all facilities and systems for treatment and control (and related appurtenances) which are installed or used by the Industrial User to achieve compliance with the conditions of this permit. Proper operation and maintenance includes but is not limited to effective performance, adequate funding, adequate operator staffing and training and adequate laboratory and process controls including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

2. Duty to Halt or Reduce Activity

Upon reduction of efficiency of operation or loss or failure of all or part of the pretreatment facility, the Industrial User shall, to the extent necessary to maintain compliance with its permit, control its production or discharge (or both) until operation of the pretreatment facility is restored or an alternative method of pretreatment is provided. This requirement applies, for example, when the primary source of power of the pretreatment facility fails or is reduced. It shall not be a defense for an Industrial User in an enforcement action to state that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Removed Substances

Solids, sludge, filter backwash or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in accordance with section 405 of the Clean Water Act and Subtitles C and D of the Resource Conservation and Recovery Act.

4. Bypass of Treatment Facilities

a) Bypass is prohibited unless it is unavoidable to prevent loss of life, personal injury or severe property damage or no feasible alternatives exist.

b) The Industrial User may allow bypass to occur which does not cause effluent limitations to be exceeded, but only if it is also for essential maintenance to assure efficient operation.

c) Notification of bypass:

(1) Anticipated bypass. If the Industrial User knows in advance of the need for a bypass, written notice shall be submitted to the Director at least ten days prior to the anticipated date of bypass.

(2) Unanticipated bypass. The Industrial User shall provide oral notice of an unanticipated bypass that exceeds applicable Pretreatment Standards to the Director at (323) 342-6200 within 24 hours from the time the Industrial User becomes aware of the bypass. A written notice shall also be provided within 5 days of the time the Industrial User becomes aware of the bypass. The written notice shall contain the following:

(i) A description of the bypass including its cause and duration;

(ii) Whether the bypass has been corrected; and

(iii) The steps taken or to be taken to reduce, eliminate and prevent reoccurrence of bypassing.

D. Monitoring and Records

1. Flow Measurements

If flow measurement is required by this permit, the appropriate flow measurement devices and methods consistent with approved scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharge. The devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurements are consistent with the

accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 5 percent from true discharge rates throughout the range of expected discharge volumes.

2. Inspection and Entry

The Industrial User shall allow the Director or an authorized representative, upon the presentation of credentials and other documents, entry to and inspection of the premises. The applicant, by accepting any permit issued pursuant to L.A.M.C. Section 64.30, does hereby consent and agree to the entry upon the premises, described in the permit, by Department personnel for the following purposes as required by this permit or L.A.M.C Section 64.30 or other applicable laws. The City shall be afforded access at all reasonable times:

a) for the purposes of inspection, sampling, flow measurement, examination of records in the performance of other authorized duties;

b) to set up on the Industrial User's property such devices as are necessary to conduct sampling inspections, compliance monitoring, flow measuring or metering operations;

c) to inspect and copy any records, reports, test results or other information required to carry out the provisions of L.A.M.C. Section 64.30, the industrial wastewater permit, or other applicable laws; and

d) to photograph any waste, waste container, vehicle, waste treatment process, discharge location, or violation discovered during an inspection.

The applicant, by accepting any permit issued, does hereby consent and agree to entry upon the premises as described herein. Any person violating this authority shall be guilty of a misdemeanor.

3. Retention of Records

a) The Industrial User shall retain records of all monitoring information, including documentation associated with Best Management Practices and all calibration and maintenance records, all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report or application. This period may be extended by request of the City of Los Angeles at any time.

b) All records that pertain to matters that are the subject of special orders or any other enforcement or litigation activities brought by the City of Los Angeles shall be retained and preserved by the Industrial User until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired.

4. Record Contents

Records of sampling and analyses shall include the following:

a) the date, exact place, time and methods of sampling or measurement, and sample preservation techniques or procedures;

b) Who performed the sampling or measurements;

c) The date(s) analyses were performed;

d) Who performed the analyses;

e) The analytical techniques or methods used; and

f) The results of such analyses.

5. Falsifying Information

No person shall knowingly make any false statement, representation or certification in any application, record, report, plan or other document filed with the City of Los Angeles. In addition, no person shall tamper with or knowingly render inaccurate any monitoring device required under this permit.

The reports and other documents required to be submitted or maintained under this Industrial Wastewater Permit shall be subject to:

a) The provisions of 18 U.S.C. Section 1001 relating to fraud and false statements;

b) The provisions of Section 309 (c) (4) of the Clean Water Act (CWA), as amended, governing false statements, representation or certification; and

c) The provisions of Section 309 (c) (6) of the Clean Water Act (CWA), as amended, regarding responsible corporate officers.

E. Additional Reporting Requirements

1. Notification of Planned Changes

The Industrial User shall immediately notify the Director in advance of any significant change to the Industrial User's operations or system which might alter the nature, quality, or volume of its wastewater including the listed or characteristic hazardous wastes for which the Industrial User had submitted initial notification under 40 CFR 403.12(p). The Director may require that a new Industrial Wastewater Permit application be filed and a new permit obtained before any planned changes take place.

2. Duty to Provide Information

The Industrial User shall furnish to the Director any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing or terminating this permit. The Industrial User shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

3. Notification of a Slug or Potential Slug Discharge

The Industrial User shall notify the Director immediately upon the occurrence of a slug discharge or any changes at its facility affecting the potential for a slug discharge of substance(s) prohibited by L.A.M.C. Section 64.30 that may enter the public sewer. The Director shall be notified by telephone at (323) 342-6200. The notification of a slug discharge shall include location of discharge, date and time thereof, type of waste, including concentration and volume, and corrective action taken. The Industrial User's notification of accidental cases in accordance with this permit does not relieve it of other reporting requirements that arise under Local, State or Federal laws.

Within five (5) days following an accidental discharge, the Industrial User shall submit to the Director a detailed written report. The report shall contain the following:

a) A description and cause of the slug or accidental discharge, the cause(s) thereof and the impact on the Industrial User's compliance status. The description should also include the location of discharge and the type, concentration and volume of waste.

b) The duration of noncompliance, including exact dates and times of noncompliance, and if the noncompliance continues, the time by which compliance is reasonably expected to occur.

c) All steps taken or to be taken to reduce, eliminate and prevent recurrence of such a slug discharge, accidental discharge or any other conditions of noncompliance.

4. Operating Upsets

Any Industrial User that experiences an upset in operations that places the Industrial User in a temporary state of noncompliance with the provisions of either this permit or with L.A.M.C. Section 64.30 shall notify the Director within 24 hours of becoming aware of the upset at (323) 342-6200. The notification shall include the location of discharge, type of material, concentration and volume, and corrective actions taken.

A written follow-up report of the upset shall be filed by the Industrial User with the Director within five (5) days. The report shall contain the following information:

a) A description of the upset, the cause(s) thereof and the upset's impact on the Industrial User's compliance status;

b) The duration of noncompliance, including exact dates and times of noncompliance, and if the noncompliance continues, the time by which compliance is reasonably expected to occur; and

c) All steps taken or to be taken to reduce, eliminate and prevent recurrence of such an upset or other conditions of noncompliance.

The report must also demonstrate that the treatment facility was being operated in a prudent and workmanlike manner.

A documented and verified operating upset shall be an affirmative defense to any enforcement action brought against the Industrial User for violations attributable to the upset event.

5. Slug Discharge Control Plan

Upon request by the LA Sanitation, the Industrial User is required to submit a Slug Discharge Control Plan to address how the Industrial User will respond to spills, bypass, and any accidental discharges that could violate any permit limits or conditions or impact the City sewer system. The plan shall contain detailed procedures to be followed by the Industrial User in the event a slug discharge occurs. The Slug Discharge Control Plan must contain, at a minimum, the following:

a) Description of sewer discharge practices, including non-routine batch discharges;

b) Description of stored chemicals including type and characteristic, volume, and chemical hazard classification;

c) Procedures for promptly notifying the City of slug discharges, including any discharges that would violate a prohibition under 40 CFR 403.5(b), with procedures for follow-up written notification within five days;

d) Any necessary procedures to prevent adverse impact from accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operation, control of plant site run-off and worker training;

e) Any necessary measures for building any containment structures or equipment;

f) Any necessary measures for controlling toxic organics (including solvents); and/or

g) Measures and equipment for emergency response.

6. Notification of Hazardous Waste Discharged into POTW

An Industrial User not exempt from the requirements under 40 CFR 403.12(p) shall notify the City of Los Angeles, LA Sanitation; the EPA Region 9, Hazardous Waste Management Division; and the California Environmental Protection Agency, Department of Toxic Substances Control in writing of any discharge into the City of Los Angeles sewer system of a substance, which, if otherwise disposed of, would be a hazardous waste under 40 CFR part 261. The written notification shall be submitted to the City of Los Angeles LA Sanitation, the EPA Region 9 and the California Environmental Protection Agency.

7. Signatory Requirements

All applications, reports or information submitted by the Industrial User to the Director must contain the following certification statement and be signed by an authorized representative indicated below:

"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 assure 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 persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

An authorized representative shall mean the following:

(a) a president, secretary, treasurer, or vice-president in charge of a principal business function, or any other person who performs similar policy or decision-making functions, if the Industrial User is a corporation;
(b) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to (1) make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiate and direct other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; (2) ensure that the necessary systems are established or actions taken to gather complete and accurate information for control mechanism requirements; and (3) sign documents in accordance with corporate procedures;
(c) a general partner or proprietor if the Industrial User is a partnership or proprietorship, respectively;
(d) a principal executive officer or director having responsibility for the overall operation of the discharging facility or a ranking elected official if the Industrial User is a governmental entity, charitable organization or other such unincorporated entity; or
(e) a representative authorized in writing by any individual designated above, if the authorization is submitted to the Director and specifies an individual or a position having responsibility for the overall operation of the facility. This includes the position of plant manager, a position of equivalent responsibility, or an individual having overall responsibility for environmental matters for the company. If an authorization under Paragraph (e) is no longer accurate because a different individual or position has the responsibility for the overall operation of the facility, or overall responsibility for environmental matters of the company, a new authorization satisfying the requirements of Paragraph (e) of this Permit must be submitted to the Director prior to, or together with, any reports to be signed by an authorized representative.

8. Annual Publication

A list of all industries which were in significant noncompliance of applicable federal pretreatment standards, Best Management Practices or other pretreatment requirements during the twelve (12) previous months shall be annually published by the Director in a newspaper(s) of general circulation that provides meaningful public notice within the jurisdiction(s) served by the POTW. Accordingly, the Industrial User is apprised that noncompliance with this permit may lead to an enforcement action and may result in publication of its name in an appropriate newspaper. For purposes of this provision, significant noncompliance is defined under 40 CFR 403.8 (f)(2)(viii) and L.A.M.C. Section 64.30.E.8.

9. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the Industrial User from civil and/or criminal penalties for noncompliance under L.A.M.C. Section 64.30 or State or Federal laws and regulations.

10. Penalties for Violations of Permit Conditions

The L.A.M.C. Section 64.30 provides that any person who violates a permit condition is subject to a civil penalty in the maximum sum provided by law for each day in which such violation occurs. Any person who willfully or negligently violates permit conditions is subject to criminal penalties of up to $1000.00 per violation per day and/or by imprisonment in the County Jail for a period of

not more than six (6) months. The Industrial User may also be subject to sanctions under State and/or Federal law.

11. Liability For Costs Incurred From Unlawful Discharge

Whenever any Industrial User introduces or causes to be introduced wastewater in violation of this permit or the L.A.M.C. and such discharge, either singly or by interaction with other discharges, results in damage to or is otherwise detrimental to or adversely affects the P.O.T.W., the storm drain system, or any Waters of the State, said Industrial User shall be liable to the City for reasonable costs necessary to correct that discharge, detriment or adverse effect, including, but not limited to labor, material, inspection, transportation, overhead, and incidental expenses associated with the corrective action. The Industrial User shall additionally be liable to the City for the reasonable costs of investigation by the City arising from the unlawful discharge.

12. Civil Liability

Violation of any pretreatment standards or requirements or any term or condition or applicable compliance schedule of this permit, the Industrial User shall be civilly liable to the City in a sum of not to exceed twenty-five thousand dollars ($25,000) a day for each violation.

13. Resource Conservation Recovery Act Notification and California Hazardous Waste Control Law

It is the responsibility of the Industrial User to ensure that the operations performed at their site comply with federal hazardous waste management regulations under subtitles C & D of the Resource Conservation and Recovery Act (RCRA) and California hazardous waste management regulations under the Hazardous Waste Control Law (Chap. 6.5, HSC, Sec. 25100 et. seq.) and California Code of Regulations (CCR), Titles 8 and 22. For information on federal and state hazardous waste regulations, contact the California Environmental Protection Agency, Department of Toxic Substances Control.

F. Definitions

1. Best Management Practices (BMP) - Activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce pollutants in discharges. BMP also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage.

2. Bi-Monthly - Once every other month.

3. Bypass - The intentional diversion of wastestreams from any portion of an Industrial User's treatment facility.

4. Categorical Pretreatment Standards - Limitations on pollutant discharges to POTWs, promulgated by EPA in accordance with Section 307 of the Clean Water Act, that apply to specified process wastewaters of particular industrial categories.

5. Commercial Establishment – A private establishment such as a restaurant, hotel, laundry, store, filling station, or recreational facility. A nonprofit private or government entity such as a church, school, hospital, military facility, correctional institution recreational facility or a facility owned or operated by a charitable organization is considered a commercial establishment.

6. Commingled Load – A load of septage which includes septage generated both within and outside the City's boundaries.

7. Composite Sample - A sample that is collected over time, formed either by continuous sampling or by mixing discrete samples. The sample may be composited either as a flow proportional composite sample (collected either as a constant sample volume at time intervals proportional to stream flow or collected by increasing the volume of each aliquot as the flow increases while maintaining a constant time interval between the aliquot) or as a time composite sample (composed of discrete sample aliquot

collected in one container at constant time intervals providing representative samples irrespective of stream flow).

8. Cooling Water

   a) Uncontaminated - Water used only for cooling purposes which has no direct contact with any raw material, intermediate or final product and which does not contain a level of contaminants detectably higher than that of the intake water.

   b) Contaminated - Water used only for cooling purposes which may become contaminated either through the use of water treatment chemicals used for corrosion inhibitors or biocides or by direct contact with process materials and/or wastewater.

9. Daily Maximum - The maximum allowable discharge of a pollutant during a calendar day. Where daily maximum limitations are expressed in units of mass, the daily discharge is the total mass discharged over the course of the day. Where daily maximum limitations are expressed in terms of a concentration, the daily discharge is the arithmetic average measurement of the pollutant concentration derived from all measurements taken that day.

10. Director - The Director of the LA Sanitation of the Department of Public Works of the City of Los Angeles or the duly authorized representative thereof.

11. Domestic Septage – The liquid or solid material removed from a private sewage disposal system (PSDS), portable toilet or other holding device that receives only domestic sewage.

12. Domestic Wastewater (Domestic Sewage) – Sanitary wastewater and wastewater generated from household type operations.

13. Establishment - An economic unit, generally at a single physical location, where business is conducted or where services or industrial operations are performed.

14. Facility - All buildings, equipment, structures, and other stationary items which are located on a single site or on contiguous or adjacent sites and which are owned or operated by the same person (or by any person which controls, is controlled by, or under common control with such person) and is authorized by the City of Los Angeles to discharge industrial wastewater to the POTW. A facility may contain more than one establishment.

15. Food Service Establishment - A facility engaged in preparing food for consumption by the public such as, but not limited to, a restaurant, bakery, commercial kitchen, caterer, hotel, school, hospital, prison, correctional facility, or care institution.

16. Four (4) - Day Average – The average of daily values for four consecutive monitoring days.

17. Grab Sample - An individual sample collected in less than 15 minutes, without regard for flow.

18. Gravity Grease Interceptor (GGI) - An approved device with a minimum total volume of 300 gallons that is specifically designed to separate, trap, and hold nonpetroleum fats, oil, and grease (FOG) from an industrial wastewater discharge, and which shall be remotely located from where food is handled, and is identified by the following: volume, a minimum retention time of 30 minutes, baffle(s), a minimum of two compartments, and gravity separation.

19. Hydromechanical Grease Interceptor (HGI) - An approved device that is installed in an industrial wastewater drainage system to separate, trap, and hold nonpetroleum fats, oil, and grease (FOG) from a wastewater discharge and is identified by flow rate, retention time, and separation efficiency. HGI design incorporates, in combination or separately, air entrainment, hydromechanical separation, interior baffling, and internal barriers.

20. Industrial User – A person that has been authorized to discharge industrial wastewater into the City of Los Angeles POTW.

21. Industrial Wastewater - Liquid and any water - carried waste other than domestic sewage. Wastewater generated from household type operations, including, but not limited to dishwashing, laundry, and car washing, performed at commercial establishments for or to support commercial purposes is considered industrial wastewater.

22. Instantaneous Maximum - The allowable maximum concentration determined from the analysis of any discrete or composited sample collected, independent of the industrial flow rate and the duration of the sampling event.

23. Interference - A discharge which alone or in conjunction with a discharge or discharges from other sources both:

    a) Inhibits or disrupts the POTW, its treatment processes or operations or its sludge processes, use or disposal; and

    b) Causes a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or prevents the use of disposal of sewage sludge. The following statutory provisions and regulations or permits issued thereunder apply (or more stringent State or Local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA) and including State regulations contained in any State sludge management plan prepared pursuant to Subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act and the Marine Protection, Research and Sanctuaries Act.

24. Monthly Average - The maximum allowable value for the average of all observations obtained during one calendar month. Compliance with the monthly average discharge limit is required regardless of the number of samples analyzed and averaged. Therefore, if only one sample is taken during the calendar month, results of the one analysis will be used to determine compliance with the monthly average.

25. Non-Domestic Septage – The liquid or solid material removed from a private sewage disposal system (PSDS) or other sanitation holding device that receives industrial wastewater or a combination of domestic and industrial wastewater.

26. Pass Through - A discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, cause a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).

27. Person - Any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity or any other legal entity, or their legal representatives, agents or assigns. The masculine gender shall include the feminine, the singular shall include the plural where indicated by the context.

28. Portable Toilet – Any portable or permanently installed sanitation apparatus or system which includes a tank for toilet waste retention. Portable Toilet includes sanitation holding devices from airplanes, trains, boats with type III marine sanitation devices, buses, movie dressing room trailers, recreational vehicles, or other similar transport vehicles.

29. Private Septage Disposal Facility (PSDF) – A disposal site, other than a City designated discharge location, with a direct connection to the City sewer, which accommodates the discharge of hauled septage.

30. Publicly Owned Treatment Works (POTW) - A treatment works as defined by Section 212 of the Clean Water Act which is owned by the State or municipality. This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial

wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW treatment plant.

31. Resource Conservation and Recovery Act (RCRA) - A Federal statute regulating the management of hazardous waste from its generation through ultimate disposal. The Act contains requirements for waste generators, transporters and owners and operators of treatment, storage and disposal facilities.

32. Sanitary Wastewater – Wastewater of human origin derived from toilets, urinals, showers, baths and restroom sinks.

33. Septage – The liquid or solid material removed from a private sewage disposal system (PSDS), portable toilet or other sanitation holding device that receives wastewater.

34. Septage Hauler – A person or an owner/operator of a business that holds Septage Disposal Permit(s) issued by the Director to discharge septage to the City's P.O.T.W.

35. Slug Discharge - Any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge, which has a reasonable potential to cause Interference or Pass Through, or in any other way violate the POTW's regulations, local limits or permit conditions.

36. Total Toxic Organics (TTO) - The sum of the masses or concentrations greater than 0.01 mg/l of the specific toxic organic compounds regulated by specific categorical pretreatment regulations which is found in the discharge at specific quantifiable concentrations.

37. Type III Marine Sanitation Device – A device that is designed to prevent the overboard discharge of treated or untreated domestic sewage.

38. Upset - An exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Industrial User, excluding such factors as operational error, improperly designed or inadequate treatment facilities or improper operation and maintenance or lack thereof.

39. Wastewater - Liquid and water - carried industrial and/or domestic wastes and sewage from facilities including, but not limited to, dwellings, commercial buildings, industrial facilities, agricultural activities, hospitals, medical facilities and other institutions, together with other wastes which may be present, whether treated or untreated, which enter the POTW.

APPENDIX A
FACT SHEET

FACT SHEET
Renewal Date: 9/1/2018

A. INDUSTRIAL USER INFORMATION

City of Santa Monica
Dba: Arcadia Water Treatment Plant
1228 S. Bundy Drive
Los Angeles, CA 90025

IU002138
W-521696

Geo Herrera, Water Production and Treatment Administrator
310-434-2659

B. DESCRIPTION OF FACILITY OPERATIONS

The City of Santa Monica Arcadia Water Treatment Plant (AWTP) is primarily engaged in treating raw water from three City groundwater well fields, Arcadia, Charnock, and Olympic, to provide 8½ million gallons of drinking water each day to its 89,000 city residents (SIC 4941).

AWTP utilizes six (6) pressure filter vessels and four (4) reverse osmosis treatment units (three in operation and one standby).

AWTP has the capacity to process 10 million gallons of groundwater and produce approximately 8.5 million gallons of potable water while generating about 1.5 million gallons of reject brine per day. The brine is discharge into the city of Santa Monica's sewer system.

AWTP operates seven days per week, 24 hours per day.

C. SAMPLE POINT DESCRIPTION/FACILITY FLOW INFORMATION

INDUSTRIAL WASTEWATER PERMIT	SAMPLE POINT	FLOW PER OPERATIONAL DAY (GPD)		DESCRIPTION
		TOTAL	PROCESS	
W-521696	**01**	**44,317**	**44,317**	**Sample Point at Sewer Maintenance Hole Located at the North side of the Facility**
TOTAL		**44,317**	**44,317**	**----**

D. PROCESS UNIT OPERATION/FLOW INFORMATION

Wastewater is generated from an online analyzer in the amount of 1,000 gpd, pressure filters backwash at a maximum amount of 20,000 gpd, and CIP cleaning of the RO units using citric acid and sodium hydroxide for a maximum amount of 100,000 gpd.

The total average daily process wastewater generated and discharged into the City of Los Angeles sewer is approximately 44,317 gallons per operational day.

PERMIT NUMBER	SAMPLE POINT	PROCESS UNIT OPERATION CODE	PROCESS DESCRIPTION
W-521696	01	GWPB000	Groundwater Remediation

E. DILUTION/AUXILIARY OPERATION/FLOW INFORMATION

The Arcadia Water Treatment Plant does not generate any dilution wastestreams.

F. FLOW MEASURING DEVICE

Multiple flow meters are installed to measure the total bachwash flow prior to discharging to the 15" sewer main line in the alley. One flow meter is installed on the neutralization tank drain line, and another one on the packaged plate settler discharge line. The flows are totalized by an automated Scada control system.

A flow meter is installed on each of the four RO concentrate effluent pipes in the RO Building.

G. PRETREATMENT UNIT OPERATIONS

Equipment at AWTP consists of raw water inlet vault, pressure filters, RO units, backwash holding tank, contact tank, wash water equalization, wash water Package Treatment Unit (PTU), Clean In Place (CIP) system, RO feed tanks and pumps, and cartridge filters.

Each pressure filter vessel consists of two independently operating cells which contain anthracite over greensand media to remove iron and manganese. Iron is primarily removed through oxidation and filtration, while manganese is removed through adsorption onto the filter media in the presence of an oxidant (i.e., free chlorine). The filters and their associated valves and piping are positioned on a slab over the contact tank, backwash holding tank, and RO feed tank.

Backwashing of the pressure filters is performed to remove the waste solids (which are primarily oxidized iron and manganese) from the greensand filters. The backwash is carried out using water that has previously passed through the filters and is stored in the backwash holding tank. The backwash holding tank is located adjacent to the contact tank, underneath the pressure filters. The spent (or dirty) backwash water from the pressure filters flows by gravity to a washwater equalization tank located adjacent to the filter complex. Solids are kept in suspension within the tank using submersible propeller-type mixers. From the equalization tank, the back wash water is pumped to the PTU.

The PTU includes a flocculation and sedimentation basins equipped with inclined plate settlers. The clarified effluent from the PTU flows by gravity to the raw water inlet vault. The wastewater generated from the sedimentation basin is intermittently drained and discharged to the City's sewer.

The feed water to the RO units is treated with anti-scalant, sodium bisulfate (to dechlorinate) and sulfuric acid. The RO units generate a reject concentrate brine flow. The brine flow is discharged to the City of Santa Monica's sewer system.

Approximately, three times a week, the RO units are cleaned with citric acid and sodium hydroxide. The wastewater generated from the CIP system is discharged to the City of Los Angeles' sewer.

The wastewater generated from PTU plate settlers and CIP system merges at Sample Point 01 (sewer maintenance hole) and is discharged to the City of Los Angeles' sewer.

INDUSTRIAL WASTEWATER PERMIT W-521696

PRETREATMENT UNIT OPERATION CODE	PRETREATMENT UNIT OPERATION DESCRIPTION
CL0100	Clarification – Plate Settlers
CN0020	Chemical Oxidation – Organic Oxidation
DI0020	Reverse Osmosis
FE0010	Equalization
FI0010	Filtration – Granular Media
FO0010	Flocculation

H. DISCHARGE LIMITATIONS

See permit, PART 2 - DISCHARGE LIMITATIONS.

I. MONITORING REQUIREMENTS

See permit, PART 3 - MONITORING REQUIREMENTS.

J. REPORTING REQUIREMENTS

See permit, PART 4 - REPORTING REQUIREMENTS.

K. SPECIAL CONDITIONS

See permit, PART 5 - SPECIAL CONDITIONS.

L. STANDARD CONDITIONS

See permit, PART 6 - STANDARD CONDITIONS.

M. RATIONALE FOR EFFLUENT LIMITATIONS

The federal definition of Significant Industrial User applies to this facility because the wastewater discharge from this facility may have a reasonable potential for adversely affecting the City of Los Angeles POTW. As a result, Arcadia Water Treatment Plant's operation located at 1228 S Bundy Drive is categorized as a Non-Categorical Significant Industrial User and is required to comply with 40 CFR 403.12.

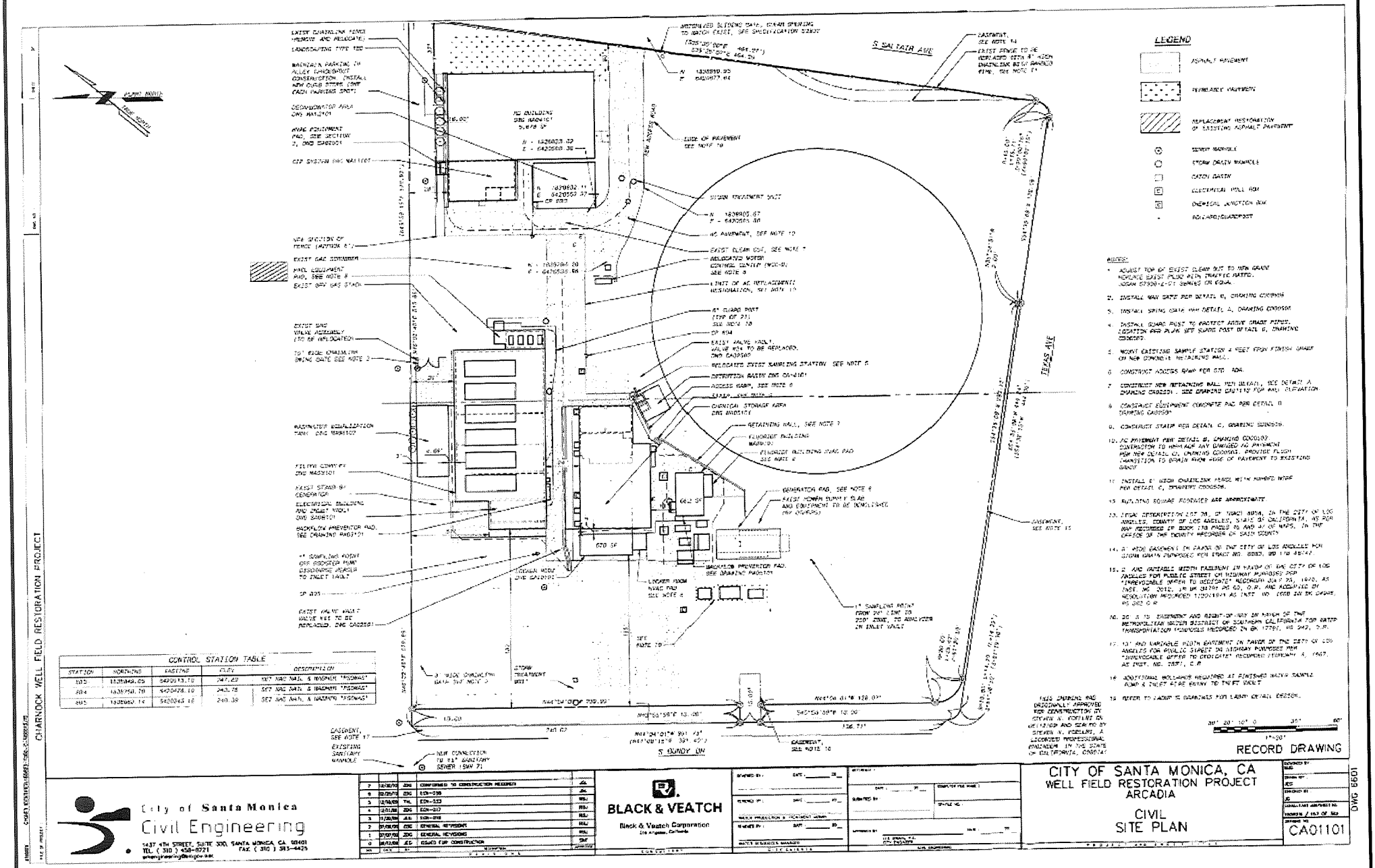
One set of limits will apply to the discharges from this facility to the sanitary sewer of the City of Los Angeles: the Local Limits. Therefore, Arcadia Water Treatment Plant is required to self-monitor for Local Limits

Prepared By: _____ Date: 8/28/2018

Reviewed By: _____ Date: 8/30/2018

IU002138.fst/td

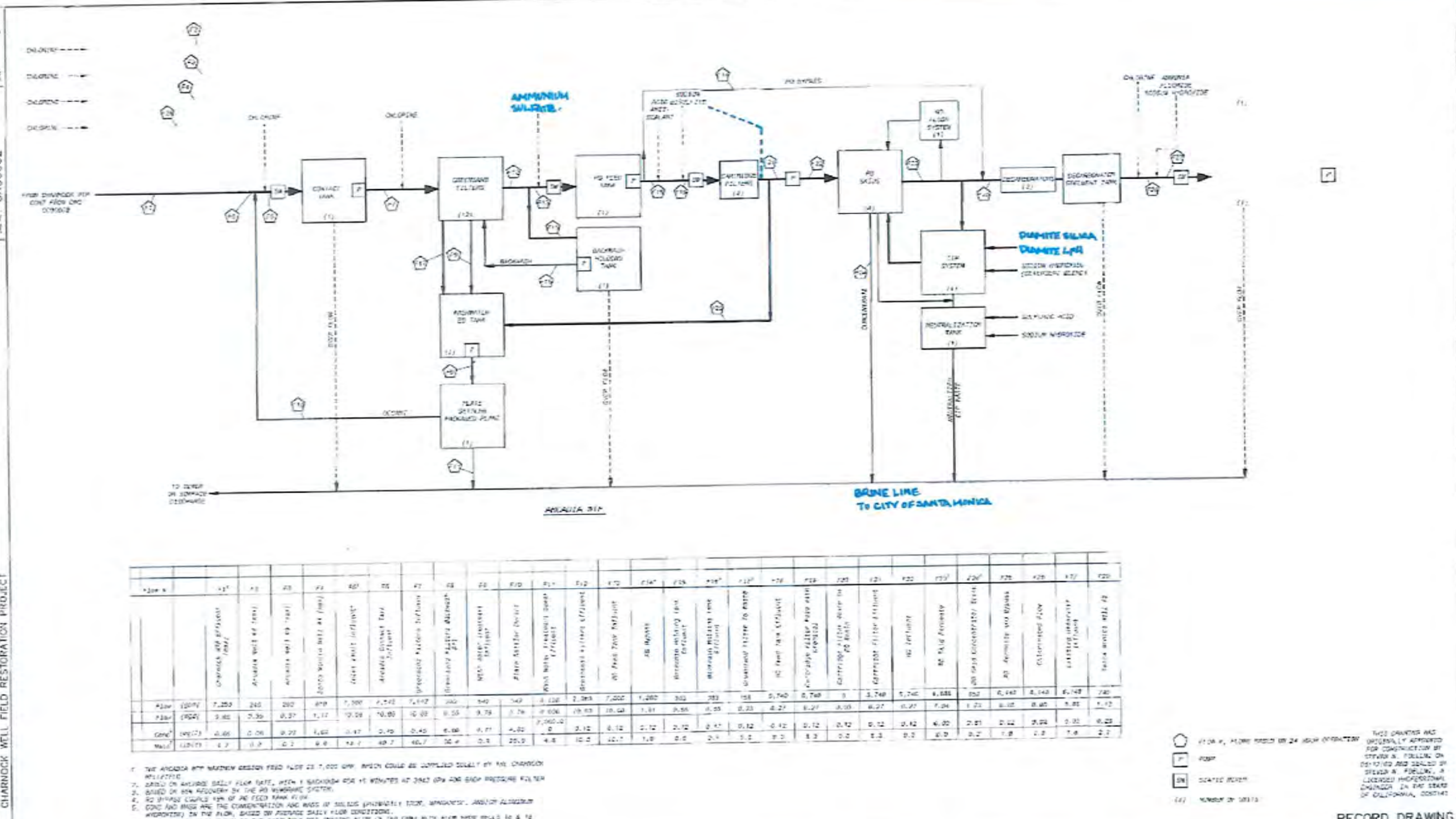
APPENDIX B
ATTACHMENT



Appendix B: Attachment 1 of 3	Page 1 of 1
DBA: Arcadia Water Treatment Plant	**IU** 002138
Permit(s) W- 521696	

CHARNOCK WELL FIELD RESTORATION PROJECT

GA00002



City of Santa Monica Civil Engineering	BLACK & VEATCH Black & Veatch Corporation	CITY OF SANTA MONICA, CA WELL FIELD RESTORATION PROJECT ARCADIA GENERAL PROCESS FLOW MASS BALANCE DIAGRAM
1437 4TH STREET, SUITE 300, SANTA MONICA, CA 90401		GA00002

DWG 6601

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FORM A

TANK SCHEDULE

Tank I.D. Number	Tank Name	Tank Volume (gallons)	Tank Contents (chemicals)	pH	Is the Tank Spill Contained (Y/N)	Tank Construction Material
1	SODIUM HYDROXIDE 1	7,730	SODIUM HYDROXIDE	10-11	Y	MILD STEEL
2	SODIUM HYDROXIDE 2	7,730	SODIUM HYDROXIDE	10-11	Y	MILD STEEL
3	SODIUM HYPOCHLORITE1	6,436	SODIUM HYPOCHLORITE	13	Y	FIBERGLASS RESIN
4	SODIUM HYPOCHLORITE2	6,436	SODIUM HYPOCHLORITE	13	Y	FIBERGLASS RESIN
5	SODIUM BISULFITE	6,436	SODIUM BISULFITE	1-2	Y	FIBERGLASS RESIN
6	SULFURIC ACID	4,449	SULFURIC ACID	2-3	Y	STAINLESS STEEL
7	AMMONIUM SULFATE 1	275	AMMONIUM SULFATE	3-5	Y	POLYCARBONATE
8	AMMONIUM SULFATE 2	275	AMMONIUM SULFATE	3-5	Y	POLYCARBONATE
9	ANTI-SCALANT 1	275	PRETREAT PLUS Y2K	≤ 2	Y	POLYCARBONATE
10	ANTI-SCALANT 2	275	PRETREAT PLUS Y2K	≤ 2	Y	POLYCARBONATE
11	NEUTRALIZATION TANK 1	4,800	DIAMITE SILICA OR LpH	SILICA 4.5-5.0 LpH 1.2-3.6	Y	FIBERGLASS RESIN
12	NEUTRALIZATION TANK 2	4,800	DIAMITE SILICA OR LpH	SILICA 4.5-5.0 LpH 1.2-3.6	Y	FIBERGLASS RESIN
13	NEUTRALIZATION TANK 3	4,800	DIAMITE SILICA OR LpH	SILICA 4.5-5.0 LpH 1.2-3.6	Y	FIBERGLASS RESIN
14	NEUTRALIZATION TANK 4	4,800	DIAMITE SILICA OR LpH	SILICA 4.5-5.0 LpH 1.2-3.6	Y	FIBERGLASS RESIN
15	DIAMITE LpH DRUMS	55x4	DIAMITE LpH	1.2-3.6		POLYCARBONATE
16	DIAMITE LpH DRUMS	55x4	DIAMITE LpH	1.2-3.6		POLYCARBONATE
17	AMMONIUM SULFATE 3	275	AMMONIUM SULFATE	3-5	Y	POLYCARBONATE
18	FLUORIDE SATURATOR 1	475	SODIUM FLUORIDE	7-10	Y	POLYCARBONATE
19	FLUORIDE SATURATOR 2	475	SODIUM FLUORIDE	7-10	Y	POLYCARBONATE
20	FLUORIDE SATURATOR 3	300	SODIUM FLUORIDE	7-10	Y	POLYCARBONATE

Appendix B: Attachment 3 of 3 Page 1 of 1

DBA: Arcadia Water Treatment Plant IU 002138

Permit(s) W- 521696

APPENDIX C

SELF-MONITORING REPORT FORM AND INSTRUCTIONS

SELF-MONITORING REPORT FORM INSTRUCTIONS

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SECTION I : **FLOW INFORMATION**

Report all flows in terms of Gallons Per Day (GPD) unless noted otherwise and check (✓) if the reported flow was (M) Measured, (E) Estimated, or (C)Calculated.

A. DAILY FLOWRATES

A.1 SAMPLE DAY FLOW - Enter the discharge flow *during the sampling period (the day/s the sample was collected).*

A.2 AVERAGE FLOW FOR THE MONITORING PERIOD - Enter the average daily discharge flow *throughout the monitoring period.* For example, if the report was submitted for the 1st Bi-Monthly monitoring period, the flow should be the average daily flow during the months of January thru February.

A.3 MAXIMUM FLOW FOR THE MONITORING PERIOD - Enter the maximum discharge flow *for a single day throughout the monitoring period.*

B. AUXILLARY FLOW ON DAY OF SAMPLING - Provide a breakdown of the sources of auxillary flows *during the sampling period.* Possible sources are: B.1) Boiler Blowdown; B.2) Non-Contact Cooling; B.3) Demineralizer\ Backwash; B.4) Cooling Tower Bleedoff; and, B.5) Others (specify).

C. BATCH DISCHARGER ONLY - Applies to industrial users that discharge wastewater on a batch basis.

C.1 NO. OF OPERATIONAL DAYS - Enter the number of days that manufacturing has been performed since last batch discharge.

C.2 NO. OF DAYS FOR ACCUMULATION - Enter the number of days the wastewater has been accumulated since last batch discharge.

C.3 DISCHARGE VOLUME - Enter the total volume of wastewater discharged per batch in gallons.

SECTION II : **SAMPLING INFORMATION**

A. SAMPLING DATES (COMPOSITE) - Enter the start date and end date for the duration of the composite sampling.
B. SAMPLING TIME (COMPOSITE) - Enter the start time and end time for the duration of the composite sampling.
C. SAMPLING DATE/TIME (GRAB) - Enter the date and time the grab sample was collected.
D. SPLIT SAMPLE (Y/N) - Enter "Y=Yes" if the sample collected is a City split sample. Enter "N=No" if not.
E. PRE-NOTIFICATION DATE - Enter the date the City was pre-notified prior to planned sampling.
F SAMPLED BY - Enter the name of the person who collected the sample.
G. LABORATORY NAME - Enter the name of the laboratory who performed the analysis.
H. LABORATORY CERT. NO. - Enter the State Certificate Number of the laboratory who performed the analysis.

SECTION III : **LABORATORY TEST RESULTS**

A. GRAB SAMPLE DATE/TIME - Enter the same information reported in Section II.C of instruction above.
B. COMPOSITE DATE/TIME - Enter the same information reported in Section II.A and II.B of instruction above.
C. SAMPLE TYPE - Check (✓) whether a composite sample or grab sample was used to analyze the analyte.
D. LABORATORY RESULTS - Enter the result (concentration) of the laboratory analysis and their corresponding units (e.g., mg/l, ppm). **The laboratory report must be submitted along with the self-monitoring report.**
E. VIOLATION - Check (✓) if any of the analytes exceeded the discharge limit. Refer to the discharge limits in Section IV of these instructions or the permit for the analyte of concern.
F. SIGNATURE OF AUTHORIZED REPRESENTATIVE, ETC... - Self Explanatory

SECTION IV : **FEDERAL AND LOCAL DISCHARGE LIMITS**

A list of the federal and local discharge limits are attached as a guide for the industrial user to determine discharge violations as noted in Section III.E of instruction above. These pages need not be submitted.

SECTION V : **CERTIFICATES/PRODUCTION DATA**

These forms apply to an industrial user (IU) required to submit any of the following: 1) Cyanide Certification, 2) Zero Discharge Certification, 3) TTO Certification, and, 4) Production Data.

A. FROM (date) TO (date) - Enter the inclusive dates (monitoring period) on the form.
B. SIGNATURE OF AUTHORIZED REPRESENTATIVE, ETC.. - Self Explanatory
C. FOR PRODUCTION BASED IU ONLY - Enter the production data *during the monitoring period* including product description, quantity, and unit.

CITY OF LOS ANGELES
BUREAU OF SANITATION

INDUSTRIAL WASTE MANAGEMENT DIVISION
PERIODIC COMPLIANCE REPORT

SEND REPORT TO:
CITY OF LOS ANGELES
INDUSTRIAL WASTE MANAGEMENT DIVISION
2714 MEDIA CENTER DR. LOS ANGELES, CA 90065

PERMIT W - 521696 | **IU- 002138** | **PH.# (310) 826-6712**

DBA: **ARCADIA WATER TREATMENT PLANT**

ADDRESS: **1228 S Bundy Drive Los Angeles, CA 90025**

SAMPLE POINT NO.: **01-001**

SAMPLE DESC.:**SAMPLE POINT AT SEWER MH LOCATED NORTH SIDE OF THE FACILITY -- NORMAL OPERATONS**

FLOW INFORMATION

DAILY FLOWRATES:

1) SAMPLE DAY FLOW: _____
GPD, [ ]M [ ]E [ ]C

2) AVE. FLOW FOR THE MONITORING PERIOD: _____
GPD, [ ]M [ ]E [ ]C

3) MAX. FLOW FOR THE MONITORING PERIOD: _____
GPD, [ ]M [ ]E [ ]C

AUXILIARY FLOW ON DAY OF SAMPLING:

1) BOILER BLOWDOWN: _____ GPD, [ ]M [ ]E [ ]C

2) NON-CONTACT COOLING: _____ GPD, [ ]M [ ]E [ ]C

3) DEMINERALIZATION/BACKWASH: _____ GPD, [ ]M [ ]E [ ]C

4) COOLING TOWER BLEEDOFF: _____ GPD, [ ]M [ ]E [ ]C

5) OTHERS,( ): _____ GPD, [ ]M [ ]E [ ]C

BATCH DISCHARGE ONLY:

1) NO. OF OPERATIONAL DAYS: _____ DAYS

2) NO. OF DAYS FOR ACCUM: _____ DAYS

3) DISCHARGE VOLUME: _____ GALLONS

SAMPLING INFORMATION

SAMPLE TYPE	DATE		TIME		SPLIT SAMPLE (Y/N)	* PRE-NOTIFICATION DATE	SAMPLED BY	LABORATORY NAME	LABORATORY CERT. #
	START	END	START	END					
COMP									
GRAB									

DCC-Discharge Case Condition; TTO-Total Toxic Organic; CN-Cyanide
MO-Monthly; BM-BiMonthly; QT-Quarterly; SA-SemiAnnual; AN-Annual;
GPD-Gallons Per Day; M-Measured; E-Estimated; C-Calculated; COMP-Compostie; G-Grab;
Mg/l-Milligrams Per Liter; PPD-Pounds Per Day

NOTE: *TO PRE-NOTIFY CALL (323) 342-6200.
1. Report must be submitted with U.S. Post Office postmark date by the 15th day of the month following the monitoring period.
2. Facsimiles (faxes) of these reports shall not be accepted.

FOR OFFICIAL USE ONLY:
POSTMARK DATE: _____
RECEIVED DATE: _____
SMR DATA INPUT BY: _____
INPUT DATE: _____
REVIEWED BY: _____
REVIEW DATE: _____

REVISED 08/31/2018

PERMIT W- 521696 IU- 002138	PERIODIC COMPLIANCE REPORT	CITY OF LOS ANGELES, BUREAU OF SANITATION
DBA: ARCADIA WATER TREATMENT PLANT	SAMPLE POINT: 01-001	

DISCHARGE LIMITS: LOCAL

ANALYTE	MONITORING	INSTANTANEOUS		DAILY		MONTHLY	
		LIMIT	UNIT	LIMIT	UNIT	LIMIT	UNIT
Arsenic, Total	Semi-Annual	3	mg/l				
Cadmium, Total	Semi-Annual	15	mg/l				
Chloride	Semi-Annual						
Chromium, Total	Semi-Annual	10	mg/l				
Copper, Total	Semi-Annual	15	mg/l				
Cyanide (Free)	Semi-Annual	2	mg/l				
Cyanide (Total)	Semi-Annual	10	mg/l				
Dissolved Sulfides	Semi-Annual	0.1	mg/l				
Lead, Total	Semi-Annual	5	mg/l				
Nickel, Total	Semi-Annual	12	mg/l				
Oil & Grease (Total)	Semi-Annual	600	mg/l				
pH	Semi-Annual	11 - 5.5	SU				
Silver, Total	Semi-Annual	5	mg/l				
Zinc, Total	Semi-Annual	25	mg/l				

SAMPLE POINT NO.: **01-001** **IU- 002138** PERMIT **W- 521696**	**INDUSTRIAL WASTE MANAGEMENT DIVISION** **PERIODIC COMPLIANCE REPORT**	CITY OF LOS ANGELES BUREAU OF SANITATION

SAMPLE DESC: **SAMPLE POINT AT SEWER MH LOCATED NORTHSIDE OF THE FACILITY -- NORMAL OPERATONS**

GRAB DATE: GRAB TIME: | COMP. START DATE END DATE: COMP. START TIME END TIME

LABORATORY RESULTS

ANALYTE	SAMPLE TYPE		LABORATORY RESULTS		*VIOLATION	
	COMP	GRAB	CONCENTRATION	UNITS	YES	NO
Arsenic, Total						
Cadmium, Total						
Chromium, Total						
Copper, Total						
Lead, Total						
Nickel, Total						
Silver, Total						
Zinc, Total						
Chloride						
Cyanide (Free)						
Cyanide (Total)						
Oil & Grease (Total)						
Dissolved Sulfides						
pH						

* SEE PERMIT FOR THE DISCHARGE LIMITS. IF IN VIOLATION, ATTACH A STATEMENT OF REASON FOR VIOLATION AND CORRECTIVE ACTION TAKEN.

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 ASSURE 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 PERSONS DIRECTLY RESPONSIBLE FOR GATEHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

AUTH. REPRESENTATIVE SIGNATURE | PRINT NAME | TITLE | DATE

APPENDIX D

Slug Discharge Control Plan

CHEMICAL SPILL RESPONSE PLAN

For the Arcadia and Charnock Water Treatment Plants

Charnock Well Field Restoration Project

City of Santa Monica, California

FINAL

August 3, 2010

No change
5/23/18
[signature]

No change
5/24/12
[signature]

No Change
4/14/15
[signature]

No change
6/4/13
[signature]

No change
4/29/14
[signature]

No change
8/15/17
[signature]

No Change
2/23/16
[signature]

Prepared for:

City of Santa Monica

City of Santa Monica
1437 4th Street, Suite 300
Santa Monica, California 90401

Prepared by:

BLACK & VEATCH
building a world of difference

ENERGY • WATER • INFORMATION • GOVERNMENT

Black & Veatch Corporation
800 Wilshire Boulevard, Suite 600
Los Angeles, California 90017

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1.0 INTRODUCTION

This Chemical Spill Response Plan provides guidelines for operation personnel to respond to unanticipated spills of chemicals used in the water treatment process. The chemicals discussed herein are in use at the Charnock Well Field (Charnock) site and/or at the Arcadia Water Treatment Plant (WTP). The scope of this plan is focused on the practical aspects of responding to a spill. Regulatory reporting requirements and lists of entities to contact in the event of a spill are addressed elsewhere and are not part of the scope of this document.

1.1 Objectives

The objectives of this Chemical Spill Response Plan are:

- Identify the chemicals used in the water treatment process
- Identify where the chemicals are stored
- Identify the equipment needed to contain or clean up a chemical spill
- Describe what needs to be done once a chemical spill is discovered

Note that chlorine gas usage is part of the original treatment system at arcadia, and it is assumed that a leak response plan has already been developed for it.

1.2 Background to the Charnock Well Field Restoration Project

The Charnock Well Field Restoration Project (Project) includes improvements to the City of Santa Monica's (City) Charnock Well Field and Arcadia WTP. The purpose of the Charnock Well Field treatment system is to remove iron and manganese, and organic compounds from the groundwater before it is pumped to the Arcadia WTP for further treatment. Treatment at Charnock consists of downhole chlorination, and filtration through pressurized greensand filters for iron and manganese removal. The filtrate from the greensand filters are then dechlorinated and filtered through granular activated carbon (GAC) to remove the organic compounds from the groundwater. Once it is treated through the GAC filters, the treated groundwater is pumped to the Arcadia WTP.

Nearly all of the City's potable water supply enters the distribution system from the Arcadia WTP, with the exception of one small well on the northwestern edge of the City. A connection for imported water from the Metropolitan Water District of Southern California (MWD) is also available at the Arcadia WTP. The Arcadia WTP also serves as the headquarters for the City's operation staff, the main distribution system control system, and the water quality laboratory. Treatment processes at the Arcadia WTP include greensand filtration to remove iron and manganese, reverse osmosis (RO) for

softening, decarbonation and chemical addition for post-treatment conditioning, fluoride addition, chlorine disinfection, and aeration to remove volatile organics.

1.3 Disclaimer

This response plan provides suggested guidelines for responding to chemical spills. However, it is not intended to replace established safety requirements, procedures, training programs (e.g., hazardous materials training), or regulations (e.g., those of Occupational Health and Safety Administration or OSHA). Material safety and data sheets (MSDS) should always be reviewed of safe handling and storage of any chemical and posted near the chemical. Manufacturer's instructions should be followed in the use of any safety equipment. In some cases, safety equipment (for example, respirators) requires special training for proper use. This training should be obtained by anyone who is expected to use such equipment. In addition, an individual's assessment of whether a situation is sufficiently safe should always guide his or her decision to engage it.

2.0 GENERAL INFORMATION ABOUT CHEMICALS AND CHEMICAL SPILLS

This section provides information about the type of chemicals that are used and stored at the two sites, where they are stored on each site, and their purpose in the treatment processes. This section also provides a distinction between the sizes of the chemical spill, describes the basic response that is common to all chemical spills, and any special requirements for responding to a particular chemical spill.

2.1 Chemical Storage

A summary of the chemicals used at one or both sites is provided in Table 2-1. Secondary containment are provided in the event of a major tank leak. The minimum volume required for secondary containment is the volume of the largest single tank placed in the containment area. If the storage is inside of a building, additional containment volume is added for 20 minutes of fire sprinkler flow.

Table 2-1. Summary of Chemicals and Their Uses

Chemical	Used at Charnock?	Used at Arcadia?	Use
Ammonium Sulfate	No	Yes	Reacts with chlorine in water to form chloramines for disinfection
Poly-Aluminum Chloride (PACL) (Sumachlor 50, a Nalco Product)	Yes	Yes	Coagulant aid for solids removal in the plate settlers
PC191 (a Nalco anti-scalant product)	No	Yes	Prevents scaling of RO membranes
Sulfuric Acid	No	Yes	Lowers pH of RO feed to prevent scaling
Sodium Fluoride	No	Yes	Source of fluoride for the water
Sodium Bisulfite	Yes	Yes	Dechlorination – removes chlorine residual from water
Sodium Hydroxide (Caustic)	No	Yes	Raises the pH of water to stabilize RO permeate
Sodium Hypochlorite	Yes	Yes	Disinfection, oxidation of iron/manganese, prevention of biological growth in process tanks/filters/wells

Citric Acid	No	Yes	For cleaning RO membranes
PC77 (a Nalco product)	No	Yes	For cleaning RO membranes
PC98 (a Nalco product)	No	Yes	For cleaning RO membranes

2.2 Chemical Storage at the Charnock Well Field

Water treatment chemicals are stored in a single chemical building at the Charnock as shown in Figure 2-1. A floor plan indicating the location of the storage tanks is shown in Figure 2-2. Wtih the chemical storage tanks enclosed in a building, adequate ventilation in the building/area is required when responding to a spill.

Table 2-2. Chemical Storage and Containment Data for the Charnock Well Field

Chemical	No. Tanks	Individual Tank Volume (gal)	Other Chemicals Sharing Containment	Enclosed in a Building?
Poly-Aluminum Chloride	1	440 (Tote)	Sodium Bisulfite*	Yes
Sodium Hypochlorite	2	5,785	None	Yes
Sodium Bisulfite	1	5,450	Poly Aluminum Chloride	Yes

* The polyaluminum chloride tote is mounted on a ledge that spills into the sodium bisulfite containment area in the event of a spill.

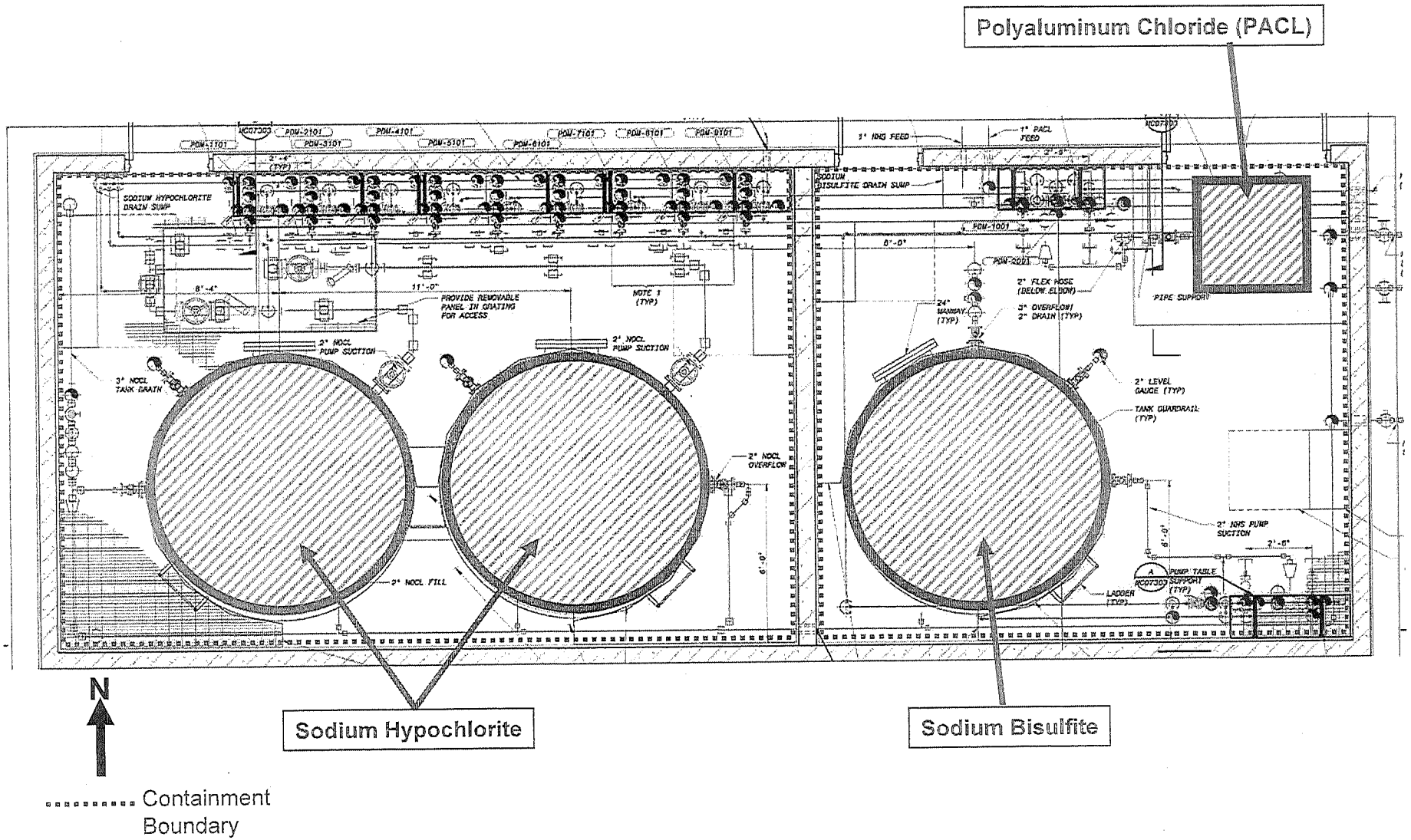
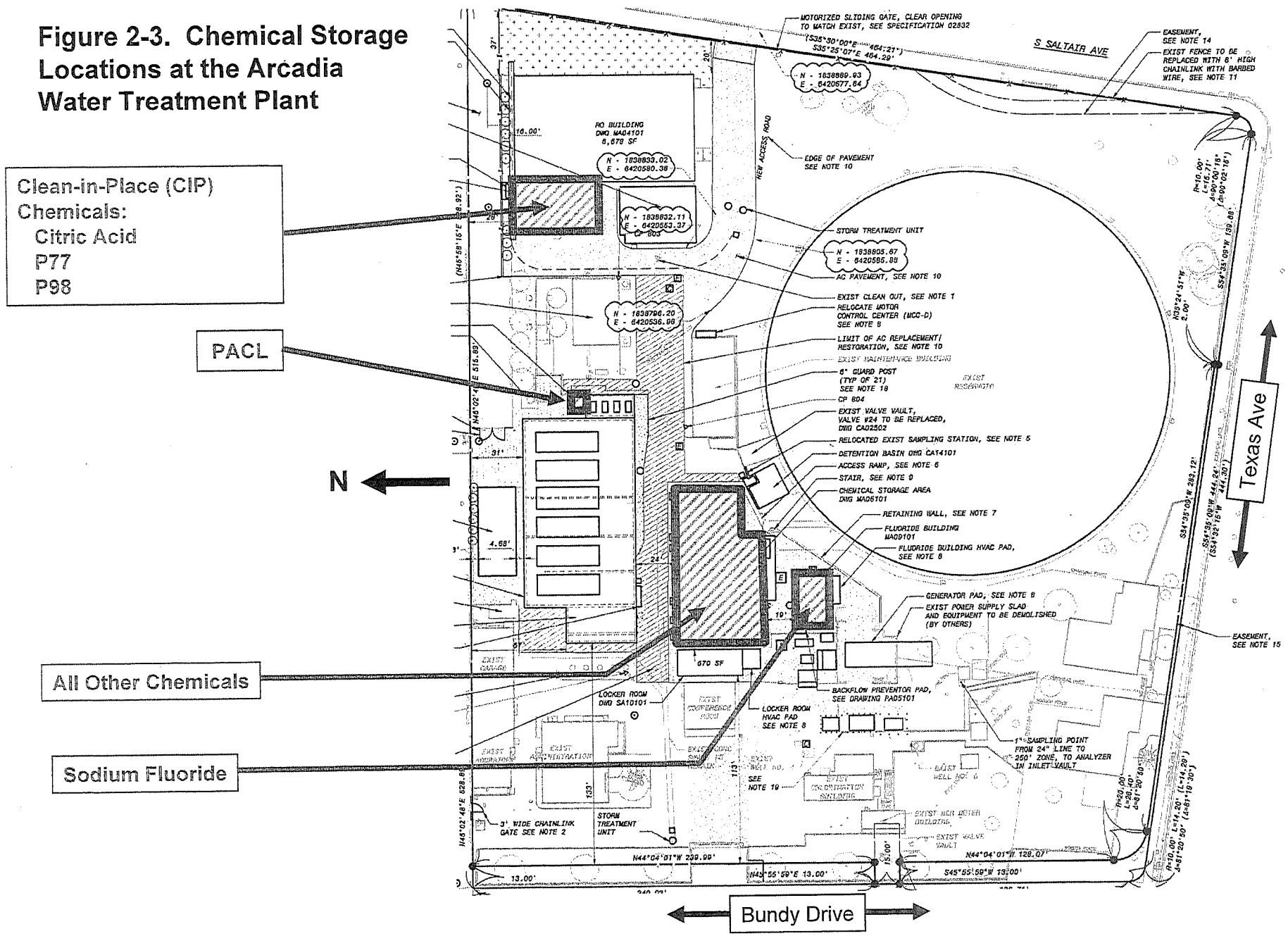


Figure 2-2. Chemical Storage Building at Charnock Well Field

Figure 2-3. Chemical Storage Locations at the Arcadia Water Treatment Plant



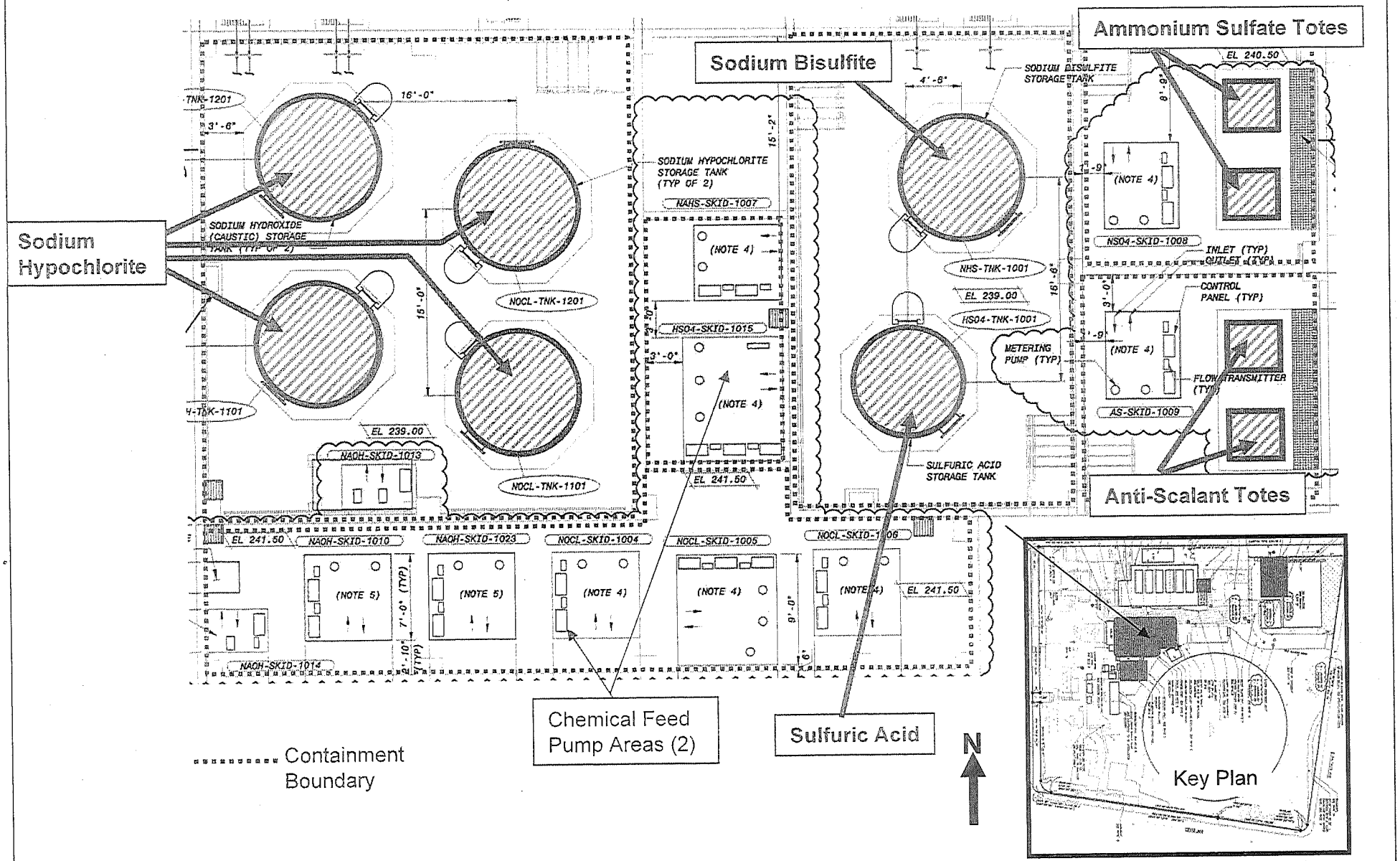


Figure 2-4. Main Chemical Storage Facilty at Arcadia Water Treatment Plant

2.3 Chemical Storage at the Arcadia WTP

Chemicals are stored in four different locations at the Arcadia WTP, as shown in Figure 2-3. Most of the chemicals are stored in the main chemical storage area, with the exception of PACL, the RO clean-in-place (CIP) chemicals, and fluoride. The volumes of the chemical storage tanks are summarized in Table 2-3, as is information about which chemicals share common containment areas.

The layout of the main chemical storage area is shown in Figure 2-4. The chemical containment is arranged to segregate the basic chemicals (caustic and sodium hypochlorite) from the acidic chemicals (sodium bisulfite and sulfuric acid), as summarized in Table 2-3. Ammonium sulfate and anti-scalant totes also have separate containment areas. The tanks in this main chemical storage area are filled by chemical delivery tank trucks. Filling should be observed for any spillage that may occur in the coupling or uncoupling of the fill hoses. Totes are delivered full and removed empty. They are not filled onsite.

The RO CIP chemicals are stored in totes in the CIP area, adjacent to the RO building, with the layout shown in Figure 2-5. There are two separate lined containment areas for the PC77 and for the PC98 (or citric acid) totes, respectively. The RO CIP chemical storage area and CIP chemicals are distinct from the others stored and used at the Arcadia WTP in that it is possible to store, neutralize, and dispose of them to the sewer. Spills from the totes (Table 2-3) can be cleaned up using absorbents or washed down and pumped from their containment via a portable pump to the neutralization tank for neutralization and eventual disposal to the sewer. The larger tanks in the adjacent containment area (Figure 2-5) are part of the CIP recirculation system (including the recirculation pumps). Leaks from these tanks can be washed down and collected in the containment area sump and pumped directly to the neutralization tank where the liquids can be neutralized and sent to the sewer.

PACL is stored and fed from a separate area on the east side of the filter complex as shown in Figure 2-6.

The fluoride building layout is shown in Figure 2-7. Both dry and liquid forms of sodium fluoride are stored in this building. Dry granular sodium fluoride is stored in 1000 lb. bulk sacks in granulated form A monorail hoist is used to lift and dispense the sodium fluoride into the saturator tanks where liquid sodium fluoride is stored and dispensed. Data for the granular and solution sodium fluoride storage is listed in Table 2-3. The bulk sacks and the dispensing system should serve to minimize contact with the dry chemical. The containment for the saturators consists of curbing around the tanks. The granular form of sodium fluoride is rated as a severe poison. Even contact with skin should be avoided. Refer to the MSDS in Appendix A for more detailed information.

Table 2-3. Chemical Storage and Containment Data for Chemicals at the Arcadia WTP (by Storage Area).

Chemical	No. Tanks	Individual Tank Volume (gal)	Other Chemicals Sharing Containment	Enclosed in a Building?
Main Chemical Storage Area				
Ammonium Sulfate	2 Totes	440	None	No
Anti-Scalant (PC191T, a Nalco Product)	2 Totes	440	None	No
Sulfuric Acid	1	3,600	Sodium Bisulfite	No
Sodium Bisulfite	1	5,450	Sulfuric Acid	No
Sodium Hydroxide	2	7,000	Sodium Hypochlorite	No
Sodium Hypochlorite	2	5,425	Sodium Hydroxide	No
Cartridge Filter Area (East of Filter Complex)				
Poly-Aluminum Chloride (Sumachlor 50, a Nalco Product)	1 Tote	440	None	No
RO CIP Area				
Citric Acid *	1 Tote	440	None	No
PC77 (a Nalco product)*	1 Tote	440	None	No
PC98 (a Nalco product)	1 Tote	440	None	No
Fluoride Storage Area				
Sodium Fluoride (Dry)	N/A**	N/A	None	Yes
Sodium Fluoride (Solution in Saturators)	2	345	None	Yes

* Citric Acid may be used in place of PC77 or vice versa. Only one of the two chemicals may be present.
** Dry granular form is stored in 1,000 lb bulk sacks.

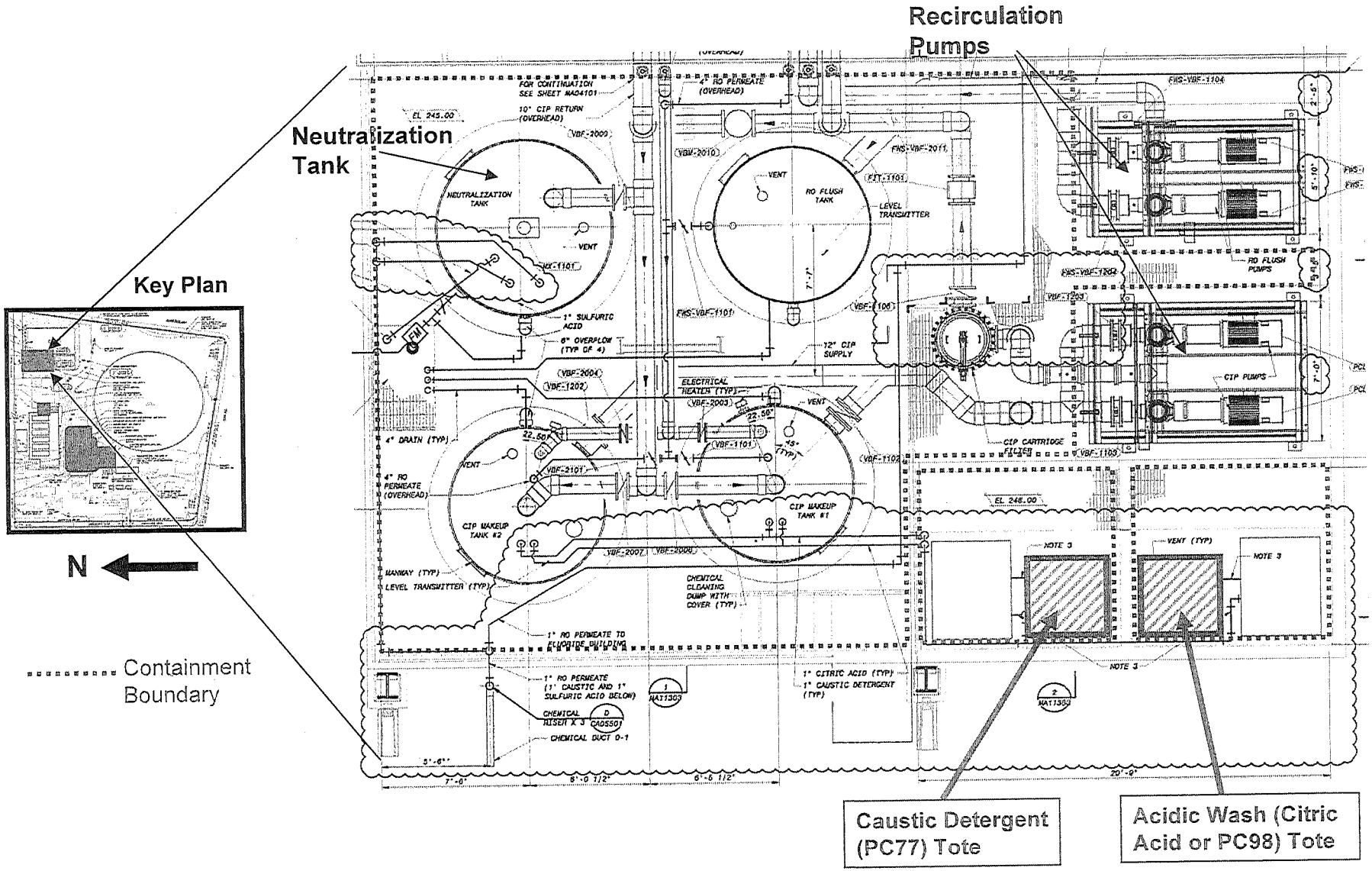


Figure 2-5. Clean-in-Place (CIP) Chemical Storage

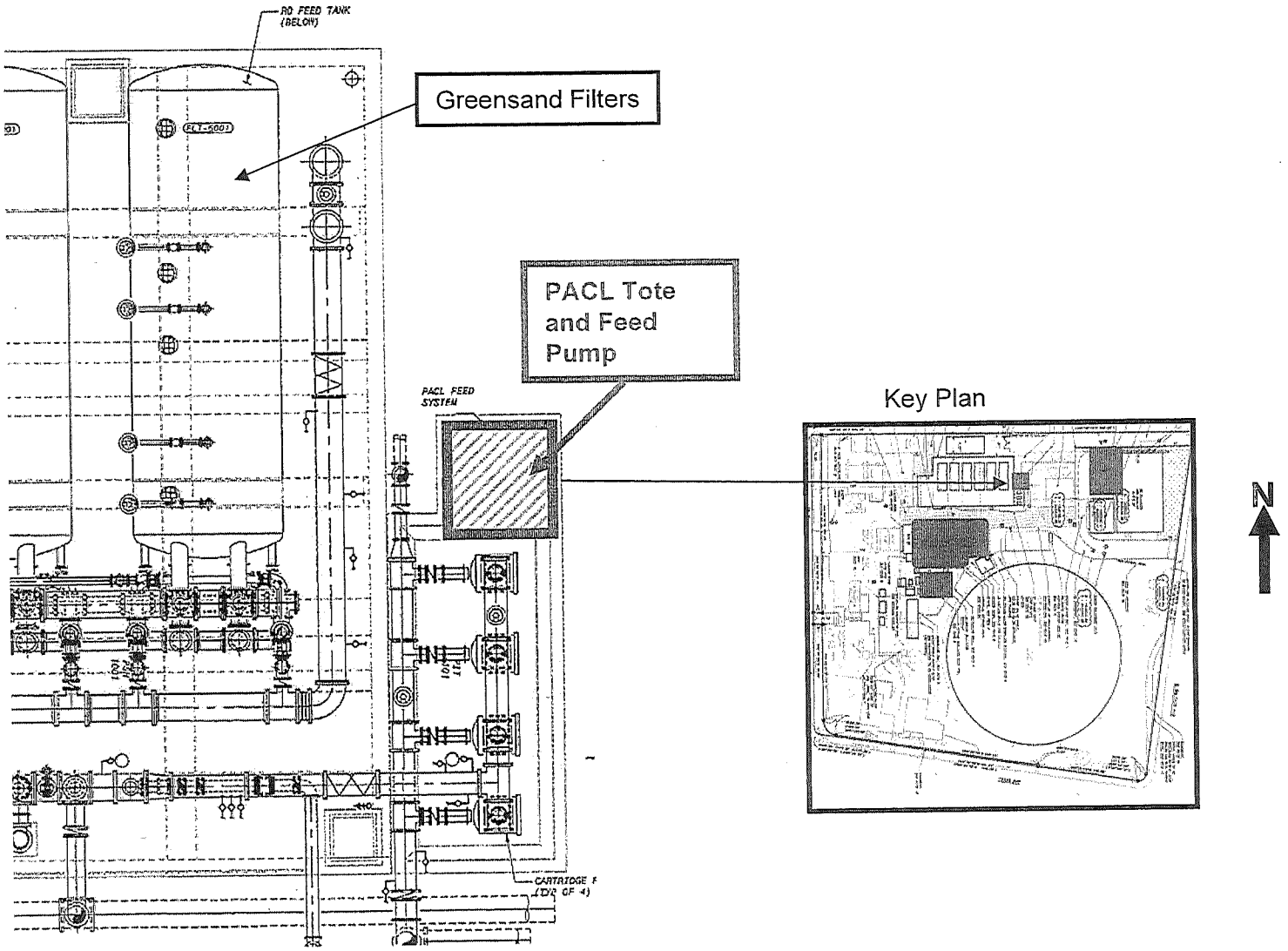


Figure 2-6. PACL Chemical Storage

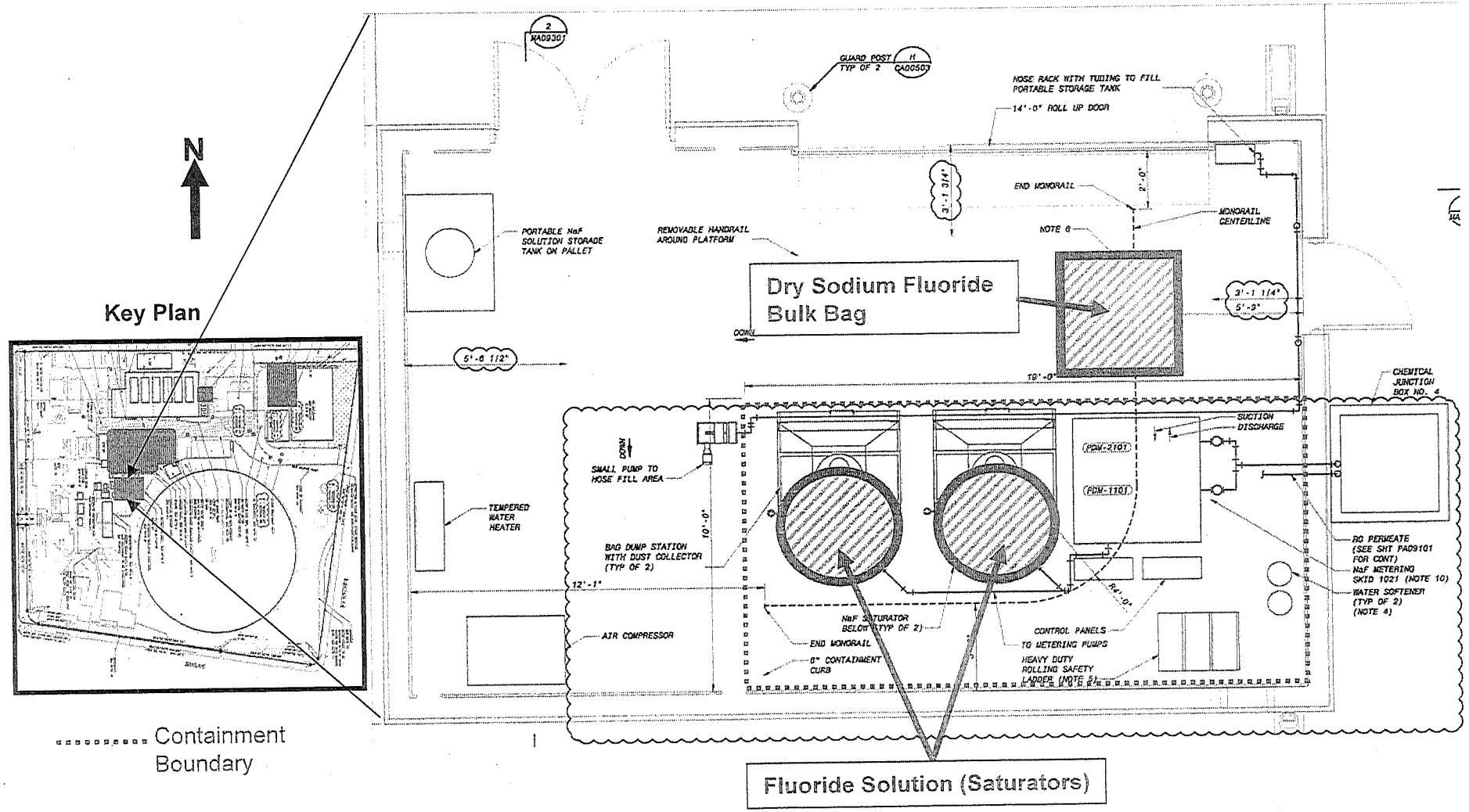


Figure 2-7. Fluoride Storage Layout at the Arcadia Water Treatment Plant

3.0 SPILL RESPONSE

There is no substitute for preparation. Preparation involves making sure that everyone on the staff responsible for handling chemicals is familiar with the Chemical Response Plan. It also involves making sure that the appropriate safety equipment and spill cleanup materials are properly stocked and accessible.

It is also important to distinguish between the two types of spills: "de minimus" (low volume) spills which can be handled by operations staff and "large quantity generator" spills for which a licensed hazardous waste treatment service must be brought in to handle.

3.1 Pre-Planning and Preparation

The operations staff and supervisor should study the MSDS for all chemicals present on the site, take any required safety training courses in handling of water treatment chemicals, and prepare plans of action, including communication protocol, before using any of the chemicals at either of the two sites.

1. Review and be familiar with the properties and safe handling of the chemicals stored and used on site. The MSDS (Appendix A) are a primary source of this information.

2. Take training courses in safe chemical handling, such as AWWA's "Safety First: The Safe Handling of Water Treatment Chemicals" (DVD).

3. Hold team planning and periodic review sessions for team approach to spill response. The team should determine and agree on the locations for storing spill kits and safety equipment and know key shutoff valve locations.

4. Obtain and store the appropriate basic safety personal protective equipment (PPE) for each chemical and that will fit each person who may be handling the each chemical. (Refer to Table 3-1 and MSDS in Appendix A.) Some equipment, for example respirators, may require special training for proper use. Provide enough basic safety equipment to outfit each person on the team. For specialized safety equipment, such as respirators, determine the appropriate a number of each that will be required.

5. Determine the size of the spill that staff would be able to handle and obtain and store the appropriately sized spill kits (see Appendix B for examples). Contact the individual vendors to determine the capacities of the kits that are available. Containers of vermiculate can be stored as well (not for use in strong acid spill cleanup). Obtain and store absorbent kits for strong acid

cleanup. Store spill kits in well marked, easily accessible locations as close to chemical storage areas as possible.

6. Obtain and store hazardous waste tags to be used to identify contents containers for used absorbent.

7. Obtain and store a roll of "Caution Do Not Enter" tape.

8. Prepare and post a list of contact telephone numbers:
   a. Emergency response (including 911)
   b. Supervisors (office and cell).
   c. Licensed hazardous waste treatment services
   d. Regulatory agencies for incident reporting

Table 3-1. Personal Protective Equipment (Summarized from MSDS).

Information presented in this table is taken from the MSDS and is summary only. Refer Section 8 the MSDS (Appendix A) for the respective chemical for more detailed information. Note that MSDS information varied by manufacturer and chemical. Where goggles are used, use a full face shield if splashing (or dust creation for dry sodium fluoride) is a possibility.

Chemical	Eyes/Face	Gloves	Clothing	Footwear	Respirator
Ammonium Sulfate	Chemical goggles (recommended by ANSI Z87.1-1979.	Plastic or rubber gloves.	Plastic or rubber apron.	Rubber boots	For mists or vapors. For exposure above an ACGIH-TLV, OSHA-PEL or levels that may cause irritation, wear a NIOSH-approved full face piece or half mask air-purifying cartridge equipped with a good mist / particulate cartridge or supplied air.
Poly-Aluminum Chloride (PACL) (Sumachlor 50, a Nalco Product)	Safety glasses**	*	*	*	For mists or vapors. Dust or mist type.
PC191 (a Nalco anti-scalant product)	Wear chemical splash goggles**	Nitrile, Butyl, PVC, or Neoprene gloves	Wear impervious apron.	*	For mists or vapors. An approved respirator is recommended.
Sulfuric Acid	Chemical goggles (recommended by ANSI Z87.1-19Y9)	Butyl Rubber, Polyethylene, Silver Shield/4H, Viton/Butyl Rubber, Responder or Tychem gloves.	Butyl Rubber or Polyethylene apron or full protective clothing when handling this material.	Butyl Rubber boots or Neoprene boots with 4H inserts.	For exposures above the OSHA-PEL or ACGIH-TLV, wear a NIOSH approved full facepiece or half mask air purifying cartridge respirator equipped with a good mist *t* particulate and acid gas cartridge, or supplied air. For exposure to Sulfuric Acid above 15 mg/tm^3, wear a full facepiece supplied air respirator, or a full facepiece self-contained breathing apparatus, operated in the pressure demand and positive pressure mode.
Sodium Fluoride (dry)	Chemical safety goggles **	Gloves.**	Wear impervious protective clothing, lab coat, apron or coveralls, as appropriate, to prevent skin contact.	*	If the exposure limit is exceeded, a NIOSH approved half-face dust/mist respirator may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece dust/mist respirator may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-facepiece positivepressure, air-supplied respirator.
Sodium Fluoride (solution)	Chemical safety goggles. ***	Gloves ***	Wear impervious protective clothing, lab coat, apron or coveralls, as appropriate, to prevent skin contact. ***	***	For emergencies or instances where the exposure levels are not known, use a full-facepiece positive pressure, air-supplied respirator. ***
Sodium Bisulfite	Splash goggles or safety glasses**	Gloves for routine industrial use**	Cover-all, rubber aprons, or chemical protective clothing made from natural	*	For mists or vapors. Positive pressure, full-facepiece Self Contained Breathing Apparatus; or positive pressure, full-facepeice Self Contained Breathing Apparatus with an auxiliary positive pressure Self Contained Breathing Apparatus.

			rubber		
Sodium Hydroxide (Caustic)	Chemical safety goggles**	Natural rubber, Neoprene, Nitrile	chemical resistant clothing**	Rubber boots	RESPIRATOR: A NIOSH approved respirator with N95 (dust, fume, mist) cartridges may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits, or when symptoms have been observed that are indicative of overexposure. If eye irritation occurs, a full face style mask should be used. A respiratory protection program that meets 29 CFR 1910.134 must be followed whenever workplace conditions warrant use of a respirator.
Sodium Hypochlorite	Chemical resistant goggles**	Neoprene, butyl-rubber, PVC, Viton ®, or Saranex®	Neoprene, butyl-rubber, PVC, Viton ®, or Saranex®	*	NIOSH approved respirator.
Citric Acid	Chemical goggles **	Chemical resistant gloves**	Clean body covering**	*	For mists or vapors. NIOSH approved respirator with dust and mist protection.
PC77 (a Nalco product)	Chemical goggles**	Nitrile, Butyl, PVC, or Neoprene gloves	Wear standard protective clothing.**	*	For mists or vapors. NIOSH approved respirator
PC98 (a Nalco product)	Safety glasses **	PVC.	Wear standard protective clothing. **	*	For mists or vapors. Consider the use of filter type: Organic vapor cartridge. with a Particulate pre-filter. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used.

Notes:

* None listed in MSDS

** Material not specified by MSDS

*** No MSDS available for sodium fluoride solution. Use PPE for dry sodium fluoride.

3.2 De Minimus Spills

De minimus spills are small enough that a packaged spill containment kit can be used for clean up. For nearly all small spills, except for strong acids like sulfuric acid, a commercially available universal absorbent or vermiculite can be used for cleanup. Kits containing universal absorbent "pillows" and "socks" are readily available from commercial outlets. The pillows and socks can be used to quickly create dikes to prevent the spill from going down drains or to simply quickly prevent the spread of the spill. Special absorbents must be used for strong acids, such as sulfuric acid, and are also readily available on the commercial market.

Table 3-2 summarizes the type of absorbents that can be used and consideration for disposal of the cleanup debris. In several cases the MSDS do not indicate if the chemical is considered hazardous. It is best in those cases to dispose of the waste assuming it is hazardous.

Guidelines for Responding to De Minimus Spills:

1. Immediately alert a supervisor upon discovery of a spill, evacuate the area, if necessary. Assess the spill area for safety.

2. If there is an injury or medical attention is needed, contact 911 immediately.

3. Put on PPE (e.g. eye protection, gloves, etc.). Refer to MSDS (Appendix A) for details on appropriate equipment for each chemical.

4. Attend to anyone who may have been in physical contact with the chemical. Remove contaminated clothing. Flush skin with water no less than 15 minutes. Use emergency eyewash and/or safety shower for this purpose if nearby. All contaminated clothing must be laundered before reuse.

5. If it is safe to do so, close valves or stop chemical feed pumps that supply chemical to the leaking pipe or other leaking appurtenance.

6. If the spill is too large for the spill kits on hand, do not handle it yourself. See Large Quantity Generator Spills.

7. Prevent entry to the spill area with hazard signs and "Caution Do Not Enter" tape.

8. Wear PPE as appropriate to the chemical and the hazard. If respiratory equipment is needed and no person with appropriate training is available, contact 911. If there is someone with appropriate respirator training, make

sure there is a second person outside of the spill area within sight or easy communication in the event of an emergency.

9. Prevent the spill from going down floor drains, other drainages, or from otherwise escaping to the environment. The absorbent pillows or absorbent socks can be used for that purpose. Remember that sulfuric acid requires a special absorbent.

10. Spread additional pillows, socks, or bulk absorbent, as necessary to absorb all of the spill.

11. Use a brush and scoop to place the used absorbent into an appropriate container: polyethylene bags for small spills, 5-gallon pails or 20-gallon drums with polyethylene liners.

12. Complete hazardous waste tags, identifying the contents as "Spill Debris" and identify the chemical. Affix the labels any bag, pail, or drum used to contain the used absorbent. Note that the absorbent does not neutralize or otherwise alter the chemical properties of the spilled chemical. Contact a licensed hazardous waste disposal firm for proper and legal disposal.

13. Place the container(s) in a ventilated area or ventilated hood until it can be disposed of properly.

14. Rinse down the contaminated surface, spread absorbent, brush and scoop, and place used absorbent into the disposal containers.

15. Report the spill to supervisor and record that fact that it has been cleaned up.

16. Replenish all spill control materials and/or protective gear.

Table 3-2. Absorbents and Disposal.

Chemical	Absorbent	Disposal Considerations
Ammonium Sulfate	Universal or Vermiculite	Non-hazardous
Poly-Aluminum Chloride (PACL) (Sumachlor 50, a Nalco Product)	Universal or Vermiculite	Assume hazardous. Hazardous/non-hazardous characteristic not identified by manufacturer.
PC191 (a Nalco anti-scalant product)	Universal or Vermiculite	Non-hazardous
Sulfuric Acid	Absorbent for Strong Acid	Hazardous
Sodium Fluoride (dry)	Not Applicable (Substance is dry granules.)	Assume hazardous. Hazardous/non-hazardous characteristic not identified

		by manufacturer.
Sodium Fluoride (solution)	Universal	Assume hazardous.
Sodium Bisulfite	Universal or Vermiculite	Assume hazardous. Hazardous/non-hazardous characteristic not identified by manufacturer.
Sodium Hydroxide (Caustic)	Universal or Vermiculite	Assume hazardous. Hazardous/non-hazardous characteristic not identified by manufacturer.
Sodium Hypochlorite	Universal or Vermiculite	Hazardous
Citric Acid	Universal or Vermiculite*	Assume hazardous. * Hazardous/non-hazardous characteristic not identified by manufacturer.
PC77 (a Nalco product)	Universal or Vermiculite*	Non-hazardous*
PC98 (a Nalco product)	Universal or Vermiculite*	Non-hazardous*

* Note that if the spill is washed down in its containment area rather than absorbed, it can be pumped to the CIP neutralization tank for storage, neutralization, and eventual disposal via the sewer.

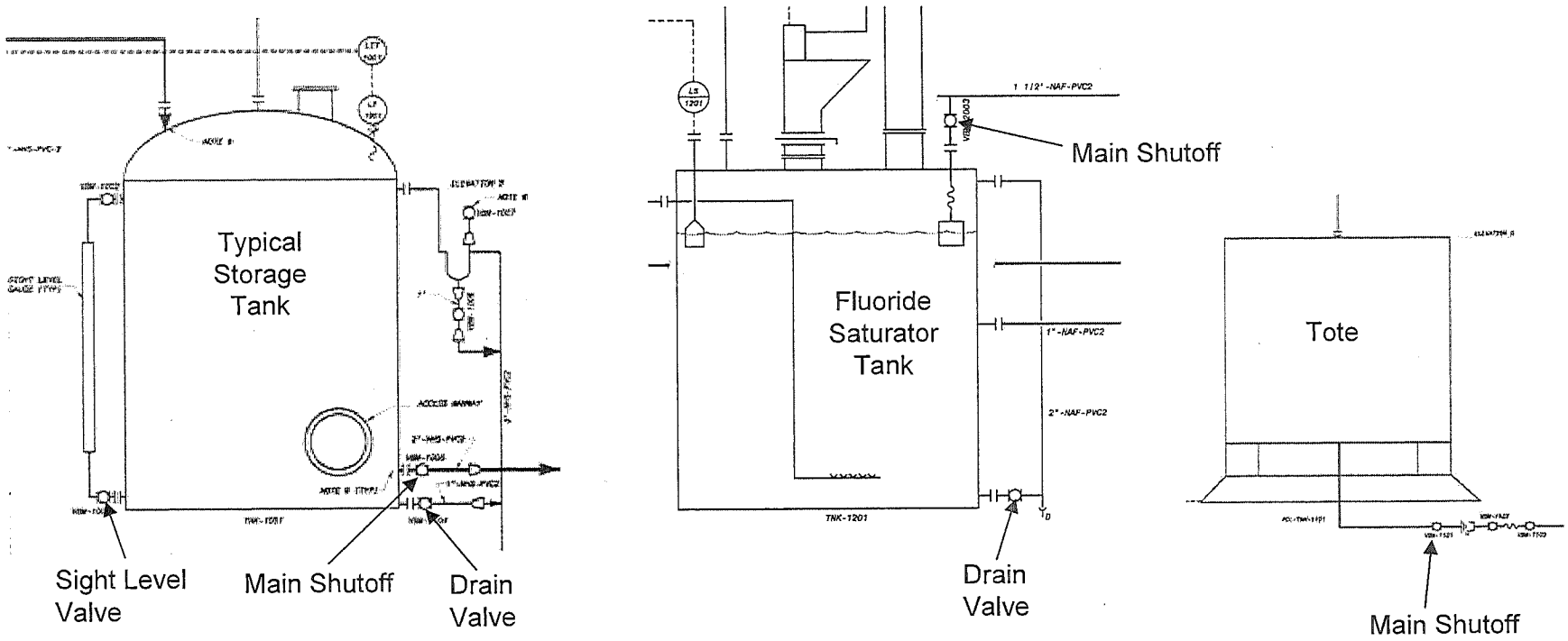


Figure 3-1. Typical Shutoff Valves for Chemical Storage Tanks and Totes.

CALIFORNIA ENVIRONMENTAL REPORTING SYSTEM (CERS)

CONSOLIDATED EMERGENCY RESPONSE / CONTINGENCY PLAN

Prior to completing this Plan, please refer to the INSTRUCTIONS FOR COMPLETING A CONSOLIDATED CONTINGENCY PLAN

A. FACILITY IDENTIFICATION AND OPERATIONS OVERVIEW

FACILITY ID #	1. CERS ID	A1. DATE OF PLAN PREPARATION/REVISION A2.
FA0013056	10245112	2/27/2018

3. BUSINESS NAME *(Same as Facility Name or DBA - Doing Business As)*: City of Santa Monica Water Pro/Tre

103. BUSINESS SITE ADDRESS: 1228 South Bundy Drive

104. BUSINESS SITE CITY		105. ZIP CODE
Los Angeles	CA	90025

A3. TYPE OF BUSINESS (e.g., Painting Contractor)	A4. INCIDENTAL OPERATIONS (e.g., Fleet Maintenance)
Water Treatment Plant	

A5. THIS PLAN COVERS CHEMICAL SPILLS, FIRES, AND EARTHQUAKES INVOLVING: (Check all that apply)

☒ 1. HAZARDOUS MATERIALS; ☐ 2. HAZARDOUS WASTES

B. INTERNAL RESPONSE

B1. INTERNAL FACILITY EMERGENCY RESPONSE WILL OCCUR VIA: (Check all that apply)

☒ 1. CALLING PUBLIC EMERGENCY RESPONDERS (i.e., 9-1-1)
☒ 2. CALLING HAZARDOUS WASTE CONTRACTOR
☐ 3. ACTIVATING IN-HOUSE EMERGENCY RESPONSE TEAM

C. EMERGENCY COMMUNICATIONS, PHONE NUMBERS AND NOTIFICATIONS

Whenever there is an imminent or actual emergency situation such as an explosion, fire, or release, the Emergency Coordinator (or his/her designee when the Emergency Coordinator is on call) shall:

1. Activate internal facility alarms or communications systems, where applicable, to notify all facility personnel.
2. Notify appropriate local authorities (i.e., call 9-1-1).
3. Notify the California Emergency Management Agency at (800) 852-7550.

Before facility operations are resumed in areas of the facility affected by the incident, the emergency coordinator shall notify the California Department of Toxic Substances Control (DTSC), the local Unified Program Agency (UPA), and the local fire department's hazardous materials program that the facility is in compliance with requirements to:

1. Provide for proper storage and disposal of recovered waste, contaminated soil or surface water, or any other material that results from an explosion, fire, or release at the facility; and
2. Ensure that no material that is incompatible with the released material is transferred, stored, or disposed of in areas of the facility affected by the incident until cleanup procedures are completed.

C1. INTERNAL FACILITY EMERGENCY COMMUNICATIONS OR ALARM NOTIFICATION WILL OCCUR VIA: (Check all that apply)

☒ 1. VERBAL WARNINGS; ☐ 2. PUBLIC ADDRESS OR INTERCOM SYSTEM; ☒ 3. TELEPHONE;
☐ 4. PAGERS; ☐ 5. ALARM SYSTEM; ☐ 6. PORTABLE RADIO

C2. NOTIFICATIONS TO NEIGHBORING FACILITIES THAT MAY BE AFFECTED BY AN OFF-SITE RELEASE WILL OCCUR BY: (Check all that apply)

☒ 1. VERBAL WARNINGS; ☐ 2. PUBLIC ADDRESS OR INTERCOM SYSTEM; ☐ 3. TELEPHONE;
☐ 4. PAGERS; ☐ 5. ALARM SYSTEM; ☐ 6. PORTABLE RADIO

EMERGENCY RESPONSE PHONE NUMBERS:

AMBULANCE, FIRE, POLICE AND CHP	9-1-1
CALIFORNIA EMERGENCY MANAGEMENT AGENCY (CAL/EMA)	(800) 852-7550
NATIONAL RESPONSE CENTER (NRC)	(800) 424-8802
POISON CONTROL CENTER	(800) 222-1222
LOCAL UNIFIED PROGRAM AGENCY (UPA/CUPA)	(213) 978-3680 C3.
C4. OTHER (Specify):	C5.

NEAREST MEDICAL FACILITY / HOSPITAL NAME: C6. UCLA Santa Monica Hospital — (424) 259-6000 C7.

AGENCY NOTIFICATION PHONE NUMBERS:

CALIFORNIA DEPT. OF TOXIC SUBSTANCES CONTROL (DTSC)	(916) 255-3545
REGIONAL WATER QUALITY CONTROL BOARD	(818) 551-2048 C8.
U.S. ENVIRONMENTAL PROTECTION AGENCY (US EPA)	(800) 300-2193
CALIFORNIA DEPT OF FISH AND GAME (DFG)	(916) 358-2900
U.S. COAST GUARD	(202) 267-2180
CAL/OSHA	(916) 263-2800
STATE FIRE MARSHAL	(916) 445-8200
C9. OTHER (Specify):	C10.
C11. OTHER (Specify):	C12.

D. EMERGENCY CONTAINMENT AND CLEANUP PROCEDURES

SPILL PREVENTION, CONTAINMENT, AND CLEANUP PROCEDURES: (Check all boxes that apply to indicate your procedures for containing spills, releases, fires or explosions; and. preventing and mitigating associated harm to persons, property, and the environment.) D1.

- ☒ 1. MONITOR FOR LEAKS, RUPTURES, PRESSURE BUILD-UP, ETC.;
- ☒ 2. PROVIDE STRUCTURAL PHYSICAL BARRIERS (e.g., Portable spill containment walls);
- ☒ 3. PROVIDE ABSORBENT PHYSICAL BARRIERS (e.g., Pads, pigs, pillows);
- ☒ 4. COVER OR BLOCK FLOOR AND/ OR STORM DRAINS;
- ☒ 5. BUILT-IN BERM IN WORK / STORAGE AREA;
- ☒ 6. AUTOMATIC FIRE SUPPRESSION SYSTEM;
- ☒ 7. ELIMINATE SOURCES OF IGNITION FOR FLAMMABLE HAZARDS (e.g. Flammable liquids, Propane);
- ☒ 8. STOP PROCESSES AND/OR OPERATIONS;
- ☐ 9. AUTOMATIC / ELECTRONIC EQUIPMENT SHUT-OFF SYSTEM;
- ☒ 10. SHUT-OFF WATER, GAS, ELECTRICAL UTILITIES AS APPROPRIATE;
- ☒ 11. CALL 9-1-1 FOR PUBLIC EMERGENCY RESPONDER ASSISTANCE / MEDICAL AID;
- ☒ 12. NOTIFY AND EVACUATE PERSONS IN ALL THREATENED AREAS;
- ☒ 13. ACCOUNT FOR EVACUATED PERSONS IMMEDIATELY AFTER EVACUATION CALL;
- ☐ 14. PROVIDE PROTECTIVE EQUIPMENT FOR ON-SITE RESPONSE TEAM;
- ☒ 15. REMOVE OR ISOLATE CONTAINERS / AREA AS APPROPRIATE;
- ☒ 16. HIRE LICENSED HAZARDOUS WASTE CONTRACTOR;
- ☒ 17. USE ABSORBENT MATERIAL FOR SPILLS WITH SUBSEQUENT PROPER LABELING, STORAGE, AND HAZARDOUS WASTE DISPOSAL AS APPROPRIATE;
- ☒ 18. SUCTION USING SHOP VACUUM WITH SUBSEQUENT PROPER LABELING, STORAGE, AND HAZARDOUS WASTE DISPOSAL AS APPROPRIATE;
- ☒ 19. WASH / DECONTAMINATE EQUIPMENT W/ CONTAINMENT and DISPOSAL OF EFFLUENT / RINSATE AS HAZARDOUS WASTE;
- ☒ 20. PROVIDE SAFE TEMPORARY STORAGE OF EMERGENCY-GENERATED WASTES;
- ☐ 21. OTHER (Specify):

D2.

E. FACILITY EVACUATION

THE FOLLOWING ALARM SIGNAL(S) WILL BE USED TO BEGIN EVACUATION OF THE FACILITY (CHECK ALL THAT APPLY): E1.

- ☒ 1. BELLS;
- ☒ 2. HORNS/SIRENS;
- ☒ 3. VERBAL (I.E., SHOUTING);
- ☐ 4. OTHER (Specify):

E2.

THE FOLLOWING LOCATION(S) IS/ARE EVACUEE EMERGENCY ASSEMBLY AREA(S) (i.e., Front parking lot, specific street corner, etc.) E3.

The primary assembly site is at the flag pole close to the South Bundy Drive gate. The secondary assembly is at the back gate close to the South Saltaire Avenue.

Note: The Emergency Coordinator must account for all on site employees and/or site visitors after evacuation.

E4.

☒ EVACUATION ROUTE MAP(S) POSTED AS REQUIRED

Note: The map(s) must show primary and alternate evacuation routes, emergency exits, and primary and alternate staging areas, and must be prominently posted throughout the facility in locations where it will be visible to employees and visitors.

F. ARRANGEMENTS FOR EMERGENCY SERVICES

Explanation of Requirement: Advance arrangements with local fire and police departments, hospitals, and/or emergency services contractors should be made as appropriate for your facility. You may determine that such arrangements are not necessary.

ADVANCE ARRANGEMENTS FOR LOCAL EMERGENCY SERVICES (Check one of the following) F1.

- ☐ 1. HAVE BEEN DETERMINED NOT NECESSARY; *or*
- ☒ 2. THE FOLLOWING ARRANGEMENTS HAVE BEEN MADE (Specify): F2.

UCLA Santa Monica Hospital
1255 15th Street
Santa Monica, CA 90404
(424) 259-8505

Playa Vista Medical Center
6200 Sea Bluff Drive Suite #1
Playa Vista, CA 90094
(310) 862-2800

St. John Health Center
2121 Santa Monica Blvd

G. EMERGENCY EQUIPMENT

Check all boxes that apply to list emergency response equipment available at the facility and identify the location(s) where the equipment is kept and the equipment's capability, if applicable. [e.g., ☒ CHEMICAL PROTECTIVE GLOVES | Spill response kit | One time use, Oil & solvent resistant only.]

TYPE	EQUIPMENT AVAILABLE G1.	LOCATION	CAPABILITY *(If applicable)*
Safety and First Aid	1. ☒ CHEMICAL PROTECTIVE SUITS, APRONS, OR VESTS	G2. Employee Locker Room	G3.
	2. ☒ CHEMICAL PROTECTIVE GLOVES	G4. Warehouse & Storage Cabinets	G5.
	3. ☒ CHEMICAL PROTECTIVE BOOTS	G6. Employee Locker Room & Warehouse	G7.
	4. ☒ SAFETY GLASSES / GOGGLES / SHIELDS	G8. Employee Locker Room & Warehouse	G9.
	5. ☒ HARD HATS	G10. Employee Locker Room & Warehouse	G11.
	6. ☒ CARTRIDGE RESPIRATORS	G12. Employee Locker Room & Warehouse	G13.
	7. ☐ SELF-CONTAINED BREATHING APPARATUS (SCBA)	G14.	G15.
	8. ☒ FIRST AID KITS / STATIONS	G16. Warehouse Lab Shop Building	G17.
	9. ☒ PLUMBED EYEWASH FOUNTAIN / SHOWER	G18. Outside, Lunch Room, CIP Building, Chemical Building	G19.
	10. ☐ PORTABLE EYEWASH KITS	G20.	G21.
	11. ☐ OTHER	G22.	G23.
	12. ☐ OTHER	G24.	G25.
Fire Fighting	13. ☒ PORTABLE FIRE EXTINGUISHERS	G26. All buildings	G27.
	14. ☒ FIXED FIRE SYSTEMS / SPRINKLERS / FIRE HOSES	G28. Chemical Storage Facility Fluoride Building	G29.
	15. ☒ FIRE ALARM BOXES OR STATIONS	G30. Control Center, Lab for Halon	G31.
	16. ☒ OTHER	G32. Lab	G33. Fire Blanket
Spill Control and Clean-Up	17. ☒ ALL-IN-ONE SPILL KIT	G34. Chemical Storage Facility	G35.
	18. ☒ ABSORBENT MATERIAL	G36. Chemical Storage Facility	G37.
	19. ☒ CONTAINER FOR USED ABSORBENT	G38. Chemical Storage Facility	G39.
	20. ☒ BERMING / DIKING EQUIPMENT	G40. Chemical Storage Facility	G41.
	21. ☒ BROOM	G42. Warehouse	G43.
	22. ☒ SHOVEL	G44. Warehouse	G45.
	23. ☒ SHOP VAC	G46. Warehouse	G47.
	24. ☒ EXHAUST HOOD	G48. Lab, Water Quality Office	G49.
	25. ☒ EMERGENCY SUMP / HOLDING TANK	G50. Chemical Storage Facility	G51.
	26. ☒ CHEMICAL NEUTRALIZERS	G52. Chemical Building & Fluoride Saturation Building	G53. Sodium Bisulfite & Sodium Thiosulfate for Chlorine
	27. ☐ GAS CYLINDER LEAK REPAIR KIT	G54.	G55.
	28. ☐ SPILL OVERPACK DRUMS	G56.	G57.
	29. ☒ OTHER	G58. Ammonium Sulfate Area	G59. Ammonium Sulfate tank is set in a plastic containment
Communi-cations and Alarm Systems	30. ☒ TELEPHONES (Includes cellular)	G60. Landline and personal cell phones	G61.
	31. ☐ INTERCOM / PA SYSTEM	G62.	G63.
	32. ☒ PORTABLE RADIOS	G64. Control Center Vehicles	G65.
	33. ☒ AUTOMATIC ALARM CHEMICAL MONITORING EQUIPMENT	G66. Lab	G67.
Other	34. ☐ OTHER	G68.	G69.
	35. ☐ OTHER	G70.	G71.

H. EARTHQUAKE VULNERABILITY

Identify areas of the facility that are vulnerable to hazardous materials releases / spills due to earthquake-related motion. These areas require immediate isolation and inspection.

VULNERABLE AREAS: (Check all that apply) H1.	LOCATIONS (e.g., shop, outdoor shed, forensic lab)
☒ 1. HAZARDOUS MATERIALS / WASTE STORAGE AREA	Chemical Storage, Facility, Lab, Fluoride Building, CIP Building H2.
☒ 2. PROCESS LINES / PIPING	Water Treatment Plant H3.
☒ 3. LABORATORY	Lab H4.
☒ 4. WASTE TREATMENT AREA	CIP Building H5.

Identify mechanical systems vulnerable to releases / spills due to earthquake-related motion. These systems require immediate isolation and inspection.

VULNERABLE SYSTEMS: (Check all that apply) H6.	LOCATIONS
☒ 1. SHELVES, CABINETS AND RACKS	Warehouse Fluoride Building, Lab, Control Center, Warehouse H7.
☐ 2. TANKS (EMERGENCY SHUTOFF)	H8.
☒ 3. PORTABLE GAS CYLINDERS	Lab Warehouse Woodshop H9.
☒ 4. EMERGENCY SHUTOFF AND/OR UTILITY VALVES	Chemical Storage Facility, Control Center Lab, Fluoride Building H10.
☒ 5. SPRINKLER SYSTEMS	Chemical Storage Facility, Fluoride Building H11.
☒ 6. STATIONARY PRESSURIZED CONTAINERS (e.g., Propane dispensing tank)	Lab H12.

I. EMPLOYEE TRAINING

Explanation of Requirement: Employee training is required for all employees handling hazardous materials and hazardous wastes in day-to-day or clean-up operations including volunteers and/or contractors. Training must be:

- Provided within 6 months for new hires;
- Amended as necessary prior to change in process or work assignment;
- Given upon modification to the Emergency Response / Contingency Plan, and updated/refreshed annually for all employees.

Required content includes all of the following:

- Material Safety Data Sheets;
- Hazard communication related to health and safety;
- Methods for safe handling of hazardous substances;
- Fire hazards of materials / processes;
- Conditions likely to worsen emergencies;
- Coordination of emergency response;
- Notification procedures;
- Applicable laws and regulations;
- Communication and alarm systems;
- Personal protective equipment;
- Use of emergency response equipment (e.g. Fire extinguishers, respirators, etc.);
- Decontamination procedures;
- Evacuation procedures;
- Control and containment procedures;
- UST monitoring system equipment and procedures (if applicable).

INDICATE HOW EMPLOYEE TRAINING PROGRAM IS ADMINISTERED (Check all that apply) I1.

☒ 1. FORMAL CLASSROOM; ☒ 2. VIDEOS; ☒ 3. SAFETY / TAILGATE MEETINGS;

☒ 4. STUDY GUIDES / MANUALS (Specify): Ken Kerri Courses, OEM manuals I2.

☐ 5. OTHER (Specify): I3.

☐ 6. NOT APPLICABLE BECAUSE FACILITY HAS NO EMPLOYEES

Large Quantity Generator (LQG) Training Records: Large quantity hazardous waste generators (i.e., who generate more than 270 gallons/1,000 kilograms of hazardous waste per month) must retain written documentation of employee hazardous waste management training sessions which includes:

- A written outline/agenda of the type and amount of both introductory and continuing training that will be given to persons filling each job position having responsibility for the management of hazardous waste (e.g., labeling, manifesting, compliance with accumulation time limits, etc.).
- The name, job title, and date of training for each hazardous waste management training session given to an employee filling such a job position; and
- A written job description for each of the above job positions that describes job duties and the skills, education, or other qualifications required of personnel assigned to the position.
- Current employee training records must be retained until closure of the facility.
- Former employee training records must be retained at least three years after termination of employment.

J. LIST OF ATTACHMENTS

(Check one of the following) J1.

☐ 1. NO ATTACHMENTS ARE REQUIRED; *or*

☐ 2. THE FOLLOWING DOCUMENTS ARE ATTACHED: J2.

K. SIGNATURE / CERTIFICATION

Certification: Based on my inquiry of those individuals responsible for obtaining the information, I certify under penalty of law that I have personally examined and am familiar with the information submitted and believe the information is true, accurate, and complete, and that a copy is available on site.

SIGNATURE OF OWNER/OPERATOR	DATE SIGNED K1.
Jason W Dyogi	2/27/2018
NAME OF SIGNER (print) K2.	TITLE OF SIGNER K3.
Jason Willkom Dyogi	Water Quality Analyst II

APPENDIX E

Approved Sewer Capacity Availability Request

City of Los Angeles
Bureau of Engineering

Sewer Capacity Availability Request (SCAR)

To: Bureau of Sanitation
The following request is submitted to you on behalf of the applicant requesting to connect to the public sewer system. Please verify that the capacity exists at the requested location for the proposed developments shown below. The results are good for 180 days from the date the sewer capacity approval from the Bureau of Sanitation.

Job Address:	**1228 S. Bundy Dr**	Sanitation Scar ID:	**45-2459-0215**
Date Submitted	02/25/2015	Request Will Serve Letter?	No
BOE District:	West LA District		
Applicant:	City of Santa Monica		
Address:	1228 S. Bundy Drive	City :	Santa Monica
State:	CA	Zip:	90025
Phone:	(310) 458-2208	Fax:	(310) 820-3747
Email:	caline.evans@smgov.net	BPA No.	
S-Map:	520	Wye Map:	5468-3

SIMM Map - Maintenance Hole Locations

No.	Street Name	U/S MH	D/S MH	Diam. (in)	Approved Flow %	Notes
1	Bundy Drive	52011034	52011043	15	100.00	reassessment of sewer capacity useage for #W-521696.

Proposed Facility Description

No.	Proposed Use Description	Sewage Generation (GPD)	Unit	Qty	GPD
1	WATER TREATING & SERVICE EQUIP.	100	GPD	351,000	351,000
				Proposed Total Flow (gpd):	**351,000**

Remarks: 1] Approved for the maximum allowable capacity of 351,000 GPD (243.75 gpm). 2]. IWMD permit required.

Note: Results are good for 180 days from the date of approval by the Bureau of Sanitation

Date Processed: 11/07/2016 Expires On: 05/06/2017

Processed by: CHRIS DEMONBRUN
Bureau of Sanitation
Phone: 323-342-1562
Sanitation Status: Approved
Reviewed by: Emilio Lopez
on 11/02/2016

Submitted by: Anthony Munoz
Bureau of Engineering
West LA District
Phone:

Fees Collected	Yes	SCAR FEE (W:37 / QC:708)	$2,834.00
Date Collected	02/25/2015	SCAR Status:	**Completed**

Scar Request Number: 567

Attachment F: Proposed Monthly Monitoring Forms

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City of Santa Monica
Olympic Advanced Water Treatment Facility, Charnock Water Treatment Plant, and Arcadia Water Treatment Plant
Monitoring Requirements

Parameter	Unit	MCL	NL	Test Method	Analysis	Wells[5]										Charnock Water Treatment Plant			Olympic Advanced Water Treatment Facility				Arcadia Water Treatment Plant						
						SM#4	SM#8	SM#9	CH#13	CH#19	CH#20	CH#16	CH#18	ARC#4	ARC#5	Raw Water Equali-zation Tank	Combined GAC Effluent[2]	Filtered Water Tank Outlet	Greensand Filter Influent	Greensand Filter Effluent	UV-AOP Effluent	Combined GAC Effluent	Greensand Filter Effluent	Cartridge Filter Combined Effluent	Arcadia RO Combined Permeate before Bypass	Arcadia Decarb-onator Influent	Decarb-onator Tank Effluent	Arcadia Reservoir Influent	Arcadia Treated Effluent
General Process																													
pH			-		Certified Lab	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Weekly
Conductivity	µmhom/cm	900[1]	-		Certified Lab	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Weekly	-	-	-	-
Odor	TON	3[1]	-		Field Test	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Monthly
Alkalinity	mg/L as $CaCO_3$	-	-		Certified Lab	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Monthly
Total Hardness	mg/L as $CaCO_3$	-	-		Certified Lab	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Monthly
Aggressiveness Index			-		Certified Lab	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Monthly
Langlier Index		-	-		Certified Lab	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Monthly
Inorganics																													
Iron	µg/L	300[1]	-		Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	-	-	-	-	Weekly	-	-	Weekly	-	-	-	-	-	Monthly
Manganese	µg/L	50[1]	-		Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	-	-	-	-	Weekly	-	-	Weekly	-	-	-	-	-	Monthly
Chlorine Residual	mg/L		-		Field Test	-	-	-	-	-	-	-	-	-	-	-	-	Daily	-	-	-	-	-	-	-	-	-	-	-
Combined Chlorine	mg/L		-		Field Test	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Daily
Fluoride	mg/L	2	-		Certified Lab	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Every six months	-	Weekends and Holidays
Nitrate	mg/L as N	10	-	EPA 353.2	Certified Lab	Quarterly	Quarterly	Quarterly	Annually	Annually	Annually	Annually	Annually	Quarterly	Quarterly	-	Monthly	-	Monthly	-	-	Monthly[4]	-	-	-	-	-	-	Monthly
TDS	mg/L	500[1]	-		Certified Lab	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Monthly
Sulfate	mg/L	250[1]	-		Certified Lab	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Monthly	-	-	-	Monthly
Bacteriological																													
Total Coliform	P/A		-		Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	-	Weekly	-	-	-	-	-	Monthly	-	-	-	-	-	Monthly
HPC	cfu/ml		-		Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	-	Weekly	-	-	-	-	-	Monthly	-	-	-	-	-	Monthly
Radionucleides																													
Uranium	pCi/L	20	-		Certified Lab	-	-	-	-	Quarterly	-	-	-	-	-	-	-	-	-	-	-	-	-	Quarterly	Quarterly	-	-	-	Quarterly
VOCs																													
1,1-Dichloroethane	µg/L	5	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	Monthly	-	-	Weekly	-	Quarterly	Weekly	Weekly	-	Weekly	Weekly
1,1-Dichloroethylene	µg/L	6	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	Monthly	-	Weekly	Weekly	-	Quarterly	Weekly	Weekly	-	Weekly	Weekly
1,2,3-Trichloropropane	µg/L	0.005	-	SRL 524M-TCP	Certified Lab	Monthly	Monthly	Monthly	-	-	-	-	-	-	-	-	-	-	Monthly	-	-	Weekly	-	Quarterly	Weekly	Weekly	-	Weekly	Weekly
1,4-Dioxane	µg/L	-	1	EPA 522	Certified Lab	Monthly	Monthly	Monthly	Annually	Annually	Annually	Annually	Annually	Annually	Annually	-	-	-	Monthly	-	Weekly	Weekly	-	Quarterly	Weekly	Weekly	-	Weekly	Weekly
Carbon Tetrachloride	µg/L	0.5	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	Monthly	-	-	Weekly	-	Quarterly	Weekly	Weekly	-	Weekly	Weekly
Cis-1,2-Dichloroethylene	µg/L	6	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	Monthly	-	Weekly	Weekly	-	Quarterly	Weekly	Weekly	-	Weekly	Weekly
Tetrachloroethylene	µg/L	5	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	Monthly	-	Weekly	Weekly	-	Quarterly	Weekly	Weekly	-	Weekly	Weekly
Trichloroethylene	µg/L	5	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	Monthly	-	Weekly	Weekly	-	Quarterly	Weekly	Weekly	-	Weekly	Weekly
1,1,2-Trichloroethane	µg/L	5	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	-	-	-	-	-	-	-	-	-	-	Monthly	-	-	Weekly	-	Quarterly	Weekly	Weekly	-	Weekly	Monthly
1,2-Dichloroethane	µg/L	0.5	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	Monthly	-	-	Weekly	-	Quarterly	Weekly	Weekly	-	Weekly	Monthly
Benzene	µg/L	1	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	Monthly	-	-	Weekly	-	Quarterly	Weekly	Weekly	-	Weekly	Monthly
Methyl tert-Butyl Ether	µg/L	13	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	Monthly	-	-	Weekly	-	Quarterly	Weekly	Weekly	-	Weekly	Monthly
Perfluorooctanoic acid	µg/L	-	5.1	EPA 537.1	Certified Lab	Monthly	Monthly	Monthly	-	-	-	-	-	-	-	-	-	-	Monthly	-	-	Weekly	-	Quarterly	Weekly	-	-		Monthly
Trans-1,2-Dichloroethylene	µg/L	10	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	Monthly	-	-	Weekly	-	Quarterly	Weekly	Weekly	-	Weekly	Monthly
Vinyl Chloride	µg/L	0.5	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	Monthly	-	-	Weekly	-	Quarterly	Weekly	Weekly	-	Weekly	Monthly
Methylene Chloride	µg/L	5	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	-	-	-	-	-	Quarterly	-	Weekly	-	Weekly	Weekly
Diisopropyl Ether	-	-	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	-	-	-	-	-	Quarterly	-	Weekly	-	Weekly	Weekly
Ethyl tert-Butyl Ether	-	-	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	-	-	-	-	-	Quarterly	-	Weekly	-	Weekly	Weekly
Chloroform	-	-	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	-	-	-	-	-	Quarterly	-	Weekly	-	Weekly	Weekly
1,1,1-Trichloroethane	µg/L	200	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	-	-	-	-	-	Quarterly	-	Weekly	-	Weekly	Weekly
tert-Amyl Methyl Ether	-	-	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	-	-	-	-	-	Quarterly	-	Weekly	-	Weekly	Weekly
Bromodichloromethane	-	-	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	-	-	-	-	-	Quarterly	-	Weekly	-	Weekly	Weekly
Toluene	µg/L	150	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	-	-	-	-	-	Quarterly	-	Weekly	-	Weekly	Weekly
Dibromochloromethane	-	-	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	-	-	-	-	-	Quarterly	-	Weekly	-	Weekly	Weekly
Ethylbenzene	µg/L	300	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	-	-	-	-	-	Quarterly	-	Weekly	-	Weekly	Weekly
m&p-Xylene	µg/L	1750	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	-	-	-	-	-	Quarterly	-	Weekly	-	Weekly	Weekly
o-Xylene	-	-	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	-	-	-	-	-	Quarterly	-	Weekly	-	Weekly	Weekly
Bromoform	-	-	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	-	-	-	-	-	Quarterly	-	Weekly	-	Weekly	Weekly
tert-Butyl Alcohol	µg/L	-	12	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly[6]	Weekly[6]	Weekly[6]	-	-	-	-	-	Quarterly[6]	-	Weekly[6]	-	Weekly[6]	Weekly[6]

1. Secondary MCL
2. See Charnock GAC Filters monthly monitoring form spreadsheet for individual GAC filter monitoring requirements.

4. Sample 1 lead vessel following return to service.
5. For VOCs listed as quarterly frequency, VOCs detected at the source, at concentrations greater than the DLR, but less than the MCL or NL are analyzed quarterly; the frequency is increased to monthly for all VOCs detected at levels greater than the MCL or NL.
6. Collect sample only if MTBE is detected at any of the Charnock Wells.

	Olympic Production (mgal) *						Charnock Production (mgal)*								Other Wells (mgal)*		Arcadia Production (mgal)*						Finished Water Quality Chemical Dosages (gal)*				Water Quality Parameters**				
Date	SM#4	SM#8	SM#9	Olympic AWTF Influent Total	UV-AOP Effluent	GAC Effluent	CH#13	CH#19	CH#20	Filtered Wells Total	CH#16	CH#18	Unfiltered Wells Total	Charnock WTP Effluent Total	CWTF Effluent Free Cl Residual (mg/L)	ARC#4	ARC#5	Arcadia WTP Influent Total	RO Feed Tank Influent Total	Production from RO	Bypass Flow	Bypass %	Finished Water Production	Caustic Soda Applied	Sodium Hypochlorite Applied	Ammonium Sulfate Applied	Hydrofluoro-silicic Acid Applied	Conduc-tivity (umho/cm)	Turbidity (NTU)	pH	Fluoride (mg/L)	Total Chlorine (mg/L)
1																															
2																															
3																															
4																															
5																															
6																															
7																															
8																															
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Notes
*(Same Day 12pm-12am data)
***(Same Day 7:00 am data)

Comments:

Prepared By: _____ Date: _____

CITY OF SANTA MONICA
WATER QUALITY LABORATORY
MONTHLY VOC ANALYSIS SUMMARY OF "IN USE" WELLS
MONTH 20XX

SAMPLING DATE:
ANALYST:

Parameter	Units	RL	SM#4	SM#8	SM#9	ARC#4	ARC#5	CH#13	CH#16	CH#18	CH#19	CH#20
1,1-Dichloroethane	µg/L	0.5										
1,1-Dichloroethylene	µg/L	0.5										
1,2,3-Trichloropropane	µg/L	0.5										
1,4-Dioxane	µg/L	0.5										
Carbon Tetrachloride	µg/L	0.5										
Cis-1,2-Dichloroethylene	µg/L	0.5										
Tetrachloroethylene	µg/L	0.5										
Trichloroethylene	µg/L	0.5										
1,1,2-Trichloroethane	µg/L	0.5										
1,2-Dichloroethane	µg/L	0.5										
Benzene	µg/L	0.5										
Methyl tert-Butyl Ether	µg/L	1.0										
Perfluorooctanoic acid	µg/L	0.5										
Trans-1,2-Dichloroethylene	µg/L	0.5										
Vinyl Chloride	µg/L	0.5										
Methylene Chloride	µg/L	0.5										
Diisopropyl Ether	µg/L	0.5										
Ethyl tert-Butyl Ether	µg/L	0.5										
Chloroform	µg/L	0.5										
1,1,1-Trichloroethane	µg/L	0.5										
tert-Amyl Methyl Ether	µg/L	0.5										
Bromodichloromethane	µg/L	0.5										
Toluene	µg/L	0.5										
Dibromochloromethane	µg/L	0.5										
Ethylbenzene	µg/L	0.5										
m&p-Xylene	µg/L	0.5										
o-Xylene	µg/L	0.5										
Bromoform	µg/L	0.5										
tert-Butyl Alcohol	µg/L	2.0										

RL = Reporting Limit ND = Not Detected NA = Not Analyzed J = Estimated Value

Comments:

Prepared By: _____ Date: _____

CITY OF SANTA MONICA
WATER QUALITY LABORATORY
MONTHLY SUMMARY OF PROCESS VOCS
CHARNOCK WTP AND OLYMPIC AWTF
MONTH 20XX

			Charnock Water Treatment Plant											Olympic Advanced Water Treatment Facility										
Parameter	Units	RL	Raw Water Equalization Tank	Combined GAC Effluent					Filtered Water Tank Outlet					Greensand Filter Influent	UV-AOP Effluent					GAC Effluent				
Frequency			Monthly	Weekly					Weekly					Monthly	Weekly					Weekly				
Date Sampled																								
1,1-Dichloroethane	µg/L	0.5													-	-	-	-	-					
1,1-Dichloroethylene	µg/L	0.5																						
1,2,3-Trichloropropane	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-					
1,4-Dioxane	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-							-	-	-	-	-
Carbon Tetrachloride	µg/L	0.5													-	-	-	-	-					
Cis-1,2-Dichloroethylene	µg/L	0.5																						
Tetrachloroethylene	µg/L	0.5																						
Trichloroethylene	µg/L	0.5																						
1,1,2-Trichloroethane	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-					
1,2-Dichloroethane	µg/L	0.5													-	-	-	-	-					
Benzene	µg/L	0.5													-	-	-	-	-					
Methyl tert-Butyl Ether	µg/L	1.0													-	-	-	-	-	-	-	-	-	-
Perfluorooctanoic acid	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-					
Trans-1,2-Dichloroethylene	µg/L	0.5													-	-	-	-	-					
Vinyl Chloride	µg/L	0.5													-	-	-	-	-	-	-	-	-	-
Methylene Chloride	µg/L	0.5												-	-	-	-	-	-	-	-	-	-	-
Diisopropyl Ether	µg/L	0.5												-	-	-	-	-	-	-	-	-	-	-
Ethyl tert-Butyl Ether	µg/L	0.5												-	-	-	-	-	-	-	-	-	-	-
Chloroform	µg/L	0.5												-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	µg/L	0.5												-	-	-	-	-	-	-	-	-	-	-
tert-Amyl Methyl Ether	µg/L	0.5												-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	µg/L	0.5												-	-	-	-	-	-	-	-	-	-	-
Toluene	µg/L	0.5												-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	µg/L	0.5												-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	µg/L	0.5												-	-	-	-	-	-	-	-	-	-	-
m&p-Xylene	µg/L	0.5												-	-	-	-	-	-	-	-	-	-	-
o-Xylene	µg/L	0.5												-	-	-	-	-	-	-	-	-	-	-
Bromoform	µg/L	0.5												-	-	-	-	-	-	-	-	-	-	-
tert-Butyl Alcohol	µg/L	2.0												-	-	-	-	-	-	-	-	-	-	-

RL = Reporting Limit ND = Not Detected NA = Not Analyzed J = Estimated Value

Comments:

Prepared By: _____ Date: _____

CITY OF SANTA MONICA
WATER QUALITY LABORATORY
MONTHLY SUMMARY OF PROCESS VOCS
ARCADIA WTP
MONTH 20XX

Parameter	Units	RL	Arcadia Water Treatment Plant																						
			Cartridge Filter Combined Effluent	Arcadia RO Combined Permeate before Bypass					Arcadia Decarbonator Influent						Arcadia Reservoir Influent						Arcadia Treated Effluent				
Frequency			Quarterly	Weekly					Weekly						Weekly						Weekly				
Date Sampled																									
1,1-Dichloroethane	µg/L	0.5																							
1,1-Dichloroethylene	µg/L	0.5																							
1,2,3-Trichloropropane	µg/L	0.5																							
1,4-Dioxane	µg/L	0.5																							
Carbon Tetrachloride	µg/L	0.5																							
Cis-1,2-Dichloroethylene	µg/L	0.5																							
Tetrachloroethylene	µg/L	0.5																							
Trichloroethylene	µg/L	0.5																							
1,1,2-Trichloroethane	µg/L	0.5																							
1,2-Dichloroethane	µg/L	0.5																							
Benzene	µg/L	0.5																							
Methyl tert-Butyl Ether	µg/L	1.0																							
Perfluorooctanoic acid	µg/L	0.5							-	-	-	-	-												
Trans-1,2-Dichloroethylene	µg/L	0.5																							
Vinyl Chloride	µg/L	0.5																							
Methylene Chloride	µg/L	0.5		-	-	-	-	-																	
Diisopropyl Ether	µg/L	0.5		-	-	-	-	-																	
Ethyl tert-Butyl Ether	µg/L	0.5		-	-	-	-	-																	
Chloroform	µg/L	0.5		-	-	-	-	-																	
1,1,1-Trichloroethane	µg/L	0.5		-	-	-	-	-																	
tert-Amyl Methyl Ether	µg/L	0.5		-	-	-	-	-																	
Bromodichloromethane	µg/L	0.5		-	-	-	-	-																	
Toluene	µg/L	0.5		-	-	-	-	-																	
Dibromochloromethane	µg/L	0.5		-	-	-	-	-																	
Ethylbenzene	µg/L	0.5		-	-	-	-	-																	
m&p-Xylene	µg/L	0.5		-	-	-	-	-																	
o-Xylene	µg/L	0.5		-	-	-	-	-																	
Bromoform	µg/L	0.5		-	-	-	-	-																	
tert-Butyl Alcohol	µg/L	2.0		-	-	-	-	-																	

RL = Reporting Limit ND = Not Detected NA = Not Analyzed J = Estimated Value

Comments:

Prepared By: _____ Date: _____

CITY OF SANTA MONICA
WATER QUALITY LABORATORY
MONTHLY SUMMARY OF PROCESS VOCS
CHARNOCK GAC FILTERS
MONTH 20XX

Parameter	Units	RL	Lead Vessel #1					Lead Vessel #2					Lead Vessel #3					Lead Vessel #4					Lead Vessel #5				
Frequency[1]			Monthly					Monthly					Monthly					Monthly					Monthly				
Date Sampled																											
Port Sampled[1]																											
1,1-Dichloroethane	µg/L	0.5																									
1,1-Dichloroethylene	µg/L	0.5																									
Carbon Tetrachloride	µg/L	0.5																									
Cis-1,2-Dichloroethylene	µg/L	0.5																									
Tetrachloroethylene	µg/L	0.5																									
Trichloroethylene	µg/L	0.5																									
1,2-Dichloroethane	µg/L	0.5																									
Benzene	µg/L	0.5																									
Methyl tert-Butyl Ether	µg/L	1.0																									
Trans-1,2-Dichloroethylene	µg/L	0.5																									
Vinyl Chloride	µg/L	0.5																									
Nitrate	µg/L	0.5																									
Methylene Chloride	µg/L	0.5																									
Diisopropyl Ether	µg/L	0.5																									
Ethyl tert-Butyl Ether	µg/L	0.5																									
Chloroform	µg/L	0.5																									
1,1,1-Trichloroethane	µg/L	0.5																									
tert-Amyl Methyl Ether	µg/L	0.5																									
Bromodichloromethane	µg/L	0.5																									
Toluene	µg/L	0.5																									
Dibromochloromethane	µg/L	0.5																									
Ethylbenzene	µg/L	0.5																									
m&p-Xylene	µg/L	0.5																									
o-Xylene	µg/L	0.5																									
Bromoform	µg/L	0.5																									
tert-Butyl Alcohol	µg/L	2.0																									

1. Sample monthly at 41% port until VOCs are detected; then sample 73% port. Sample monthly at 73% port until VOCs are detected; then sample effluent port. Sample weekly at effluent port thereafter.

RL = Reporting Limit ND = Not Detected NA = Not Analyzed J = Estimated Value

Comments:

Prepared By: _____ Date: _____

CITY OF SANTA MONICA
WATER QUALITY LABORATORY
MONTHLY SUMMARY OF PROCESS VOCS
CHARNOCK GAC FILTERS
MONTH 20XX

Parameter	Units	RL	Lag Vessel #1					Lag Vessel #2					Lag Vessel #3					Lag Vessel #4					Lag Vessel #5				
Frequency[1]			Triggered					Triggered					Triggered					Triggered					Triggered				
Date Sampled																											
Port Sampled[1]																											
1,1-Dichloroethane	µg/L	0.5																									
1,1-Dichloroethylene	µg/L	0.5																									
Carbon Tetrachloride	µg/L	0.5																									
Cis-1,2-Dichloroethylene	µg/L	0.5																									
Tetrachloroethylene	µg/L	0.5																									
Trichloroethylene	µg/L	0.5																									
1,2-Dichloroethane	µg/L	0.5																									
Benzene	µg/L	0.5																									
Methyl tert-Butyl Ether	µg/L	1.0																									
Trans-1,2-Dichloroethylene	µg/L	0.5																									
Vinyl Chloride	µg/L	0.5																									
Nitrate	µg/L	0.5																									
Methylene Chloride	µg/L	0.5																									
Diisopropyl Ether	µg/L	0.5																									
Ethyl tert-Butyl Ether	µg/L	0.5																									
Chloroform	µg/L	0.5																									
1,1,1-Trichloroethane	µg/L	0.5																									
tert-Amyl Methyl Ether	µg/L	0.5																									
Bromodichloromethane	µg/L	0.5																									
Toluene	µg/L	0.5																									
Dibromochloromethane	µg/L	0.5																									
Ethylbenzene	µg/L	0.5																									
m&p-Xylene	µg/L	0.5																									
o-Xylene	µg/L	0.5																									
Bromoform	µg/L	0.5																									
tert-Butyl Alcohol	µg/L	2.0																									

1. Sample in lag vessel triggered based on VOC detection in combined GAC effluent.

RL = Reporting Limit ND = Not Detected NA = Not Analyzed J = Estimated Value

Comments:

Prepared By: _____ Date: _____

CITY OF SANTA MONICA
WATER QUALITY LABORATORY
MONTHLY SUMMARY OF PROCESS VOCS
OLYMPIC GAC FILTERS
MONTH 20XX

Parameter	Units	RL	Lead Vessel #1					Lead Vessel #2					Lead Vessel #3					Lead Vessel #4				
Frequency[1]			Monthly					Monthly					Monthly					Monthly				
Date Sampled																						
Port Sampled[1]																						
1,1-Dichloroethane	µg/L	0.5																				
1,1-Dichloroethylene	µg/L	0.5																				
1,2,3-Trichloropropane	µg/L	0.5																				
Carbon Tetrachloride	µg/L	0.5																				
Cis-1,2-Dichloroethylene	µg/L	0.5																				
Tetrachloroethylene	µg/L	0.5																				
Trichloroethylene	µg/L	0.5																				
1,1,2-Trichloroethane	µg/L	0.5																				
1,2-Dichloroethane	µg/L	0.5																				
Benzene	µg/L	0.5																				
Perfluorooctanoic acid	µg/L	0.5																				
Trans-1,2-Dichloroethylene	µg/L	0.5																				

1. Sample monthly at 30% port until VOCs are detected; then sample 70% port. Sample monthly at 70% port until VOCs are detected; then sample effluent port. Sample weekly at effluent port thereafter.

RL = Reporting Limit ND = Not Detected NA = Not Analyzed J = Estimated Value

Comments:

Prepared By: _____ Date: _____

CITY OF SANTA MONICA
WATER QUALITY LABORATORY
MONTHLY SUMMARY OF PROCESS VOCS
OLYMPIC GAC FILTERS
MONTH 20XX

Parameter	Units	RL	Lag Vessel #1					Lag Vessel #2					Lag Vessel #3					Lag Vessel #4				
Frequency[1]			Triggered					Triggered					Triggered					Triggered				
Date Sampled																						
Port Sampled[1]																						
1,1-Dichloroethane	µg/L	0.5																				
1,1-Dichloroethylene	µg/L	0.5																				
1,2,3-Trichloropropane	µg/L	0.5																				
Carbon Tetrachloride	µg/L	0.5																				
Cis-1,2-Dichloroethylene	µg/L	0.5																				
Tetrachloroethylene	µg/L	0.5																				
Trichloroethylene	µg/L	0.5																				
1,1,2-Trichloroethane	µg/L	0.5																				
1,2-Dichloroethane	µg/L	0.5																				
Benzene	µg/L	0.5																				
Perfluorooctanoic acid	µg/L	0.5																				
Trans-1,2-Dichloroethylene	µg/L	0.5																				

1. Sample in lag vessel triggered based on VOC detection in combined GAC effluent.

RL = Reporting Limit ND = Not Detected NA = Not Analyzed J = Estimated Value

Comments:

Prepared By: _____ Date: _____

CITY OF SANTA MONICA
WATER QUALITY LABORATORY
MONTHLY SUMMARY OF PROCESS DATA
MONTH 20XX

			Wells										Charnock WTP	Olympic AWTF							Arcadia WTP													
Parameter	Units	RL	SM#4	SM#8	SM#9	CH#13	CH#16	CH#18	CH#19	CH#20	ARC#4	ARC#5	Combined GAC Effluent	Greensand Filter Influent	Greensand Filter Effluent						Combined GAC Effluent	Greensand Filter Effluent					Cartridge Filter Combined Effluent	Arcadia RO Combined Permeate before Bypass						Decarb-onator Tank Effluent	Arcadia Treated Effluent					
Frequency[1]			Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Monthly	Monthly	Weekly						Monthly	Weekly					Quarterly	Weekly						Every Six Months	Weekly					
Date Sampled																																							
General																																							
pH			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Conductivity	µmhom/cm		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Odor	TON		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alkalinity	mg/L as CaCO3		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Hardness	mg/L as CaCO3		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aggressiveness Index			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Langlier Index			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inorganics																																							
Iron	µg/L	5.0											-	-							-						-	-	-	-	-	-	-	-		-	-	-	-
Manganese	µg/L	2.0											-	-							-						-	-	-	-	-	-	-	-		-	-	-	-
Chlorine Residual[2]	mg/L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Combined Chlorine[2]	mg/L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluoride	mg/L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrate	mg/L as N	0.2													-	-	-	-	-			-	-	-	-	-		-	-	-	-	-	-	-		-	-	-	-
TDS	mg/L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-
Sulfate	mg/L	5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-
Radionucleides																																							
Uranium	pCi/L		-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-		-	-	-	-

1. Refer to Permit Monitoring Requirements matrix for varying frequency based on analyte
2. See daily production log spreadsheet for concentration..
RL = Reporting Limit ND =

Comments:

Prepared By: _____ Date: _____

CITY OF SANTA MONICA
WATER QUALITY LABORATORY
MONTHLY SUMMARY OF BACTE DATA
IN-USE WELLS AND TREATMENT PLANTS
MONTH 20XX

		Wells										Charnock WTP					Olympic AWTF						Arcadia WTP	
Parameter	Units	SM#4	SM#8	SM#9	CH#13	CH#16	CH#18	CH#19	CH#20	ARC#4	ARC#5	GAC Effluent					Greensand Filter Effluent	GAC Effluent					Greensand Filter Effluent	Treated Effluent
Frequency		Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Weekly					Monthly	Weekly					Monthly	Monthly
Date Sampled																								
Total Coliform	P/A																							
HPC	cfu/ml																							

Comments:

Prepared By: _____

City of Santa Monica
Olympic Advanced Water Treatment Facility (AWTF)
Monthly Monitoring Report

Monitoring Requirements

		Location																
Parameter	Abbreviation	SM-4	SM-8	SM-9	AWTF Influent	UV-AOP Effluent	GAC Effluent	Charnock	Arcadia	Blended RO Influent	RO Permeate	Decarbonator Influent	Chlorinated Decarb Effluent	Finished Water	Test Method	MCL	NL	Unit
1,1-Dichloroethane	1,1-DCA	Monthly	Monthly	Monthly	Monthly	Weekly	Weekly	Monthly	Monthly	Weekly	Weekly	Weekly	Weekly	Weekly	EPA 524.2	5		µg/L
1,1-Dichloroethylene	1,1-DCE	Monthly	Monthly	Monthly	Monthly	Weekly	Weekly	Monthly	Monthly	Weekly	Weekly	Weekly	Weekly	Weekly	EPA 524.2	6		µg/L
1,2,3-Trichloropropane	1,2,3-TCP	Monthly	Monthly	Monthly	Monthly	Weekly	Weekly			Weekly	Weekly	Weekly	Weekly	Weekly	SRL 524M-TCP	0.005		µg/L
1,4-Dioxane	1,4-D	Monthly	Monthly	Monthly	Monthly	Weekly	Weekly			Weekly	Weekly	Weekly	Weekly	Weekly	EPA 522		1	µg/L
Carbon Tetrachloride		Monthly	Monthly	Monthly	Monthly	Weekly	Weekly	Monthly	Monthly	Weekly	Weekly	Weekly	Weekly	Weekly	EPA 524.2	0.5		µg/L
Cis-1,2-Dichloroethylene	Cis-1,2-DCE	Monthly	Monthly	Monthly	Monthly	Weekly	Weekly	Monthly	Monthly	Weekly	Weekly	Weekly	Weekly	Weekly	EPA 524.2	6		µg/L
Tetrachloroethylene	PCE	Monthly	Monthly	Monthly	Monthly	Weekly	Weekly	Monthly	Monthly	Weekly	Weekly	Weekly	Weekly	Weekly	EPA 524.2	5		µg/L
Trichloroethylene	TCE	Monthly	Monthly	Monthly	Monthly	Weekly	Weekly	Monthly	Monthly	Weekly	Weekly	Weekly	Weekly	Weekly	EPA 524.2	5		µg/L
1,1,2-Trichloroethane		Monthly	Monthly	Monthly	Monthly	Weekly	Weekly			Weekly	Weekly	Weekly	Weekly	Monthly	EPA 524.2	5		µg/L
1,2-Dichloroethane	1,2-DCE	Monthly	Monthly	Monthly	Monthly	Weekly	Weekly	Monthly	Monthly	Weekly	Weekly	Weekly	Weekly	Monthly	EPA 524.2	0.5		µg/L
Benzene	BNZ	Monthly	Monthly	Monthly	Monthly	Weekly	Weekly	Monthly	Monthly	Weekly	Weekly	Weekly	Weekly	Monthly	EPA 524.2	1		µg/L
Methyl tert-Butyl Ether	MTBE	Monthly	Monthly	Monthly	Monthly	Weekly	Weekly	Monthly	Monthly	Weekly	Weekly	Weekly	Weekly	Monthly	EPA 524.2	13		µg/L
Perfluorooctanoic acid	PFOA	Monthly	Monthly	Monthly	Monthly	Weekly	Weekly			Weekly	Weekly	Weekly	Weekly	Monthly	EPA 537.1		5.1	µg/L
Trans-1,2-Dichloroethylene	Trans-1,2-D(	Monthly	Monthly	Monthly	Monthly	Weekly	Weekly	Monthly	Monthly	Weekly	Weekly	Weekly	Weekly	Monthly	EPA 524.2	10		µg/L
Vinyl Chloride	VC	Monthly	Monthly	Monthly	Monthly	Weekly	Weekly			Weekly	Weekly	Weekly	Weekly	Monthly	EPA 524.2	0.5		µg/L
Nitrate		Monthly	Monthly	Monthly	Monthly	Weekly	Weekly, 1 vessel post-GAC return to service			Weekly	Weekly	Weekly	Weekly	Monthly	EPA 353.2	10		mg/L as N
Methylene Chloride								Monthly	Monthly	Weekly	Weekly	Weekly	Weekly	Monthly	EPA 524.2	5		µg/L
Diisopropyl Ether	DIPE							Monthly	Monthly	Weekly	Weekly	Weekly	Weekly	Monthly	EPA 524.2			
Ethyl tert-Butyl Ether	ETBE							Monthly	Monthly	Weekly	Weekly	Weekly	Weekly	Monthly	EPA 524.2			
Chloroform								Monthly	Monthly	Weekly	Weekly	Weekly	Weekly	Monthly	EPA 624.1			
1,1,1-Trichloroethane	1,1,1-TCE							Monthly	Monthly	Weekly	Weekly	Weekly	Weekly	Monthly	EPA 524.2	200		µg/L
tert-Amyl Methyl Ether	TAME							Monthly	Monthly	Weekly	Weekly	Weekly	Weekly	Monthly	EPA 524.2			
Bromodichloromethane	BDCM							Monthly	Monthly	Weekly	Weekly	Weekly	Weekly	Monthly	EPA 524.2			
Toluene								Monthly	Monthly	Weekly	Weekly	Weekly	Weekly	Monthly	EPA 524.2	150		µg/L
Dibromochloromethane	CDBM							Monthly	Monthly	Weekly	Weekly	Weekly	Weekly	Monthly	EPA 524.2			
Ethylbenzene	EB							Monthly	Monthly	Weekly	Weekly	Weekly	Weekly	Monthly	EPA 524.2	300		µg/L
m&p-Xylene								Monthly	Monthly	Weekly	Weekly	Weekly	Weekly	Monthly	EPA 524.2	1750		µg/L
o-Xylene	OXE							Monthly	Monthly	Weekly	Weekly	Weekly	Weekly	Monthly	EPA 524.2			
Bromoform	MBR							Monthly	Monthly	Weekly	Weekly	Weekly	Weekly	Monthly	EPA 524.2			
tert-Butyl Alcohol	TBA							Monthly	Monthly	Weekly	Weekly	Weekly	Weekly	Monthly	EPA 524.2		12	µg/L

AWTF: Advanced Water Treatment Facility
MCL: Maximum contaminant level
NL: Notification level

CITY OF SANTA MONICA WATER TREATMENT PLANT
MONTHLY OPERATIONAL REPORT
MONTH, 20XX

	Olympic Production (mgal) *				Charnock Production (mgal)*								Other Wells (mgal)*		Filtered Olympic Prod. (mgal)*		Total Plant Production (mgal)*				Finished WQ (disinf & F) (gal)*			Water Quality Parameters**				
Date	SM#4	SM#8	SM#9	Blended Olympic Wells Total[1]	CH#13	CH#19	CH#20	Filtered Wells Total	CH#16	CH#18	Unfiltered Wells Total	Ratio Filtered/ Charnock Total	ARC#4	ARC#5	UV-AOP Eff	Post GAC	Production from RO	Bypass Flow	Bypass %	Finished Water Production	Hydrofluoro-silicic Acid Applied	Sodium Hypochlorite Applied	Caustic Soda Applied	Conduc-tivity (umho/cm)	Turbidity (NTU)	pH	Fluoride (mg/L)	Total Chlorine (mg/L)
1																												
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												
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26																												
27																												
28																												
29																												
30																												

NOTES:
*(Same Day 12pm-12am data)
***(Same Day 7:00 am data)

COMMENTS:

CITY OF SANTA MONICA
WATER QUALITY LABORATORY
MONTHLY VOC ANALYSIS SUMMARY OF "IN USE" WELLS
MONTH 20XX

		RL	SM-4	SM-8	SM-9	ARC#4	ARC#5	CH#13	CH#16	CH#18	CH#19	CH#20
Date Sampled												
Port Sampled												
1,1-Dichloroethane	ug/L											
1,1-Dichloroethylene	ug/L											
1,2,3-Trichloropropane	ug/L											
1,4-Dioxane	ug/L											
Carbon Tetrachloride	ug/L											
Cis-1,2-Dichloroethylene	ug/L											
Tetrachloroethylene	ug/L											
Trichloroethylene	ug/L											
Methylene Chloride	ug/L											
Trans-1,2-Dichloroethylene	ug/L											
Methyl tert-Butyl Ether	ug/L											
Diisopropyl Ether	ug/L											
Ethyl tert-Butyl Ether	ug/L											
Chloroform	ug/L											
1,1,1-Trichloroethane	ug/L											
Benzene	ug/L											
1,2-Dichloroethane	ug/L											
tert-Amyl Methyl Ether	ug/L											
Bromodichloromethane	ug/L											
Toluene	ug/L											
Dibromochloromethane	ug/L											
Ethylbenzene	ug/L											
m&p-Xylene	ug/L											
o-Xylene	ug/L											
Bromoform	ug/L											
tert-Butyl Alcohol	ug/L											

RL = Reporting Limit ND = Not Detected J = Estimated Value AWTF = Advanced Water Treatment Facility Inf = Influent

Comments: 1) VOA samples including TBA were analyzed by the in-house lab.

CITY OF SANTA MONICA
WATER QUALITY LABORATORY
MONTHLY SUMMARY OF PROCESS VOCS
MONTH 20XX

			Olympic Wells			Charnock Unit		Arcadia Water Treatment Plant																							
		RL	SM-4	SM-8	SM-9	Raw Water EQ Tank	Charnock WTP Effluent	UV/AOP Influent	UV/AOP Influent	UV/AOP Effluent				GAC Effluent				Blended RO Influent				RO Permeate				Decarbonator Effluent				Arcadia Reservoir Treated Effluent			
Frequency			Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Weekly				Weekly				Weekly				Weekly				Weekly				Weekly			
Date Sampled																															
Port Sampled																															
1,1-DCA	ug/L																														
1,1-DCE	ug/L																														
1,2,3-TCP	ug/L																														
1,4-D	ug/L																														
Carbon Tetrachloride	ug/L																														
Cis-1,2-DCE	ug/L																														
TCE	ug/L																														
PCE	ug/L																														
Methylene Chloride	ug/L																														
trans-1,2-DCE	ug/L																														
MTBE	ug/L																														
DIPE	ug/L																														
ETBE	ug/L																														
Chloroform	ug/L																														
1,1,1-TCE	ug/L																														
Benzene	ug/L																														
1,2-DCE	ug/L																														
TAME	ug/L																														
BDCM	ug/L																														
Toluene	ug/L																														
CDBM	ug/L																														
EB	ug/L																														
m&p-Xylene	ug/L																														
OXE	ug/L																														
MBR	ug/L																														
TBA	ug/L																														

RL = Reporting Limit ND = Not Detected J = Estimated Value AWTF = Advanced Water Treatment Facility Inf = Influent

Comments:

City of Santa Monica -- Water Division
Daily Theoretical Blending Calculation
MONTH, 20XX

1,4-Dioxane

Theoretical blend of 1,4-Dioxane at AWTF

			Combined Olympic Wells		Combined Charnock Wells		Combined Arcadia Wells		Post-GAC Olympic Wells		Blended RO Influent		Decarbonator Influent		Decarbonator Effluent		AWTF 5-MG Reservoir	
Date/ Time	Sampler	Sample ID	MGPD	1,4-D (ug/L)	MGPD	1,4-D (ug/L)	MGPD	1,4-D (ug/L)	MGPD	1,4-D (ug/L)	MGPD	1,4-D (ug/L)	MGPD	1,4-D (ug/L)	MGPD	1,4-D (ug/L)	Calculated 1,4-D (ug/L)	
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
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29																		
30																		

RL = Reporting Limit ND = Not Detected J = Estimated Value AWTF = Advanced Water Treatment Facility

City of Santa Monica -- Water Division
Monthly Post-GAC Nitrate Monitoring
MONTH, 20XX
Nitrate

Theoretical blend of Nitrate at AWTF

			Combined Olympic Wells		Post-GAC Olympic Wells			AWTF 5-MG Reservoir	
Date/ Time	Sampler	Sample ID	MGPD	Nitrate (mg/L as N)	MGPD	Sampled train	Nitrate (mg/L as N)	Calculated nitrate (mg/L as N)	
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

RL = Reporting Limit ND = Not Detected J = Estimated Value AWTF = Advanced Water Treatment Facility

Appendix D: Vapor Phase GAC Permit

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Drive, Diamond Bar, CA 91765

PERMIT TO CONSTRUCT

Granted as of 11/5/2010

ID 61057

Legal Owner
or Operator:

SANTA MONICA CITY
1228 S BUNDY DR
LOS ANGELES, CA 90025

Equipment Location: 1228 S BUNDY DR, LOS ANGELES, CA 90025-1102

Equipment Description :

GROUNDWATER TREATMENT SYSTEM CONSISTING OF:

1. AIR BLOWER (DC-BLC-1201), 30 H.P., MAXIMUM 9000 CFM TO DECARBONATOR (DC-DC-1201).

2. DECARBONATOR TOWER (DC-DC-1201), HUNGERFORD AND TERRY INC. OR EQUIVALENT, 11' DIA. X 15' – 4" H., WITH 2" NOMINAL DIAMETER X 5' PACKING MATERIAL BED, POLYETHYLENE OR PVC TYPE, 3,100 GPM INFLUENT WATER FROM THE REVERSE OSMOSIS (RO) PERMEATE OR BYPASS STREAM, A PRESSURE DIFFERENTIAL INDICATOR FOR THE PACKING BED, AND WITH SEALED EFFLUENT TANK VENTING TO THE DECARBONATOR.

3. DECARBONATOR EXHAUST DUCT AIR HEATER (DC-HTR-1001), INDEECO OR BRASCH, 63 KW, AND WITH AN AUTOMATIC TEMPERATURE CONTROLS.

4. DUAL-BED CARBON ADSORBER, IN SERIES, BAY PRODUCTS OR EQUIVALENT, FRP VOC CONTROL SYSTEM, EACH BED 12' DIA. X 3' H., WITH TOTAL COMBINED 20,000 POUNDS OF GRANULAR ACTIVATED CARBON (GAC).

5. EXHAUST STACK, 4' DIA. X 35' HIGH (COMMON WITH OTHER EXISTING GAC SYSTEM).

Conditions :

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THE OWNER OR OPERATOR OF THIS EQUIPMENT SHALL PROVIDE TO SCAQMD THE FINAL EQUIPMENT SPECIFICATIONS, PRIOR TO INSTALLATION OF THE EQUIPMENT (MAKE, MODEL, DIMENSIONS, SIZE AND MAXIMUM CAPACITY).

ORIGINAL

4. THIS EQUIPMENT SHALL NOT BE USED TO TREAT THE WATER FROM THE REVERSE OSMOSIS (RO) PERMEATE OR BYPASS, CONTAMINATED WITH ANY CARCINOGENIC COMPOUNDS LISTED IN TABLE-I, UNDER RULE 1401, AMENDED ON JUNE 5, 2009, EXCEPT TRICHLOROETHYLENE (TCE) AND TETRACHLOROETHYLENE (PCE).

5. A FLOW METER SHALL BE INSTALLED AND MAINTAINED FOR ALL WATER INFLUENT LINE(S) TO THE DECARBONATOR TO DETERMINE THE TOTAL COMBINED FLOW RATE (GPM), TREATED BY THE DECARBONATOR (DC-DC-1201).

6. THE MAXIMUM FLOW RATE OF INFLUENT WATER TO BE TREATED BY THE DECARBONATOR SHALL NOT EXCEED 3,100 GALLONS PER MINUTE.

7. DEACARBONATOR INFLUENT WATER ANALYSIS FOR THE CONTAMINANTS CONCENTRATION SHALL BE MEASURED AND RECORDED ON A MONTHLY BASIS, FOR THE FIRST THREE MONTHS AND, THEREAFTER, ON A QUARTERLY BASIS. ANALYTICAL RESULTS SHALL BE RECORDED AND KEPT ON FILE.

8. THE INFLUENT WATER CONCENTRATION TO THE DECARBONATOR SHALL NOT EXCEED THE FOLLOWING LIMITS:

TRICHLOROETHYLENE (TCE)	45 µG/L
TETRACHLOROETHYLENE (PCE)	13.5 µG/L
1,1-DICHLOROETHYLENE (1,1-DCE)	5.3 µG/L

9. WHENEVER THE DECARBONATOR IS IN SERVICE, THE EXHAUST FROM THE DECARBONATOR SHALL BE TREATED BY THE DUAL-BED CARBON ADSORBER CONTAINING AT LEAST TOTAL 20,000 LBS OF GRANULAR ACTIVATED CARBON.

10. DECARBONATOR EXHAUST DUCT AIR HEATER SHALL BE OPERATED IN A MANNER SUCH THAT DUAL-BED CARBON ADSORBER INLET AIR STREAM TEMPERATURE IS MAINTAINED BELOW 90 DEGREES FAHRENHEIT OR AS APPROVED BY THE DISTRICT. TEMPERATURE READING SHALL BE RECORDED ONCE A MONTH AND KEPT ON FILE.

11. A FLOW INDICATOR SHALL BE INSTALLED AND MAINTAINED AT THE INLET STREAM TO THE DUAL-BED CARBON ADSORBER TO INDICATE THE TOTAL AIR FLOW RATE IN STANDARD CUBIC FEET PER MINUTE (SCFM). THE TOTAL FLOW RATE SHALL NOT EXCEED 9,000 SCFM. IN CASE A PRESSURE SENSOR DEVICE IS USED INSTEAD OF THE FLOW INDICATOR, A CONVERSION CHART SHALL BE AVAILABLE TO INDICATE THE CORRESPONDENT FLOW RATE (IN SCFM) TO THE PRESSURE READING. THE FLOW RATE MEASURED SHALL BE RECORDED ONCE A WEEK FOR THE FIRST MONTH AND MONTHLY, THEREAFTER.

12. THE ACTIVATED CARBON USED IN THE ADSORBER SHALL HAVE A CTC NO. NOT LESS THAN 60% AS MEASURED BY ASTM METHOD D3467.

13. GRAB SAMPLES FROM THE CARBON ADSORBER OUTLET SHALL BE TAKEN ONCE A QUARTER AND ANALYZED FOR TRICHLOROETHYLENE (TCE) & PERCHLOROETHYLENE (PCE) CONCENTRATION (PPBV). ANALYSIS SHALL BE CONDUCTED USING EPA METHOD TO-15 OR OTHER METHOD APPROVED BY SCAQMD. RESULTS SHALL BE RECORDED.

14. WHEN TCE AND PCE CONCENTRATION RESULTS FOR THE CARBON ADSORBER OUTLET IS EQUAL TO OR GREATER THAN 80 PPBV FOR TCE OR 18 PPBV FOR PCE, THEN CARBON SHALL BE REPLACED WITH FRESH CARBON. RECORDS FOR THE TCE AND PCE CONCENTRATIONS AND CARBON CHANGE OVER DATE(S) SHALL BE KEPT AND MAINTAINED ON FILE.

15. THE OPERATOR SHALL SUBMIT IN WRITING THE RESULTS FOR THE INFLUENT WATER ANALYSIS, FLOW RATE (GPM), GAC INLET-AIR TEMPERATURE, FLOW RATE (SCFM), AND GAC OUTLET CONCENTRATIONS (TCE & PCE) READINGS, FOR THE FIRST YEAR OF OPERATION. THE RESULTS SHALL BE SUBMITTED WITH IN 45 DAYS, FROM ONE YEAR OF EQUIPMENT START-UP, TO THE ATTENTION OF: SCAQMD, REFINERY AND WASTE MANAGEMENT PERMITTING, 21865 COPLEY DRIVE, DIAMOND BAR, CA 91765. THE SUBMITTAL SHALL INCLUDE A COPY OF THE ACTIVE PERMIT.

16. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR AT LEAST TWO YEARS AND MADE AVAILABLE TO SCAQMD PERSONNEL UPON REQUEST.

PERMIT TO CONSTRUCT

Approval or denial of this application for permit to operate the above equipment will be made after an inspection to determine if the equipment has been constructed in accordance with the approved plans and specifications and if the equipment can be operated in compliance with all Rules of the South Coast Quality Management District.

Please notify GAURANG RAWAL at (909) 396 - 2543 when construction of equipment is complete.

This Permit to Construct is based on plans, specifications, and data submitted as it pertains to the release of air contaminants and control measures to reduce air contaminants. No approval or opinion concerning safety and other factors in design, construction or operation of equipment is expressed or implied.

This Permit to Construct shall serve as a temporary Permit to operate provided the Executive Officer is given prior notice of such intent to operate.

This Permit to Construct will become invalid if the Permit to Operate is denied or if the application is cancelled. This PERMIT TO CONSTRUCT SHALL EXPIRE ONE YEAR FROM THE DATE OF ISSUANCE unless an extension is granted by the Executive Officer.

By Dorris M Bailey

DMB/GR01

DORRIS M.BAILEY
Principal office Assistant

ORIGINAL

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Drive, Diamond Bar, CA 91765

PERMIT TO CONSTRUCT

Granted as of 11/5/2010
ID 61057

Legal Owner
or Operator:

SANTA MONICA CITY
1228 S BUNDY DR
LOS ANGELES, CA 90025

Equipment Location: 1228 S BUNDY DR, LOS ANGELES, CA 90025-1102

Equipment Description :

MODIFICATION OF THE AIR POLLUTION CONTROL SYSTEM (D64015) CONSISTING OF:

1. ACTIVATED CARBON ADSORBER (A), DUAL BED, WITH 12' DIA. X 3' H. OF CARBON IN EACH BED.

2. ACTIVATED CARBON ADSORBER (B), DUAL BED, WITH 12' DIA. X 3' H. OF CARBON IN EACH BED.

3 TWO DUCT GAS HEATERS, 500,000 BTU PER HOUR EACH.

4. THREE BLOWERS, 25 H.P. EACH.

5. STACK 3' DIA. X 35' H.

BT THE ADDITION OF;

6. AIR BLOWER (DC-BLC-1101), 30 H.P., MAXIMUM 9000 CFM TO DECARBONATOR (DC-DC-1101).

7. DECARBONATOR TOWER (DC-DC-1101), HUNGERFORD AND TERRY INC. OR EQUIVALENT, 11' DIA. X 15' – 4" H., WITH 2" NOMINAL DIAMETER X 5' PACKING MATERIAL BED, POLYETHYLENE OR PVC TYPE, 3,100 GPM INFLUENT WATER FROM THE REVERSE OSMOSIS (RO) PERMEATE OR BYPASS STREAM, A PRESSURE DIFFERENTIAL INDICATOR FOR THE PACKING BED, AND WITH SEALED EFFLUENT TANK VENTING TO THE DECARBONATOR.

BY THE REPLACEMENT OF ITEM NO. 3 WITH;

8. TWO DUCT HEATERS, EACH BRASCH OR EQUIVALENT, 90 KW, AND WITH AN AUTOMATIC TEMPERATURE CONTROLS.

AND WITH CORRECTED STACK DIMENSION,

9. EXHAUST STACK, 4' DIA. X 35' HIGH (COMMON WITH OTHER NEW GAC SYSTEM).

ORIGINAL

PERMIT TO CONSTRUCT

Conditions :

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THE OWNER OR OPERATOR OF THIS EQUIPMENT SHALL PROVIDE TO SCAQMD THE EQUIPMENT SPECIFICATIONS (MAKE, MODEL, DIMENSIONS, SIZE AND MAXIMUM CAPACITY) THAT WILL BE USED FOR THE FINAL PERMIT TO OPERATE.

4. THIS EQUIPMENT SHALL NOT BE USED TO TREAT THE WATER FROM THE REVERSE OSMOSIS (RO) PERMEATE OR BYPASS, CONTAMINATED WITH ANY CARCINOGENIC COMPOUNDS LISTED IN TABLE-I, UNDER RULE 1401, AMENDED ON JUNE 5, 2009, EXCEPT TRICHLOROETHYLENE (TCE) AND TETRACHLOROETHYLENE (PCE).

5. A FLOW METER SHALL BE INSTALLED AND MAINTAINED FOR ALL WATER INFUENT LINE(S) TO THE DECARBONATOR TO DETERMINE THE TOTAL COMBINED FLOW RATE (GPM), TREATED BY THE DECARBONATOR (DC-DC-1101).

6. THE MAXIMUM FLOW RATE OF INFLUENT WATER FLOW TO BE TREATED BY THE DECARBONATOR (SUM OF FLOW RATE FROM EACH LINE) SHALL NOT EXCEED 3,100 GALLONS PER MINUTE.

7. DEACARBONATOR INFLUENT WATER ANALYSIS FOR THE CONTAMINANTS CONCENTRATION SHALL BE MEASURED AND RECORDED ON A MONTHLY BASIS, FOR THE FIRST THREE MONTHS AND , THEREAFTER, ON A QUARTERLY BASIS. ANALYTICAL RESULTS SHALL BE RECORDED AND KEPT ON FILE.

8. THE INFLUENT WATER CONCENTRATION TO THE DECARBONATOR SHALL NOT EXCEED THE FOLLOWING LIMITS:

TRICHLOROETHYLENE (TCE)	45 µG/L
TETRACHLOROETHYLENE (PCE)	13.5 µG/L
1,1-DICHLOROETHYLENE (1,1-DCE)	5.3 µG/L

9. WHENEVER THE DECARBONATOR IS IN SERVICE, THE EXHAUST (9,000 SCFM) FROM THE DECARBONATOR SHALL ONLY BE TREATED BY THE DEDICATED DUAL-BED CARBON ADSORBER (B), CONTAINING AT LEAST TOTAL 20,000 LBS OF GRANULAR ACTIVATED CARBON.

10. DECARBONATOR EXHAUST DUCT AIR HEATER SHALL BE OPERATED IN A MANNER SUCH THAT DUAL-BED CARBON ADSORBER INLET AIR STREAM TEMPERATURE IS MAINTAINED BELOW 90 DEGREES FAHRENHEIT OR AS APPROVED BY THE DISTRICT. TEMPERATURE READING SHALL BE RECORDED ONCE A MONTH AND KEPT ON FILE.

ORIGINAL

11. A FLOW INDICATOR SHALL BE INSTALLED AND MAINTAINED AT THE INLET STREAM TO THE DUAL-BED CARBON ADSORBER TO INDICATE THE TOTAL AIR FLOW RATE IN STANDARD CUBIC FEET PER MINUTE (SCFM). THE TOTAL FLOW RATE SHALL NOT EXCEED 9,000 SCFM. IN CASE A PRESSURE SENSOR DEVICE IS USED INSTEAD OF THE FLOW INDICATOR, A CONVERSION CHART SHALL BE AVAILABLE TO INDICATE THE CORRESPONDENT FLOW RATE (IN SCFM) TO THE PRESSURE READING. THE FLOW RATE MEASURED SHALL BE RECORDED ONCE A WEEK FOR THE FIRST MONTH AND MONTHLY, THEREAFTER.

12. EXHAUST FROM THE EXISTING MECHANICAL SURFACE AERATION SYSTEM (D64017) SHALL BE TREATED BY THE DESIGNATED HEATER AND CARBON ADSORBER (TRAIN A).

13. THE ACTIVATED CARBON USED IN THE ADSORBER SHALL HAVE A CTC NO. NOT LESS THAN 60% AS MEASURED BY ASTM METHOD D3467.

14. GRAB SAMPLES FROM THE CARBON ADSORBER OUTLET SHALL BE TAKEN ONCE A QUARTER AND ANALYZED FOR TRICHOLROETHYLENE (TCE) & PERCHLOROETHYLENE (PCE) CONCENTRATION (PPBV). ANALYSIS SHALL BE CONDUCTED USING EPA METHOD TO-15 OR OTHER METHOD APPROVED BY SCAQMD. RESULTS SHALL BE RECORDED.

15. WHEN TCE AND PCE CONCENTRATION RESULTS FOR THE CARBON ADSORBER OUTLET IS EQUAL TO OR GREATER THAN 80 PPBV FOR TCE OR 18 PPBV FOR PCE, THEN CARBON SHALL BE REPLACED WITH FRESH CARBON. RECORDS FOR THE TCE AND PCE CONCENTRATIONS AND CARBON CHANGE OVER DATE(S) SHALL BE KEPT AND MAINTAINED ON FILE.

16. THE OPERATOR SHALL SUBMIT IN WRITING THE RESULTS FOR THE INFLUENT WATER ANALYSIS, FLOW RATE (GPM), GAC INLET-AIR TEMPERATURE, FLOW RATE (SCFM), AND GAC OUTLET CONCENTRATIONS (TCE & PCE) READINGS, FOR THE FIRST YEAR OF OPERATION. THE RESULTS SHALL BE SUBMITTED WITHIN 45 DAYS, FROM ONE YEAR OF EQUIPMENT START-UP, TO THE ATTENTION OF: SCAQMD, REFINERY AND WASTE MANAGEMENT PERMITTING, 21865 COPLEY DRIVE, DIAMOND BAR, CA 91765. THE SUBMITTAL SHALL INCLUDE A COPY OF THE ACTIVE PERMIT.

17. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR AT LEAST TWO YEARS AND MADE AVAILABLE TO SCAQMD PERSONNEL UPON REQUEST.

PERMIT TO CONSTRUCT

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Dorris M Bailey

By_____
DORRIS M.BAILEY
Principal office Assistant

DMB/GR01

ORIGINAL

Appendix E: Proposed Monthly Monitoring Forms

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City of Santa Monica
Olympic Advanced Water Treatment Facility, Charnock Water Treatment Plant, and Arcadia Water Treatment Plant
Monitoring Requirements

Parameter	Unit	MCL	NL	Test Method	Analysis	Wells[5]										Charnock Water Treatment Plant			Olympic Advanced Water Treatment Facility				Arcadia Water Treatment Plant						
						SM#4	SM#8	SM#9	CH#13	CH#19	CH#20	CH#16	CH#18	ARC#4	ARC#5	Raw Water Equali-zation Tank	Combined GAC Effluent[2]	Filtered Water Tank Outlet	Greensand Filter Influent	Greensand Filter Effluent	UV-AOP Effluent	Combined GAC Effluent	Greensand Filter Effluent	Cartridge Filter Combined Effluent	Arcadia RO Combined Permeate before Bypass	Arcadia Decarb-onator Influent	Decarb-onator Tank Effluent	Arcadia Reservoir Influent	Arcadia Treated Effluent
General Process																													
pH			-		Certified Lab	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Weekly
Conductivity	µmhom/cm	900[1]	-		Certified Lab	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Weekly	-	-	-	-
Odor	TON	3[1]	-		Field Test	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Monthly
Alkalinity	mg/L as $CaCO_3$	-	-		Certified Lab	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Monthly
Total Hardness	mg/L as $CaCO_3$	-	-		Certified Lab	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Monthly
Aggressiveness Index			-		Certified Lab	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Monthly
Langlier Index		-	-		Certified Lab	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Monthly
Inorganics																													
Iron	µg/L	300[1]	-		Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	-	-	-	-	Weekly	-	-	Weekly	-	-	-	-	-	Monthly
Manganese	µg/L	50[1]	-		Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	-	-	-	-	Weekly	-	-	Weekly	-	-	-	-	-	Monthly
Chlorine Residual	mg/L		-		Field Test	-	-	-	-	-	-	-	-	-	-	-	-	Daily	-	-	-	-	-	-	-	-	-	-	-
Combined Chlorine	mg/L		-		Field Test	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Daily
Fluoride	mg/L	2	-		Certified Lab	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Every six months	-	Weekends and Holidays
Nitrate	mg/L as N	10	-	EPA 353.2	Certified Lab	Quarterly	Quarterly	Quarterly	Annually	Annually	Annually	Annually	Annually	Quarterly	Quarterly	-	Monthly	-	Monthly	-	-	Monthly[4]	-	-	-	-	-	-	Monthly
TDS	mg/L	500[1]	-		Certified Lab	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Monthly
Sulfate	mg/L	250[1]	-		Certified Lab	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Monthly	-	-	-	Monthly
Bacteriological																													
Total Coliform	P/A		-		Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	-	Weekly	-	-	-	-	-	Monthly	-	-	-	-	-	Monthly
HPC	cfu/ml		-		Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	-	Weekly	-	-	-	-	-	Monthly	-	-	-	-	-	Monthly
Radionucleides																													
Uranium	pCi/L	20	-		Certified Lab	-	-	-	-	Quarterly	-	-	-	-	-	-	-	-	-	-	-	-	-	Quarterly	Quarterly	-	-	-	Quarterly
VOCs																													
1,1-Dichloroethane	µg/L	5	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	Monthly	-	-	Weekly	-	Quarterly	Weekly	Weekly	-	Weekly	Weekly
1,1-Dichloroethylene	µg/L	6	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	Monthly	-	Weekly	Weekly	-	Quarterly	Weekly	Weekly	-	Weekly	Weekly
1,2,3-Trichloropropane	µg/L	0.005	-	SRL 524M-TCP	Certified Lab	Monthly	Monthly	Monthly	-	-	-	-	-	-	-	-	-	-	Monthly	-	-	Weekly	-	Quarterly	Weekly	Weekly	-	Weekly	Weekly
1,4-Dioxane	µg/L	-	1	EPA 522	Certified Lab	Monthly	Monthly	Monthly	Annually	Annually	Annually	Annually	Annually	Annually	Annually	-	-	-	Monthly	-	Weekly	Weekly	-	Quarterly	Weekly	Weekly	-	Weekly	Weekly
Carbon Tetrachloride	µg/L	0.5	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	Monthly	-	-	Weekly	-	Quarterly	Weekly	Weekly	-	Weekly	Weekly
Cis-1,2-Dichloroethylene	µg/L	6	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	Monthly	-	Weekly	Weekly	-	Quarterly	Weekly	Weekly	-	Weekly	Weekly
Tetrachloroethylene	µg/L	5	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	Monthly	-	Weekly	Weekly	-	Quarterly	Weekly	Weekly	-	Weekly	Weekly
Trichloroethylene	µg/L	5	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	Monthly	-	Weekly	Weekly	-	Quarterly	Weekly	Weekly	-	Weekly	Weekly
1,1,2-Trichloroethane	µg/L	5	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	-	-	-	-	-	-	-	-	-	-	Monthly	-	-	Weekly	-	Quarterly	Weekly	Weekly	-	Weekly	Monthly
1,2-Dichloroethane	µg/L	0.5	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	Monthly	-	-	Weekly	-	Quarterly	Weekly	Weekly	-	Weekly	Monthly
Benzene	µg/L	1	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	Monthly	-	-	Weekly	-	Quarterly	Weekly	Weekly	-	Weekly	Monthly
Methyl tert-Butyl Ether	µg/L	13	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	Monthly	-	-	Weekly	-	Quarterly	Weekly	Weekly	-	Weekly	Monthly
Perfluorooctanoic acid	µg/L	-	5.1	EPA 537.1	Certified Lab	Monthly	Monthly	Monthly	-	-	-	-	-	-	-	-	-	-	Monthly	-	-	Weekly	-	Quarterly	Weekly	-	-		Monthly
Trans-1,2-Dichloroethylene	µg/L	10	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	Monthly	-	-	Weekly	-	Quarterly	Weekly	Weekly	-	Weekly	Monthly
Vinyl Chloride	µg/L	0.5	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	Monthly	-	-	Weekly	-	Quarterly	Weekly	Weekly	-	Weekly	Monthly
Methylene Chloride	µg/L	5	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	-	-	-	-	-	Quarterly	-	Weekly	-	Weekly	Weekly
Diisopropyl Ether	-	-	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	-	-	-	-	-	Quarterly	-	Weekly	-	Weekly	Weekly
Ethyl tert-Butyl Ether	-	-	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	-	-	-	-	-	Quarterly	-	Weekly	-	Weekly	Weekly
Chloroform	-	-	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	-	-	-	-	-	Quarterly	-	Weekly	-	Weekly	Weekly
1,1,1-Trichloroethane	µg/L	200	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	-	-	-	-	-	Quarterly	-	Weekly	-	Weekly	Weekly
tert-Amyl Methyl Ether	-	-	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	-	-	-	-	-	Quarterly	-	Weekly	-	Weekly	Weekly
Bromodichloromethane	-	-	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	-	-	-	-	-	Quarterly	-	Weekly	-	Weekly	Weekly
Toluene	µg/L	150	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	-	-	-	-	-	Quarterly	-	Weekly	-	Weekly	Weekly
Dibromochloromethane	-	-	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	-	-	-	-	-	Quarterly	-	Weekly	-	Weekly	Weekly
Ethylbenzene	µg/L	300	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	-	-	-	-	-	Quarterly	-	Weekly	-	Weekly	Weekly
m&p-Xylene	µg/L	1750	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	-	-	-	-	-	Quarterly	-	Weekly	-	Weekly	Weekly
o-Xylene	-	-	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	-	-	-	-	-	Quarterly	-	Weekly	-	Weekly	Weekly
Bromoform	-	-	-	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly	Weekly	Weekly	-	-	-	-	-	Quarterly	-	Weekly	-	Weekly	Weekly
tert-Butyl Alcohol	µg/L	-	12	EPA 524.2	Certified Lab	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Quarterly	Quarterly	Monthly[6]	Weekly[6]	Weekly[6]	-	-	-	-	-	Quarterly[6]	-	Weekly[6]	-	Weekly[6]	Weekly[6]

1. Secondary MCL
2. See Charnock GAC Filters monthly monitoring form spreadsheet for individual GAC filter monitoring requirements.

4. Sample 1 lead vessel following return to service.
5. For VOCs listed as quarterly frequency, VOCs detected at the source, at concentrations greater than the DLR, but less than the MCL or NL are analyzed quarterly; the frequency is increased to monthly for all VOCs detected at levels greater than the MCL or NL.
6. Collect sample only if MTBE is detected at any of the Charnock Wells.

CITY OF SANTA MONICA WATER TREATMENT PLANT
MONTHLY OPERATIONAL REPORT
MONTH 20XX

	Olympic Production (mgal) *						Charnock Production (mgal)*								Other Wells (mgal)*		Arcadia Production (mgal)*						Finished Water Quality Chemical Dosages (gal)*				Water Quality Parameters**				
Date	SM#4	SM#8	SM#9	Olympic AWTF Influent Total	UV-AOP Effluent	GAC Effluent	CH#13	CH#19	CH#20	Filtered Wells Total	CH#16	CH#18	Unfiltered Wells Total	Charnock WTP Effluent Total	CWTF Effluent Free Cl Residual (mg/L)	ARC#4	ARC#5	Arcadia WTP Influent Total	RO Feed Tank Influent Total	Production from RO	Bypass Flow	Bypass %	Finished Water Production	Caustic Soda Applied	Sodium Hypochlorite Applied	Ammonium Sulfate Applied	Hydrofluoro-silicic Acid Applied	Conduc-tivity (umho/cm)	Turbidity (NTU)	pH	Fluoride (mg/L)	Total Chlorine (mg/L)
1																															
2																															
3																															
4																															
5																															
6																															
7																															
8																															
9																															
10																															
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30																															

Notes
*(Same Day 12pm-12am data)
***(Same Day 7:00 am data)

Comments:

Prepared By: _____ Date: _____

CITY OF SANTA MONICA
WATER QUALITY LABORATORY
MONTHLY VOC ANALYSIS SUMMARY OF "IN USE" WELLS
MONTH 20XX

SAMPLING DATE:
ANALYST:

Parameter	Units	RL	SM#4	SM#8	SM#9	ARC#4	ARC#5	CH#13	CH#16	CH#18	CH#19	CH#20
1,1-Dichloroethane	µg/L	0.5										
1,1-Dichloroethylene	µg/L	0.5										
1,2,3-Trichloropropane	µg/L	0.5										
1,4-Dioxane	µg/L	0.5										
Carbon Tetrachloride	µg/L	0.5										
Cis-1,2-Dichloroethylene	µg/L	0.5										
Tetrachloroethylene	µg/L	0.5										
Trichloroethylene	µg/L	0.5										
1,1,2-Trichloroethane	µg/L	0.5										
1,2-Dichloroethane	µg/L	0.5										
Benzene	µg/L	0.5										
Methyl tert-Butyl Ether	µg/L	1.0										
Perfluorooctanoic acid	µg/L	0.5										
Trans-1,2-Dichloroethylene	µg/L	0.5										
Vinyl Chloride	µg/L	0.5										
Methylene Chloride	µg/L	0.5										
Diisopropyl Ether	µg/L	0.5										
Ethyl tert-Butyl Ether	µg/L	0.5										
Chloroform	µg/L	0.5										
1,1,1-Trichloroethane	µg/L	0.5										
tert-Amyl Methyl Ether	µg/L	0.5										
Bromodichloromethane	µg/L	0.5										
Toluene	µg/L	0.5										
Dibromochloromethane	µg/L	0.5										
Ethylbenzene	µg/L	0.5										
m&p-Xylene	µg/L	0.5										
o-Xylene	µg/L	0.5										
Bromoform	µg/L	0.5										
tert-Butyl Alcohol	µg/L	2.0										

RL = Reporting Limit ND = Not Detected NA = Not Analyzed J = Estimated Value

Comments:

Prepared By: _____ Date: _____

CITY OF SANTA MONICA
WATER QUALITY LABORATORY
MONTHLY SUMMARY OF PROCESS VOCS
CHARNOCK WTP AND OLYMPIC AWTF
MONTH 20XX

			Charnock Water Treatment Plant											Olympic Advanced Water Treatment Facility										
Parameter	Units	RL	Raw Water Equalization Tank	Combined GAC Effluent					Filtered Water Tank Outlet					Greensand Filter Influent	UV-AOP Effluent					GAC Effluent				
Frequency			Monthly	Weekly					Weekly					Monthly	Weekly					Weekly				
Date Sampled																								
1,1-Dichloroethane	µg/L	0.5													-	-	-	-	-					
1,1-Dichloroethylene	µg/L	0.5																						
1,2,3-Trichloropropane	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-					
1,4-Dioxane	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-							-	-	-	-	-
Carbon Tetrachloride	µg/L	0.5													-	-	-	-	-					
Cis-1,2-Dichloroethylene	µg/L	0.5																						
Tetrachloroethylene	µg/L	0.5																						
Trichloroethylene	µg/L	0.5																						
1,1,2-Trichloroethane	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-					
1,2-Dichloroethane	µg/L	0.5													-	-	-	-	-					
Benzene	µg/L	0.5													-	-	-	-	-					
Methyl tert-Butyl Ether	µg/L	1.0													-	-	-	-	-	-	-	-	-	-
Perfluorooctanoic acid	µg/L	0.5	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-					
Trans-1,2-Dichloroethylene	µg/L	0.5													-	-	-	-	-					
Vinyl Chloride	µg/L	0.5													-	-	-	-	-	-	-	-	-	-
Methylene Chloride	µg/L	0.5												-	-	-	-	-	-	-	-	-	-	-
Diisopropyl Ether	µg/L	0.5												-	-	-	-	-	-	-	-	-	-	-
Ethyl tert-Butyl Ether	µg/L	0.5												-	-	-	-	-	-	-	-	-	-	-
Chloroform	µg/L	0.5												-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	µg/L	0.5												-	-	-	-	-	-	-	-	-	-	-
tert-Amyl Methyl Ether	µg/L	0.5												-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	µg/L	0.5												-	-	-	-	-	-	-	-	-	-	-
Toluene	µg/L	0.5												-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	µg/L	0.5												-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	µg/L	0.5												-	-	-	-	-	-	-	-	-	-	-
m&p-Xylene	µg/L	0.5												-	-	-	-	-	-	-	-	-	-	-
o-Xylene	µg/L	0.5												-	-	-	-	-	-	-	-	-	-	-
Bromoform	µg/L	0.5												-	-	-	-	-	-	-	-	-	-	-
tert-Butyl Alcohol	µg/L	2.0												-	-	-	-	-	-	-	-	-	-	-

RL = Reporting Limit ND = Not Detected NA = Not Analyzed J = Estimated Value

Comments:

Prepared By: _____ Date: _____

CITY OF SANTA MONICA
WATER QUALITY LABORATORY
MONTHLY SUMMARY OF PROCESS VOCS
ARCADIA WTP
MONTH 20XX

			Arcadia Water Treatment Plant																				
Parameter	Units	RL	Cartridge Filter Combined Effluent	Arcadia RO Combined Permeate before Bypass					Arcadia Decarbonator Influent					Arcadia Reservoir Influent					Arcadia Treated Effluent				
Frequency			Quarterly	Weekly					Weekly					Weekly					Weekly				
Date Sampled																							
1,1-Dichloroethane	µg/L	0.5																					
1,1-Dichloroethylene	µg/L	0.5																					
1,2,3-Trichloropropane	µg/L	0.5																					
1,4-Dioxane	µg/L	0.5																					
Carbon Tetrachloride	µg/L	0.5																					
Cis-1,2-Dichloroethylene	µg/L	0.5																					
Tetrachloroethylene	µg/L	0.5																					
Trichloroethylene	µg/L	0.5																					
1,1,2-Trichloroethane	µg/L	0.5																					
1,2-Dichloroethane	µg/L	0.5																					
Benzene	µg/L	0.5																					
Methyl tert-Butyl Ether	µg/L	1.0																					
Perfluorooctanoic acid	µg/L	0.5							-	-	-	-	-										
Trans-1,2-	µg/L	0.5																					
Vinyl Chloride	µg/L	0.5																					
Methylene Chloride	µg/L	0.5		-	-	-	-	-															
Diisopropyl Ether	µg/L	0.5		-	-	-	-	-															
Ethyl tert-Butyl Ether	µg/L	0.5		-	-	-	-	-															
Chloroform	µg/L	0.5		-	-	-	-	-															
1,1,1-Trichloroethane	µg/L	0.5		-	-	-	-	-															
tert-Amyl Methyl Ether	µg/L	0.5		-	-	-	-	-															
Bromodichloromethane	µg/L	0.5		-	-	-	-	-															
Toluene	µg/L	0.5		-	-	-	-	-															
Dibromochloromethane	µg/L	0.5		-	-	-	-	-															
Ethylbenzene	µg/L	0.5		-	-	-	-	-															
m&p-Xylene	µg/L	0.5		-	-	-	-	-															
o-Xylene	µg/L	0.5		-	-	-	-	-															
Bromoform	µg/L	0.5		-	-	-	-	-															
tert-Butyl Alcohol	µg/L	2.0		-	-	-	-	-															

RL = Reporting Limit ND = Not Detected NA = Not Analyzed J = Estimated Value

Comments:

Prepared By: _____ Date: _____

CITY OF SANTA MONICA
WATER QUALITY LABORATORY
MONTHLY SUMMARY OF PROCESS VOCS
CHARNOCK GAC FILTERS
MONTH 20XX

Parameter	Units	RL	Lead Vessel #1					Lead Vessel #2					Lead Vessel #3					Lead Vessel #4					Lead Vessel #5				
Frequency[1]			Monthly					Monthly					Monthly					Monthly					Monthly				
Date Sampled																											
Port Sampled[1]																											
1,1-Dichloroethane	µg/L	0.5																									
1,1-Dichloroethylene	µg/L	0.5																									
Carbon Tetrachloride	µg/L	0.5																									
Cis-1,2-Dichloroethylene	µg/L	0.5																									
Tetrachloroethylene	µg/L	0.5																									
Trichloroethylene	µg/L	0.5																									
1,2-Dichloroethane	µg/L	0.5																									
Benzene	µg/L	0.5																									
Methyl tert-Butyl Ether	µg/L	1.0																									
Trans-1,2-Dichloroethylene	µg/L	0.5																									
Vinyl Chloride	µg/L	0.5																									
Nitrate	µg/L	0.5																									
Methylene Chloride	µg/L	0.5																									
Diisopropyl Ether	µg/L	0.5																									
Ethyl tert-Butyl Ether	µg/L	0.5																									
Chloroform	µg/L	0.5																									
1,1,1-Trichloroethane	µg/L	0.5																									
tert-Amyl Methyl Ether	µg/L	0.5																									
Bromodichloromethane	µg/L	0.5																									
Toluene	µg/L	0.5																									
Dibromochloromethane	µg/L	0.5																									
Ethylbenzene	µg/L	0.5																									
m&p-Xylene	µg/L	0.5																									
o-Xylene	µg/L	0.5																									
Bromoform	µg/L	0.5																									
tert-Butyl Alcohol	µg/L	2.0																									

1. Sample monthly at 41% port until VOCs are detected; then sample 73% port. Sample monthly at 73% port until VOCs are detected; then sample effluent port. Sample weekly at effluent port thereafter.
RL = Reporting Limit ND = Not Detected NA = Not Analyzed J = Estimated Value

Comments:

Prepared By: _____ Date: _____

CITY OF SANTA MONICA
WATER QUALITY LABORATORY
MONTHLY SUMMARY OF PROCESS VOCS
CHARNOCK GAC FILTERS
MONTH 20XX

Parameter	Units	RL	Lag Vessel #1					Lag Vessel #2					Lag Vessel #3					Lag Vessel #4					Lag Vessel #5				
Frequency[1]			Triggered					Triggered					Triggered					Triggered					Triggered				
Date Sampled																											
Port Sampled[1]																											
1,1-Dichloroethane	µg/L	0.5																									
1,1-Dichloroethylene	µg/L	0.5																									
Carbon Tetrachloride	µg/L	0.5																									
Cis-1,2-Dichloroethylene	µg/L	0.5																									
Tetrachloroethylene	µg/L	0.5																									
Trichloroethylene	µg/L	0.5																									
1,2-Dichloroethane	µg/L	0.5																									
Benzene	µg/L	0.5																									
Methyl tert-Butyl Ether	µg/L	1.0																									
Trans-1,2-Dichloroethylene	µg/L	0.5																									
Vinyl Chloride	µg/L	0.5																									
Nitrate	µg/L	0.5																									
Methylene Chloride	µg/L	0.5																									
Diisopropyl Ether	µg/L	0.5																									
Ethyl tert-Butyl Ether	µg/L	0.5																									
Chloroform	µg/L	0.5																									
1,1,1-Trichloroethane	µg/L	0.5																									
tert-Amyl Methyl Ether	µg/L	0.5																									
Bromodichloromethane	µg/L	0.5																									
Toluene	µg/L	0.5																									
Dibromochloromethane	µg/L	0.5																									
Ethylbenzene	µg/L	0.5																									
m&p-Xylene	µg/L	0.5																									
o-Xylene	µg/L	0.5																									
Bromoform	µg/L	0.5																									
tert-Butyl Alcohol	µg/L	2.0																									

1. Sample in lag vessel triggered based on VOC detection in combined GAC effluent.

RL = Reporting Limit ND = Not Detected NA = Not Analyzed J = Estimated Value

Comments:

Prepared By: _____ Date: _____

CITY OF SANTA MONICA
WATER QUALITY LABORATORY
MONTHLY SUMMARY OF PROCESS VOCS
OLYMPIC GAC FILTERS
MONTH 20XX

Parameter	Units	RL	Lead Vessel #1					Lead Vessel #2					Lead Vessel #3					Lead Vessel #4				
Frequency[1]			Monthly					Monthly					Monthly					Monthly				
Date Sampled																						
Port Sampled[1]																						
1,1-Dichloroethane	µg/L	0.5																				
1,1-Dichloroethylene	µg/L	0.5																				
1,2,3-Trichloropropane	µg/L	0.5																				
Carbon Tetrachloride	µg/L	0.5																				
Cis-1,2-Dichloroethylene	µg/L	0.5																				
Tetrachloroethylene	µg/L	0.5																				
Trichloroethylene	µg/L	0.5																				
1,1,2-Trichloroethane	µg/L	0.5																				
1,2-Dichloroethane	µg/L	0.5																				
Benzene	µg/L	0.5																				
Perfluorooctanoic acid	µg/L	0.5																				
Trans-1,2-Dichloroethylene	µg/L	0.5																				

1. Sample monthly at 30% port until VOCs are detected; then sample 70% port. Sample monthly at 70% port until VOCs are detected; then sample effluent port. Sample weekly at effluent port thereafter

RL = Reporting Limit ND = Not Detected NA = Not Analyzed J = Estimated Value

Comments:

Prepared By: _____ Date: _____

CITY OF SANTA MONICA
WATER QUALITY LABORATORY
MONTHLY SUMMARY OF PROCESS VOCS
OLYMPIC GAC FILTERS
MONTH 20XX

Parameter	Units	RL	Lag Vessel #1					Lag Vessel #2					Lag Vessel #3					Lag Vessel #4				
Frequency[1]			Triggered					Triggered					Triggered					Triggered				
Date Sampled																						
Port Sampled[1]																						
1,1-Dichloroethane	µg/L	0.5																				
1,1-Dichloroethylene	µg/L	0.5																				
1,2,3-Trichloropropane	µg/L	0.5																				
Carbon Tetrachloride	µg/L	0.5																				
Cis-1,2-Dichloroethylene	µg/L	0.5																				
Tetrachloroethylene	µg/L	0.5																				
Trichloroethylene	µg/L	0.5																				
1,1,2-Trichloroethane	µg/L	0.5																				
1,2-Dichloroethane	µg/L	0.5																				
Benzene	µg/L	0.5																				
Perfluorooctanoic acid	µg/L	0.5																				
Trans-1,2-Dichloroethylene	µg/L	0.5																				

1. Sample in lag vessel triggered based on VOC detection in combined GAC effluent.

RL = Reporting Limit ND = Not Detected NA = Not Analyzed J = Estimated Value

Comments:

Prepared By: _____ Date: _____

CITY OF SANTA MONICA
WATER QUALITY LABORATORY
MONTHLY SUMMARY OF PROCESS DATA
MONTH 20XX

			Wells										Charnock WTP	Olympic AWTF								Arcadia WTP																	
Parameter	Units	RL	SM#4	SM#8	SM#9	CH#13	CH#16	CH#18	CH#19	CH#20	ARC#4	ARC#5	Combined GAC Effluent	Greensand Filter Influent	Greensand Filter Effluent							Combined GAC Effluent	Greensand Filter Effluent					Cartridge Filter Combined Effluent	Arcadia RO Combined Permeate before Bypass						Decarb-onator Tank Effluent	Arcadia Treated Effluent					
Frequency[1]			Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly	Monthly	Monthly	Weekly							Monthly	Weekly					Quarterly	Weekly						Every Six Months	Weekly					
Date Sampled																																							
General																																							
pH			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Conductivity	µmhom/cm		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Odor	TON		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alkalinity	mg/L as CaCO3		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Hardness	mg/L as CaCO3		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aggressiveness Index			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Langlier Index			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inorganics																																							
Iron	µg/L	5.0											-	-							-						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Manganese	µg/L	2.0											-	-							-						-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorine Residual[2]	mg/L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Combined Chlorine[2]	mg/L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluoride	mg/L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrate	mg/L as N	0.2													-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TDS	mg/L		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate	mg/L	5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Radionucleides																																							
Uranium	pCi/L		-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

1. Refer to Permit Monitoring Requirements matrix for varying frequency based on analyte
2. See daily production log spreadsheet for concentration..
RL = Reporting Limit ND =

Comments:

Prepared By: _____ Date: _____

CITY OF SANTA MONICA
WATER QUALITY LABORATORY
MONTHLY SUMMARY OF BACTE DATA
IN-USE WELLS AND TREATMENT PLANTS
MONTH 20XX

		Wells										Charnock WTP					Olympic AWTF						Arcadia WTP	
Parameter	Units	SM#4	SM#8	SM#9	CH#13	CH#16	CH#18	CH#19	CH#20	ARC#4	ARC#5	GAC Effluent					Greensand Filter Effluent	GAC Effluent					Greensand Filter Effluent	Treated Effluent
Frequency		Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Weekly					Monthly	Weekly					Monthly	Monthly
Date Sampled																								
Total Coliform	P/A																							
HPC	cfu/ml																							

Comments:

Prepared By: _____

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Appendix F: Alternative MCL-equivalent Calculations

Tables F-1 through F-4 present alternative MCL-equivalent calculations (to Section 8 calculations) using an NL of 0.1 ng/L for PFOA (OEHHA-recommended value).

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Table F-1. Treated Water Quality Goals, MCLs, NLs, RLs, DLR, Health Effects, Endpoints, and MCL-Equivalents: Initial Design; PFOA PHG Recommended by OEHHA

Constituent of Potential Concern	Units	Treated Water Concentration	MCL	NL	RL	0.1 x RL	DLR	Rationale for Ratio[a]	Ratio
Chronic, Cancer Endpoints[b]									
1,1-DCA	µg/L	0.014	5				0.5	Concentration < DLR	0
1,2,3-TCP	µg/L	0.0003	0.005				0.005	Concentration < DLR	0
1,4-D	µg/L	0.012	--	1	35	3.5	-- [c]	0.012/1	0.012
Carbon tetrachloride	µg/L	0.0004	0.5				0.5	Concentration < DLR	0
PCE	µg/L	0.002	5				0.5	Concentration < DLR	0
TCE	µg/L	0.041	5				0.5	Concentration < DLR	0
1,1,2-Trichloroethane	µg/L	0.014	5				0.5	Concentration < DLR	0
1,2-Dichloroethane	µg/L	0.002	0.5				0.5	Concentration < DLR	0
Benzene	µg/L	0.0001	1				0.5	Concentration < DLR	0
MTBE	µg/L	0.019	13				3	Concentration < DLR	0
PFOA	ng/L	0.008		0.1 (PHG-recommended NL)	10	1	--[d]	0.008/0.1	0.080
trans-1,2-Dichloroethylene	µg/L	0.0005	10				0.5	Concentration < DLR	0
Vinyl Chloride	µg/L	0.001	0.5				0.5	Concentration < DLR	0
Total MCL-equivalent, chronic, cancer endpoints									**0.09 < 1**
Chronic, Non-cancer Endpoints[b]									
1,1-DCE	µg/L	0.0001	6				0.5	Concentration < DLR	0
cis-1,2-DCE	µg/L	0.0001	6				0.5	Concentration < DLR	0
Total MCL-equivalent, chronic, non-cancer endpoints									**0 < 1**

a. A ratio of zero was used when the treated water concentration was lower than the DLR.

b. California Office of Environmental Health Hazard Assessment (OEHHA), California Public Health Goals for Chemicals in Drinking Water.

c. There is no official DLR for 1,4-Dioxane; the recommended reporting limit is 1 µg/L.

d. There is no DLR for PFOA.

Table F-2. Treated Water Quality Goals, MCLs, NLs, RLs, DLR, Health Effects, Endpoints, and MCL-Equivalents: Contingency Design; PFOA PHG Recommended by OEHHA

Constituent of Potential Concern	Units	Treated Water Concentration[a]	MCL	NL	RL	0.1 x RL	DLR	Rationale for Ratio[b]	Ratio
Chronic, Cancer Endpoints[c]									
1,1-DCA	µg/L	0.016	5				0.5	Concentration < DLR	0
1,2,3-TCP	µg/L	0.0004	0.005				0.005	Concentration < DLR	0
1,4-D	µg/L	0.008	--	1	35	3.5	-- [d]	0.008/1	0.008
Carbon tetrachloride	µg/L	0.0005	0.5				0.5	Concentration < DLR	0
PCE	µg/L	0.002	5				0.5	Concentration < DLR	0
TCE	µg/L	0.045	5				0.5	Concentration < DLR	0
1,1,2-Trichloroethane	µg/L	0.013	5				0.5	Concentration < DLR	0
1,2-Dichloroethane	µg/L	0.002	0.5				0.5	Concentration < DLR	0
Benzene	µg/L	0.0001	1				0.5	Concentration < DLR	0
MTBE	µg/L	0.020	13				3	Concentration < DLR	0
PFOA	ng/L	0.008		0.1 (PHG-recommended NL)	10	1	--[e]	0.008/0.1	0.08
trans-1,2-Dichloroethylene	µg/L	0.0004	10				0.5	Concentration < DLR	0
Vinyl Chloride	µg/L	0.0005	0.5				0.5	Concentration < DLR	0
Total MCL-equivalent, chronic, cancer endpoints									**0.09 < 1**
Chronic, Non-cancer Endpoints[c]									
1,1-DCE	µg/L	0.0001	6				0.5	Concentration < DLR	0
Cis 1,2-DCE	µg/L	0.00005	6				0.5	Concentration < DLR	0
Total MCL-equivalent, chronic, non-cancer endpoints									**0 < 1**

a. Treated water concentrations listed represent the Contingency Design scenario with the additional treatment (expanded UV/H_2O_2).
b. A ratio of zero was used when the treated water concentration was lower than the DLR.
c. OEHHA, California Public Health Goals for Chemicals in Drinking Water.
d. There is no official DLR for 1,4-Dioxane; the recommended reporting limit is 1 µg/L.
e. There is no DLR for PFOA.

Table F-3. Treated Water Quality Goals, MCLs, NLs, RLs, DLR, Health Effects, Endpoints, and MCL-Equivalents: Initial Design Concentrations for Olympic Flows Only; PFOA PHG Recommended by OEHHA

Constituent of Potential Concern	Units	Treated Water Concentration	MCL	NL	RL	0.1 x RL	DLR	Rationale for Ratio[a]	Ratio
Chronic, Cancer Endpoints[b]									
1,1-DCA	µg/L	0.048	5				0.5	Concentration < DLR	0
1,2,3-TCP	µg/L	0.001	0.005				0.005	Concentration < DLR	0
1,4-D	µg/L	0.043	--	1	35	3.5	-- [c]	0.043/1	0.043
Carbon tetrachloride	µg/L	0.001	0.5				0.5	Concentration < DLR	0
PCE	µg/L	0.0004	5				0.5	Concentration < DLR	0
TCE	µg/L	0.001	5				0.5	Concentration < DLR	0
1,1,2-Trichloroethane	µg/L	0.050	5				0.5	Concentration < DLR	0
1,2-Dichloroethane	µg/L	0.007	0.5				0.5	Concentration < DLR	0
Benzene	µg/L	0.0004	1				0.5	Concentration < DLR	0
MTBE	µg/L	0.022	13				3	Concentration < DLR	0
PFOA	ng/L	0.028	--	0.1 (PHG-recommended NL)	10	1	--[d]	0.028/0.1	0.28
trans-1,2-Dichloroethylene	µg/L	0.002	10				0.5	Concentration < DLR	0
Vinyl Chloride	µg/L	0.002	0.5				0.5	Concentration < DLR	0
Total MCL-equivalent, chronic, cancer endpoints									**0.32 < 1**
Chronic, Non-cancer Endpoints[b]									
1,1-DCE	µg/L	0.0003	6				0.5	Concentration < DLR	0
Cis 1,2-DCE	µg/L	0.0002	6				0.5	Concentration < DLR	0
Total MCL-equivalent, chronic, non-cancer endpoints									**0 < 1**

a. A ratio of zero was used when the treated water concentration was lower than the DLR.
b. OEHHA, California Public Health Goals for Chemicals in Drinking Water.
c. There is no official DLR for 1,4-Dioxane; the recommended reporting limit is 1 µg/L.
d. There is no DLR for PFOA.

Table F-4. Treated Water Quality Goals, MCLs, NLs, RLs, DLR, Health Effects, Endpoints, and MCL-Equivalents: Contingency Design Concentrations for Olympic Flows Only; PFOA PHG Recommended by OEHHA

Constituent of Potential Concern	Units	Treated Water Concentration[a]	MCL	NL	RL	0.1 x RL	DLR	Rationale for Ratio[b]	Ratio
Chronic, Cancer Endpoints[c]									
1,1-DCA	µg/L	0.074	5				0.5	Concentration < DLR	0
1,2,3-TCP	µg/L	0.002	0.005				0.005	Concentration < DLR	0
1,4-D	µg/L	0.035	--	1	35	3.5	-- [d]	0.035/1	0.035
Carbon tetrachloride	µg/L	0.002	0.5				0.5	Concentration < DLR	0
PCE	µg/L	0.0003	5				0.5	Concentration < DLR	0
TCE	µg/L	0.001	5				0.5	Concentration < DLR	0
1,1,2-Trichloroethane	µg/L	0.059	5				0.5	Concentration < DLR	0
1,2-Dichloroethane	µg/L	0.007	0.5				0.5	Concentration < DLR	0
Benzene	µg/L	0.0004	1				0.5	Concentration < DLR	0
MTBE	µg/L	0.029	13				3	Concentration < DLR	0
PFOA	ng/L	0.036		0.1 (PHG-recommended NL)	10	1	--[e]	0.036/0.1	0.36
trans-1,2-Dichloroethylene	µg/L	0.002	10				0.5	Concentration < DLR	0
Vinyl Chloride	µg/L	0.002	0.5				0.5	Concentration < DLR	0
Total MCL-equivalent, chronic, cancer endpoints									**0.40 < 1**
Chronic, Non-cancer Endpoints[c]									
1,1-DCE	µg/L	0.0003	6				0.5	Concentration < DLR	0
Cis 1,2-DCE	µg/L	0.0002	6				0.5	Concentration < DLR	0
Total MCL-equivalent, chronic, non-cancer endpoints									**0 < 1**

a. Treated water concentrations listed represent the Contingency Design scenario with the additional treatment (expanded UV/H_2O_2).
b. A ratio of zero was used when the treated water concentration was lower than the DLR.
c. OEHHA, California Public Health Goals for Chemicals in Drinking Water.
d. There is no official DLR for 1,4-Dioxane; the recommended reporting limit is 1 µg/L.
e. There is no DLR for PFOA.

Appendix G: DDW Comments and Responses

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City of Santa Monica

Public Works Department
Water Resources Division

July 28, 2022

Sutida Berquist

District Engineer
State Water Resources Control
Board – Division of Drinking Water
500 North Central Avenue, Suite 500
Glendale, CA 91203

Response to Division of Drinking Water Comments on the City of Santa Monica Olympic Well Field Restoration and Arcadia Water Treatment Plant Expansion Project
Olympic Well Field Step 4 – Effective Treatment and Monitoring Report

Dear Ms. Berquist,

Pursuant to the submittal of the City of Santa Monica Olympic Well Field Treatment and Monitoring – Step 4 of 97-005 Evaluation to the Division of Drinking Water (DDW) on March 3, 2022, and DDW's comments received by the City via email on April 12 and April 25, 2022, the City of Santa Monica (City) in conjunction with the City's Design-Build Team has reviewed and discussed the comments. Enclosed are the City's response to the comments. To help facilitate review, we have provided verbatim comments received from DDW along with our responses.

Comments provided via Email from Saeed Hafeznezami (DDW) on April 12, 2022
("RE: CoSM Olympic Well Field Restoration - DDW Meeting Presentation and Follow-up")

1. ***DDW Comment:*** We want to know whether all available 1,2,3-TCP data for the production wells (wells 4, 3/9, 8) have been submitted to DDW.

   Response: All data, including 1,2,3-TCP, for both production wells (SM-4, 8, 3/9) and monitoring wells has been submitted to DDW in the Step 2 Report (Full Raw Water Quality Characterization Step 2 of 97-005 Evaluation - City of Santa Monica Olympic Well Field, August 2021). Production well data is also included in Appendix A, Step 4 Report.

   All available 1,2,3-TCP data for production wells SM-4, SM-8, SM-3 (to be replaced by SM-9) are included in the SDWIS database. A PS code is assigned to the pending production wells (SM-8 and 9), and we have confirmed the accredited laboratory (Weck Laboratories) has uploaded all 1,2,3-TCP for SM-8 and 9 to the SDWIS database.

2. ***DDW Comment:*** We want to know more about the assumptions that have gone into estimating the Olympic AWTF influent concentrations (30/49 ppt for initial/contingency designs). Have the actual data from monitoring wells in the capture zones been submitted to DDW?

   Response: The Step 2 Report describes the analysis for developing the predicted well concentrations. See comment response #1. The multipliers placed upon those values reflect best engineering judgement of the City and Design-Build Team and are based on the available information and desire to size conservatively. All data for the monitoring wells has been submitted to DDW in the Step 2 Report (Full Raw Water Quality Characterization Step 2 of 97-005 Evaluation - City of Santa Monica Olympic Well Field, August 2021). Data for the monitoring wells are also available on the California State Water Resources Control Board GeoTracker, Los Angeles RWQCB (Region 4) - Case #: 904040434.

   All available 1,2,3-TCP data for production wells SM-4, SM-8, SM-3 (to be replaced by SM-9) are included in the SDWIS database. A PS code is assigned to the pending production wells (SM-8 and 9), and we have confirmed the accredited laboratory (Weck Laboratories) has uploaded all 1,2,3-TCP for SM-8 and 9 to the SDWIS database.

3. ***DDW Comment:*** 1,2,3-TCP treatment in the AWTF under the "initial" design is significantly dependent on blending with the Charnock+Arcadia wells as there is a 24% RO bypass. We want to know what contingency provisions are planned if the Charnock/Arcadia blending becomes unavailable.

   Response: The Olympic AWTF initial design is now modified to include lead-lag GAC. Removal of 1,2,3-TCP will be accomplished at the AWTF so blending Olympic AWTF effluent with the Charnock and Arcadia wells does not need to be relied upon for compliance. GAC media has been selected for 1,2,3-TCP removal and quenching.

4. ***DDW Comment:*** We want to know more about the "contingency" design scenario and possibility of adding lead-lag GAC for 1,2,3-TCP treatment.

   Response: As noted above, the initial design of the Olympic AWTF is now modified to include lead-lag GAC.

5. ***DDW Comment:*** We want to know the sources and references used for removal percentage values in Tables 3-2 and 3-3 from Step 4 report.

   Response: Percent removals through various treatment processes were obtained from state regulatory documents, EPA data, field data from existing plants, pilot data, and peer-

reviewed data. The Step 4 Report will be revised to include references for removal percentage value information.

Comments provided via Email from Saeed Hafeznezami (DDW) on April 25, 2022 ("RE: CoSM Olympic Well Field Restoration - DDW Meeting Presentation and Follow-up")

1. ***DDW Comment:*** Were the safety factor values of 1.5 and 1.2, which were applied to the influent concentrations, calculated based on some specific mathematical analysis of the uncertainty? Step 2 Report (Section 6.3.4) does not explicitly answer this question.

   Response: There is no standard formula for designing a system for potential future contaminant concentrations. The multipliers reflect best engineering judgement of the City and Design-Build Team. The multipliers are based on the available information and desire to size conservatively.

   Also, operations within the Olympic Wellfield includes an early warning monitoring system to capture groundwater quality within the monitoring wells that will flag changes in the 2-, 5- and 10-year zones for each production well. The early warning monitoring system will assist the City in anticipating potential exceedances and modify operations accordingly.

2. ***DDW Comment:*** The RO feed tank effluent values listed in Table 3-1 of Step 4 Report seem to be wrong and should be 7,030 gpm and 9,097 gpm for the bypass rates of 24 and 23% for the Initial and Contingency scenarios, respectively.

   Response: The RO Feed Tank Effluent values are 7,030 gpm and 9,097 gpm for initial and contingency design scenarios, respectively. Table 3-1 of Step 4 Report is updated to reflect this.

3. ***DDW Comment:*** Can the RO bypass be entirely eliminated and replaced with other enhanced post-treatment stabilization processes?

   Response: Post-treatment stabilization through blending of RO bypass with RO permeate is a critical step in the finished water treatment processes. Removing the RO bypass and replacing with other enhanced post-treatment stabilization processes is not feasible as the site is fully built out with no additional space for new treatment processes. In addition, there is not enough capacity through the retrofitted RO system to treat the full flow without RO bypass. The initial design of the Olympic AWTF is now modified to include lead-lag GAC which will significantly improve contaminant removal upstream of the RO system. In addition, DDW's concern with the RO bypass is related to 1,2,3-TCP removal and this

issue has been addressed with the implementation of the lead-lag GAC system now. Therefore, the City respectfully requests the RO bypass remain in place.

4. ***DDW Comment:*** Step 4 Report discusses the contingency of expanding the AOP system to achieve higher level of removal for the COPCs. Please state and describe the amount of time expected for the expansion to complete from the time the need for the expansion is established.

   Response: Expanding the UV/AOP system to meet the contingency design would include installing additional lamp drivers in the partially filled UV power distribution centers and lamps and sleeves within the empty section of the UV reactors. Excluding current supply chain and demand variability, expanding the UV/AOP can be completed in approximately 2 – 4 months. In such a scenario, the Olympic wells' flows would be adjusted to maintain concentrations at or below design levels until the system expansion was complete.

5. ***DDW Comment:*** Section 3.4.2.1 of Step 4 Report states that lamps can be added to the 12th reactor section. Is this scenario what constitutes the Contingency Design removal rates for AOP listed in Table 3-3 of Step 4 Report?

   Response: Yes.

6. ***DDW Comment:*** Please describe the time frame and steps needed to be taken for converting the existing four GAC vessels from operating in the quenching mode to lead/lag mode for adsorption of COPCs such as 1,2,3-TCP.

   Response: As noted above, the initial design of the Olympic AWTF is now modified to include lead-lag GAC.

7. ***DDW Comment:*** Section 3.4.1 of Step 4 Report states that existing RO trains are operated as "(3+1)". However, Section 3.4.2.2 states "the existing RO trains (4+0) will be retrofitted". Please clarify the discrepancy.

   Response: In the initial design, the retrofitted RO trains will operate in a 3 duty, 1 standby, mode based on available influent water. In the contingency design, once water is available from other future wells per Table 1-1 of Step 4 Report, all RO trains will operate in duty mode with no standby. When a RO train goes offline due to cleaning or maintenance, plant operating capacity will be reduced. Section 3.4.2.2 of Step 4 Report will be revised accordingly to clarify this point.

8. ***DDW Comment:*** Section 3.4.3 of Step 4 Report refers to "increased hydrogen peroxide dose" as part of AOP treatment expansion for greater removal of constituents. However,

Table 1-7 of the OMMP lists hydrogen peroxide dose of 40 mg/L for both the Initial and Contingency scenarios. Please clarify the discrepancy.

Response: Section 3.4.3 of Step 4 Report is revised to remove the discrepancy as Trojan's performance guarantee includes the same peroxide dose (40 mg/L) for both initial and contingency designs.

9. ***DDW Comment:*** Section 4 of Step 4 Report states "To run only the Olympic wells without the Charnock and Arcadia Wells at Initial Design conditions, the highest blended 1,2,3-TCP concentration will need to be limited to approximately 0.009 µg/L by reducing well flows, primarily from SM-4". Please clearly specify what the lowered flow rate from well SM-4 as well as the other two wells will be in this scenario and add it as a scenario to Table 4-1.

   Response: The Olympic AWTF initial design is now modified to include lead-lag GAC. Removal of 1,2,3-TCP will be accomplished at the AWTF, so this well management approach will not be required to operate only the Olympic AWTF. The Step 4 and 5 reports will be revised accordingly.

10. ***DDW Comment:*** Footnote "a" of Table 4-4 of Step 4 Report states that the Olympic influent blend concentrations are based on flow rate of 500 gpm from all three Olympic wells. However, this operating scenario does not result in blended 1,2,3-TCP concentration of 0.009 µg/L, and the rest of the listed concentrations are also based on the flow rates of 900 gpm from SM-4 and 550 gpm from SM-8 and SM-9. Please clarify the footnote.

    Response: The Olympic AWTF-only analysis included in Table 4-4 of Step 4 Report will be updated including new calculations with lead-lag GAC added into the Olympic AWTF initial design. The Step 4 and 5 reports will be revised accordingly, including adding clarification to the footnotes as needed.

11. ***DDW Comment:*** Please add as a footnote to Table 4-4 of Step 4 Report, the assumed flow rates for all three Olympic wells resulting in the blended 1,2,3-TCP concentration of 0.009 µg/L.

    Response: The Olympic AWTF only analysis included in Table 4-4 of Step 4 Report will be updated including new calculations with lead-lag GAC added into the Olympic AWTF initial design. The Step 4 and 5 reports will be revised accordingly, including adding clarification to the footnotes as needed.

12. ***DDW Comment:*** Figure 5-1 of Step 4 Report shows the sampling locations (S1 to S22). However, Table 3-1 of the OMMP does not specify the constituents to be sampled at these locations, only stating "Collect water quality samples to document water quality and

treatment performance". Please provide a table listing all of the constituents proposed to be sampled at each one of these locations.

Response: Text in Table 3-1 of Step 4 Report will be revised to list all constituents proposed to be sampled at each sampling location.

13. ***DDW Comment:*** Table 3-4 of the OMMP refers to "Olympic Monitoring Wells". Please clarify whether this is a reference to all of the 22 monitoring wells specified in Table 4-2 of Step 2 Report. Please also add a table listing all of the constituents proposed to be monitored at the monitoring wells for the Olympic production wells.

    Response: Yes, Table 3-4 of Step 4 Report is referring to all monitoring wells. The wellfield monitoring will be removed from Table 3-4, and a reference/link to California State Water Resources Control Board Geotracker, Los Angeles RWQCB (Region 4) - Case #: 904040434, for the Olympic Well Field monitoring work, which provides an extensive, ongoing history of the sampling completed in the basin.

14. ***DDW Comment:*** Section 6.2.2 of Step 4 Report states "In addition to routine sampling at the production wells, samples will also be collected monthly at the Olympic Well Field monitoring wells". However, Table 3-4 of the OMMP specifies the frequency of monitoring at the production and monitoring wells to be quarterly and increasing to monthly for "those parameters that exceed an MCL". Please clarify the proposed monitoring frequencies for all constituents at the production and monitoring wells.

    Response: Section 6.2.2 of Step 4 Report will be revised as follows: "In addition to routine sampling at the production wells (reported to the DDW via SDWIS), samples will also be collected quarterly at the Olympic Well Field monitoring wells and reported to the Los Angeles RWQCB (Case #: 904040434). Monitoring well data will be used to inform operation of the well field".

15. ***DDW Comment:*** Please provide information on how hydrogen peroxide levels are monitored and controlled upstream of the UV reactors.

    Response: The Trojan master control panel, the System Control Center (SCC), controls the speed of the peroxide pumps. The specific gravity of the bulk solution is also entered into the SCC. The pumps each have a flowmeter and will have regular calibration checks. The bulk peroxide concentration will also be periodically verified via grab sample. The OMMP will be revised accordingly to include this discussion.

16. ***DDW Comment:*** Table 6-1 of Step 4 Report lists monitoring parameters (ORP, chlorine residual, conductivity, and pH) for the RO system at Monitoring Point N, which is shown as a

single point on Figure 5-1. Please clarify whether Monitoring Point N refers to individual or combined effluent of RO trains.

Response: ORP and chlorine residual are measured on the combined inlet. Individual trains have conductivity and pH analyzers. Weekly conductivity profiles will also be collected. Table 6-1 of Step 4 Report will be revised accordingly to clarify which analytes are combined RO influent and individual RO trains.

17. ***DDW Comment:*** Treated water concentrations for 1,4-dioxane and PFOA under the Contingency Design scenario listed in Table 8-2 of Step 4 Report seem to be wrong (listed as 0.018 µg/L instead of 0.022 µg/L for 1,4-dioxane, and 0.008 ng/L instead of 0.01 ng/L for PFOA).

    Response: The DDW may be referencing an older, draft version of the mass balance provided by the City via Excel format. Table 8-2 of Step 4 Report will be updated based on the revised initial design including removal of contaminants through lead-lag GAC.

18. ***DDW Comment:*** Please add a clarifying footnote to Table 8-3 of Step 4 Report stating that the treated water concentration of 0.004 µg/L for 1,2,3-TCP is based on the assumption of maximum influent concentration of 0.009 µg/L.

    Response: The Olympic AWTF only analysis included in Table 8-3 of Step 4 Report will be updated including new calculations with lead-lag GAC added into the Olympic AWTF initial design. The Step 4 and 5 reports will be revised accordingly, including adding clarification to the footnotes as needed.

19. ***DDW Comment:*** Please add language to the title of Table 8-4 of Step 4 Report clarifying that the treated water concentrations listed represent the Contingency Design scenario with the additional treatment (expanded AOP and lead/lag GAC).

    Response: The title of Table 8-4 of Step 4 Report will be revised to clarify the additional treatment included under contingency design (i.e., expanded AOP). As discussed previously, lead-lag GAC is now included in the Olympic AWTF initial design.

If you have any questions or additional comments pertaining to our responses, please contact me at (310) 458-8230 or via email at sunny.wang@santamonica.gov.

Sincerely,

City of Santa Monica

Sunny Wang, P.E.

Water Resources Manager
City of Santa Monica
2500 Michigan Ave, Bldg 1
Santa Monica, CA 90404

CC: Saeed Hafeznezami, State Water Resources Control Board – Division of Drinking Water (via email)

Jeff O'Keefe, State Water Resources Control Board – Division of Drinking Water (via email)

Kurt Souza, State Water Resources Control Board – Division of Drinking Water (via email)

Scott Coffin, State Water Resources Control Board – Division of Drinking Water (via email)

Brian Bernados, State Water Resources Control Board – Division of Drinking Water (via email)

Matthew Megill, State Water Resources Control Board – Division of Drinking Water (via email)