State of California
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION
320 West 4th Street, Suite 200, Los Angeles
FACT SHEET
WASTE DISCHARGE REQUIREMENTS
FOR

CITY OF SANTA MONICA
(Charnock Pilot Test Plant Groundwater Pilot Testing Project)
NPDES NO. CAG994004
CI-7841

FACILITATION LOCATION	**FACILITY MAILING ADDRESS**
11375 Westminster Avenue	1212 Fifth Street, Third Floor
Santa Monica, CA 90066	Santa Monica, CA 90066

PROJECT DESCRIPTION

The City of Santa Monica (The City) operates a groundwater pilot testing project at the City's Charnock well field . The aim of the pilot study is to use the data and information collected to develop a full scale treatment system to treat groundwater to a level which is acceptable for delivery to the City's potable water system. Discharge from the subject project is regulated under General NPDES Permit CAG994004 (Order No. R4-2003-0111) which was issued on September 15, 2003. The City submitted a Notice of Intent (NOI) form, and analytical results of groundwater samples to continue enrollment under the General NPDES Permit. Based on the groundwater quality data provided, staff have determined that discharge of treated groundwater from the pilot testing project meets the conditions specified in General Permit No. CAG994004 ; Order No. R4-2008-0032 which was adopted by the Board on June 5, 2008. The Charnock pilot test plant treatment process consists of oxidation of the pumped groundwater with sodium hypochlorite; greensand filtration in pressure vessel and settling followed by reverse osmosis softening and polishing by passage through two granular activated carbon vessels connected in series.

VOLUME AND DESCRIPTION OF DISCHARGE

Up to 900,000 gallons per day of wastewater is discharged to Westwood Channel Discharge Point 001 (located at Latitude 34° 01' 01", Longitude 118° 25' 34"), thence to the Ballona Creek, a water of the United States. The site location map and the schematic of waste flow diagram are shown as Figures 1 and 2, respectively.

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December 23, 2008

APPLICABLE EFFLUENT LIMITATIONS

Based on the information provided in the NPDES Application Supplemental Requirements, the following constituents in the Table below have been determined to show reasonable potential to exist in the discharge. The treated groundwater discharges flow into Ballona Creek. Therefore, the discharge limitations in Attachment B of Order No. R4-2008-0032 are not applicable to the discharge.

This Table lists the specific constituents and effluent limitations applicable to the discharge.

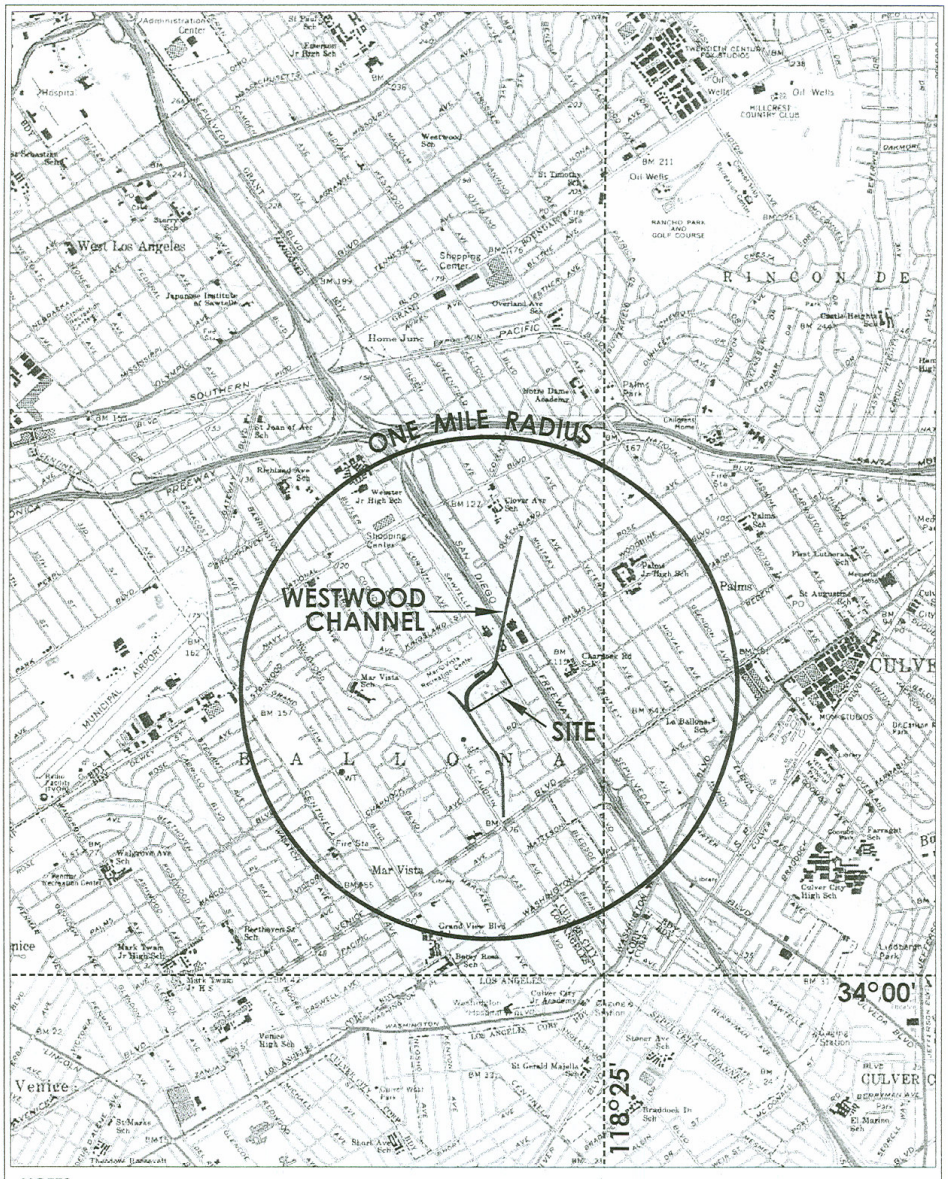
Constituents	Units	Discharge Limitations	
		Daily Maximum	Monthly Average
Total Suspended Solids	mg/L	150	50
Turbidity	NTU	150	50
BOD_5 20°C	mg/L	30	20
Oil and Grease	mg/L	15	10
Settleable Solids	ml/L	0.3	0.1
Sulfides	mg/L	1.0	---
Phenols	mg/L	1.0	---
Residual Chlorine	mg/L	0.1	---
Methylene Blue Active Substances (MBAS)	mg/L	0.5	---
Volatile organic Compounds			
Trichloroethylene	µg/L	5.0	---
1,1-Dichloroethylene	µg/L	6.0	3.2
Metals			
Selenium	µg/L	5.0	2.5

FREQUENCY OF DISCHARGE

The continuous discharge will last until the pilot testing project is completed, and thereafter for the permanent system if necessary.

REUSE OF WATER

It is not feasible to discharge the wastewater to the sanitary sewer system. It is not economically feasible to haul the wastewater for off-site disposal. There are no other feasible reuse options for the discharge. Therefore, the wastewater will be discharged to the channel in compliance with the requirements of the attached order.



NOTES:

1) All locations are approximate

2) Sources: United States Geological Survey, "Beverly Hills" 7.5 Minute Quadrangle, 1964, photorevised 1981; "Hollywood" 7.5 Minute Quadrangle, 1965, photorevised 1981; "Venice" 7.5 Minute Quadrangle, 1965, photorevised 1981; "Inglewood" 7.5 Minute Quadrangle, 1965, photorevised 1981; and Planned Utilization Of The Groundwater Basins of The Coastal Plain of Los Angeles County, Appendix A, Groundwater Geology, State Of California Department of Water Resources, June 1961.

3) The location of the outfall from the Charnock Well Field Settling Basin to the Westwood Channel is approximately situated at 34°00' latitude, 118°25' longitude, or 368401 easting, 3764752 nothing in UTM Zone 11.

0 2,000 4,000
APPROXIMATE SCALE IN FEET

KOMEX

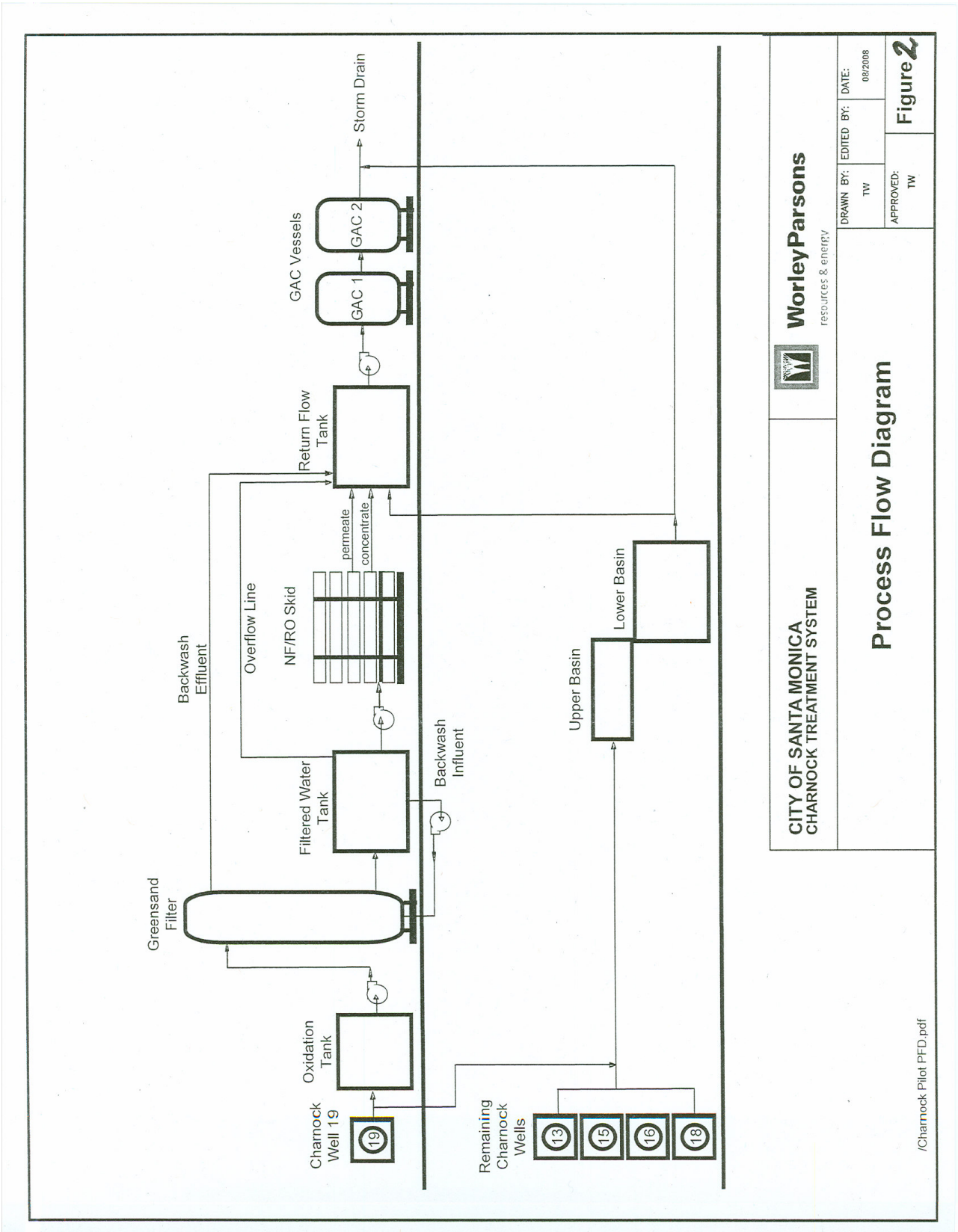
Client: CITY OF SANTA MONICA

Project/Site: Charnock Outfall and Receiving Waterbody

Title: SITE LOCATION MAP

Date: 8-15-08 | Drafted By: TW | Figure No:

Project No: H444 | Approved By:


Storm Drain
GAC Vessels
GAC 1
GAC 2
Return Flow Tank
permeate
concentrate
NF/RO Skid
Overflow Line
Backwash Effluent
Filtered Water Tank
Backwash Influent
Greensand Filter
Oxidation Tank
Charnock Well 19
19
Remaining Charnock Wells
13
15
16
18
Upper Basin
Lower Basin
CITY OF SANTA MONICA
CHARNOCK TREATMENT SYSTEM
WorleyParsons
resources & energy
Process Flow Diagram
DRAWN BY: TW
EDITED BY:
DATE: 08/2008
APPROVED: TW
Figure 2
/Charnock Pilot PFD.pdf