

**I. PURPOSE OF REPORT**

The City of Burbank (hereinafter the City) has submitted an application dated November 19, 1992 for an amended permit to serve treated water from the Burbank Operable Unit (hereinafter Burbank OU) Facilities to the City. The purpose of this report is to document the investigation, evaluate the proposed operation and make recommendation regarding issuance of an amended domestic water supply permit.

**II. DESCRIPTION OF SYSTEM**

The City currently operates its existing water system under water permit No. 65-108 issued on June 18, 1965. Permit and amendments are summarized in the following table:

<b><i>Permit</i></b>	<b><i>Permit No</i></b>	<b><i>Issued Date</i></b>	<b><i>Permit Type</i></b>
<b><i>Full</i></b>	65-108	June 18, 1965	Revised Full Permit
<b><i>Amendment</i></b>	03-92-000	June 1, 1992	GAC treatment (Wells 7 & 15)

Due to the regional groundwater contamination with Volatile Organic Compounds (VOCs), all of the City's groundwater sources exceed State standards and require treatment. Since 1991, the City has installed and operated a Granular Activated Carbon (GAC) unit to remove VOCs from Wells No. 7 and 15, which provide about 10 percent of the total water supply. The remaining 90 percent of the total supply is purchased from the Metropolitan Water District of Southern California (MWD). [REDACTED]

<b><i>Connection</i></b>	<b><i>Size (inch)</i></b>	<b><i>Capacity (cfs)</i></b>	<b><i>Location</i></b>
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

According to the 1994 Annual Report submitted by the City, the system supplies over 6.6 billion gallons (~12,000 gpm) of water annually through over 26,000 service connections to over 90,000 residents. The maximum daily usage was

26.51 MG (18,410 gpm) on August 12, 1994 and the maximum monthly usage was 752 MG (16,850 gpm) for the month of August.

The City has 34 storage facilities with a total capacity of about 50 MG. There are seven (7) pressure zones with pressures ranging from 60 to 160 psi in the distribution system. The operation is divided into three subsystems based upon the three main pressure zones: Systems No. 1, 2 and 3.

### **III. INVESTIGATION FINDINGS**

The following definitions are provided to be consistent with EPA reports and treatment plant design and specifications.

- (a) Treatment Plant: The plant includes the treatment processes of air stripping and liquid phase granular activated carbon (LPGAC) for treating groundwater.
- (b) Valley Pumping Plant: The plant includes Valley Forebay Facility and Booster Station for storage, disinfection and pumping of the treated groundwater.
- (c) Blending Facilities: The plant includes facilities that provide blending of purchased water from Metropolitan Water District of Southern California (MWD) with the treated groundwater for nitrate reduction.
- (d) Burbank OU Facilities: Burbank Operable Unit includes seven (7) Extraction Wells, Treatment Plant, Valley Pumping Plant, Blending Facilities, and the pipelines and appurtenances associated with the above treatment processes.
- (e) Point of Delivery: The physical point of transfer of the treated groundwater from the Treatment Plant to the Valley Pumping Plant.
- (f) Point of Interconnection: The physical point of transfer of the treated groundwater following the booster station but prior to entry into the Blending Facilities.
- (g) Point of MWD Connection: The physical point of transfer of the purchased treated surface water from the MWD for blending from the MWD pipeline to the Blending Facilities.
- (h) Point of Water System Introduction: The physical point of transfer of the blended water between the Blending Facilities and the City's potable water distribution system.

#### **(A) Groundwater Contamination**

Groundwater samples have been collected from the City's and/or Lockheed Martin wells for chemical analysis since 1980. Many VOCs have been detected at concentrations exceeding the California Maximum Contaminant Levels (MCLs). Perchloroethylene (PCE) and Trichloroethylene (TCE) have been observed at the highest concentrations and are noted to have the greatest areal distribution of all VOCs detected within the Burbank OU. According to monitoring data, up to 19,000 ppb of PCE and 27,000 ppb of TCE have been

detected. A few other VOCs have also been detected within the Burbank OU area at lower concentrations. These VOCs include:

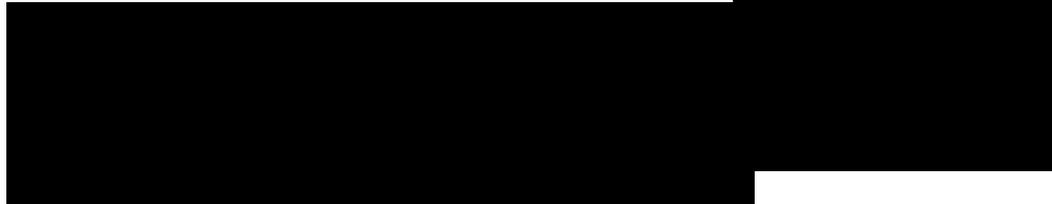
- Benzene
- Carbon Tetrachloride
- Chlorobenzene
- Cis-1,2-Dichloroethylene (cis-1,2-DCE)
- trans-1,2-Dichloroethylene (trans-1,2-DCE)
- 1,2-Dichloroethane (1,2-DCA)
- 1,1-Dichloroethylene (1,1-DCE)
- 1,2-Dichloropropane (1,2-DPA)
- 1,1,2-Trichloroethane (1,1,2-TCA)
- 1,1,2,2-Tetrachloroethane (1,1,2,2-PCA), and
- Vinyl chloride

Many trace metals have also been detected in the area. The metals include chromium, lead, zinc, copper, cadmium, arsenic, silver, mercury and selenium. Generally the levels of these metals were below State MCLs.

Nitrate has been a regional problem due to the extensive use of private sewage disposal systems, exfiltration from sanitary sewer lines, and former agricultural practices. Nitrate has been detected in all groundwater sources and exceeds the MCL in many wells.

**(B) Burbank Operable Unit - Extraction Wells**

The location of the Burbank OU is shown in Figure 1. Seven (7) wells have been constructed in the Burbank OU Phase I Well Field. 



The drilling logs, well design and development are summarized in the attached Well Construction Summary and the DHS Well Data form for each individual well. The wells are constructed with 18-inch OD, 0.312-inch wall, type 304 stainless steel casing and wire wrap screens. Mild steel casing was used from about 70 feet above the water table to ground surface. Screen slot size varied among the wells and between the upper and lower sections of each well, ranging from 60-slot to 90-slot. The wells are between 332 and 365 feet deep. Each well contains two isolated screen sections: an upper and a lower section. The gravel pack consists of clean, washed, rounded gravel in gradations of 6x12, 6x9, and 4x8. A sanitary seal consisting of cement grout extends approximately 60 feet below ground surface in the annulus of each well.

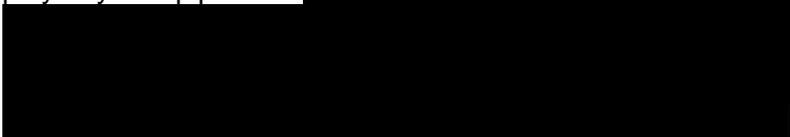
A secured, below-grade well vault is provided to house the well appurtenances. The well vault provides access to the wellhead, flow meter, flow control valves,

pressure relief controls, water level and line pressure monitors, and pump electric box. A secured, above-ground sampling cabinet has been installed near each well vault and contains a groundwater sampling port, a packer inflation pressure gauge and inflation/deflation valve, remote meters (voltage and current) for monitoring the cathodic protection system rectifiers, and a wellhead vent line.

The well pumps were sized and selected according to each well's development. Four of the pumps installed in Wells VO-1, VO-2, VO-3, and VO-4 are 200-horsepower (hp), electric submersible units with an optimum design capacity of 1500 gpm at a total dynamic head (TDH) of 410 feet. The other three pumps installed in wells VO-5, VO-6, and VO-7 are 250-hp, electric submersible units with an optimum design capacity of 1900 gpm at a TDH of 420 feet. The well pump information is summarized in the attached Well Data form for each individual well.

An impressed-current cathodic protection system was installed to inhibit electrolytic corrosion for each well. The cathodic protection system consists of sacrificial anodes installed within 100 feet of the well vault; a rectifier; remote rectifier meters; connecting cables between the anode beds and the rectifier, and between the rectifier and the wellhead; insulating flanges, sleeves and washers installed on the wellhead; and magnesium anode ribbons and casing insulators installed on the drop pipe inside the well.

Extracted groundwater is conveyed by an underground, high-density polyethylene pipeline. 

 The underground sections of the pipeline are up to 3-inch outside diameter HDPE Drisco pipe, rated at 160 psig. The above ground sections of the pipelines, and the piping inside each well vault is carbon steel construction, rated at 150 psig.

**(C) *Burbank Operable Unit - Treatment Facilities***

The Burbank Operable Unit Facilities include: 1) the Treatment Plant; 2) the Valley Pumping Plant; and 3) the Blending Facilities (see Figure 3).

1) The Treatment Plant

The Treatment Plant is a semi-automated facility designed to extract, transfer and process groundwater collected from the extraction well field. The main section of the plant consists of a stripping tower feed system, stripping tower system, stripping tower overhead treatment system and a stripping tower bottom treatment system. Figure 4 is an isometric 3-dimensional view of the Treatment Plant. Figure 5 is a plot plan of the plant layout.

The stripping tower feed system includes seven extraction wells, the well field collection pipeline and systems required to control the output of each well and the feed split to each stripping tower. The stripping tower system includes two air stripping towers with the capacity to process 4,500 gpm of groundwater each.

The operator may select a one-tower operation, or a two-tower operation in either parallel or series mode. The influent enters the top of the tower above the packed section while air is fed to the bottom of the column below the packed media section. The tower utilizes a trough distributor to ensure even distribution of the influent over the packed media section. The towers contain a 40 feet packed section starting 10 feet from the bottom of the towers. The first 10 feet of packing, from the bottom, is 2-inch Pall rings, the remainder are 3-inch LANPAC. The air flow is adjusted to provide an air to water ratio to achieve the desired removal of VOCs from the influent. VOCs and the air exits the top of each tower and is directed to separate vapor phase granular activated carbon (VPGAC) beds. The bottom streams from the two towers are combined and directed to a common liquid phase granular activated carbon (LPGAC) beds. Figure 6 is the process flow diagram. Figure 7 shows flow distribution in the LPGAC beds. Air stripping tower data is summarized in the attached Air Stripping Plant form along with the extraction well level header pressure control system. The LPGAC data is summarized in the GAC Filtration Data Form.

The bottom treatment system includes six (6) 14-foot diameter, 46-foot 9-inch vertical vessels. Each vessel contains two (2) 14-foot diameter by 10-foot high flat beds designed carbon baskets with a support and retainer screen. The vessels are designed for an operating pressure of 90 psig. The air stripping towers are intended to be the primary treatment and the carbon beds provide an additional level of protection. Water is fed in an up-flow manner through the beds and the capacity of each bed is 750 gpm. Trace levels of VOCs will be adsorbed onto the carbon. The effluent exiting the LPGAC beds is directed to the Valley Pumping Plant.

The spent carbon is reactivated on site. The regeneration process involves the hydraulic transfer of the spent carbon from one adsorber to a pressure vessel. The spent carbon is contacted with low pressure steam for 30 hours. The organic compounds adsorbed onto the carbon are heated, vaporized and removed with the exiting steam.

## 2) The Valley Pumping Plant

The Valley Pumping Plant includes three main components: the disinfection facility, the forebay facility, and the City's booster station (see Figure 8 for the layout). The system components are shown on the process flow diagram (Figure 9). The treated groundwater from the Treatment Plant is disinfected with free chlorine directly into the pipeline located in the chlorine diffuser vault. After the chlorine is diffused through the static mixer, the treated groundwater is transferred to the Valley Forebay. The Forebay has a total capacity of five (5) million gallons and is divided into two sections (see attached Reservoir Data form for details). Water is released from the Forebay into an existing concrete conduit which connects to the Booster Station. Ammonia is then injected into the concrete conduit. Ammonia reacts with the chlorine to form monochloramines. Chlorine and ammonia are injected to provide a total residual throughout the City's distribution system. The disinfected water will be pumped through the existing pipelines contained in the Booster Station. Disinfection facilities are summarized in the attached Disinfection Data form.

Four pipelines leading to four pumps have individual capacities of 4,000, 4,000, 6,800, and 6,800 gpm, respectively. Three existing pumps were rehabilitated and a new pump with a variable frequency drive was added. Each line consists of a suction butterfly valve, meter, pump, check valve, butterfly valve for discharge control, surge anticipator valve, and a discharge gate valve. Each line connects to a discharge line located west of the Booster Station and will be delivered to the Point of Interconnection to the Blending Facilities. The Valley Pumping Plant has a capacity of up to 12,000 gpm. A Pumping Station Data form is attached.

3) The Blending Facilities

At the Point of Interconnection, disinfected groundwater will be blended with water supplied from the MWD to reduce nitrate levels in the treated groundwater. The Blending Facilities include a connection to the MWD supply and the potable water conveyance system. The size of the MWD B-5 connection was increased to provide a capacity of 12,000 gpm of potable water to the blending station. The potable water conveyance system consists of approximately 8,400 feet of 30-inch diameter ductile iron pipe, from the B-5 vault to the Valley Pumping Plant. Figure 10 shows the pipeline alignment. The pipeline data is summarized in the Distribution Data form.

The Blending Station consists of manifolded piping, pressure reducing valves, and a static mixer to blend the potable water from MWD with treated and disinfected groundwater from the Valley Pumping Plant. Figure 11 shows the Blending Station layout.

**(D) *Operations and Water Quality Monitoring***

Initially, the Burbank OU Facilities will be jointly operated by the Lockheed Martin, the City of Burbank, and Administrative Order Respondent (AOR) for an unknown number of years. The water treatment plant operators and their responsibilities as well as their certification status are listed in the Table 1.

Water samples at various stages of treatment processes will be collected to monitor the treatment efficiency and water quality. In addition to the sampling schedule specified in the Operational Sampling Plans of the Lockheed Martin and the City of Burbank, additional samples shall be collected according to the provisions of this document. The sampling locations with the assigned DHS Primary Station Codes are summarized in Table 2. The City shall submit monitoring data for each sampling location using the DHS Primary Station Code.

**IV. ENGINEERING APPRAISAL OF SANITARY HAZARDS AND SAFEGUARDS**

The locations of the all extraction wells have been evaluated and found to be free of sanitary hazards. All seven extraction wells had been constructed according to the California Water Well Standards (DWR Bulletins 74-81 and 74-

90). All groundwater from the Burbank OU well field will be treated to meet State MCLs for VOCs at all times. The Treatment Plant effluent will be blended with low-nitrate water from MWD to meet the nitrate MCL at all times prior to delivery to the customers. Monitoring for the VOCs as well as the nitrate level in the blended water will be performed.

Groundwater samples have been collected from the seven extraction wells by both the DHS and the Lockheed Martin according to the Vulnerability Assessment and Monitoring Frequency Guidelines (see Attachments). The samples collected by the DHS were analyzed in the DHS's Sanitation and Radiation Laboratory in Los Angeles. The analytical results are summarized in Table 3. In addition to PCE and TCE, a few other organic chemicals have been detected such as 1,1-DCE, 1,2-DCP, Di-2-ethylhexyl Phthalate, Chloroform, 1,2,3-TCP. However, all those organic chemicals are either below or at their MCL levels.

A cross-connection control field inspection was conducted on April 27, 1995 by Los Angeles County and State Department of Health Services. A cross-connection prevention device is required in the line to the recycle water holding tank TK 920 to prevent a possible cross-connection. The inspection report is attached. A 3" RP device has been installed and tested at the required location during month of July. No other hazards are known to exist in the Burbank Treatment Facilities.

The VOC concentrations in the groundwater have been as high as 19,000 ppb of PCE and 27,000 ppb of TCE. In order to meet MCLs, removals of about 99.98% will need to be achieved. Close surveillance will be needed to ensure that such removals do occur. Frequent monitoring for organic chemicals is needed to ensure that early detection of these compounds, which may be harder to remove, is done. Due to the high concentrations involved (to date, the highest contaminated wells used for domestic supply in the State), the facilities must be operated and monitored in a reliable manner.

## V. **CONCLUSIONS AND RECOMMENDATIONS**

The Department of Health Services finds that the sources of supply, treatment, works, and operation as described in this report are capable of producing a safe, wholesome, and potable supply under all circumstances and conditions. The quality of the water served and the City's facilities and operations adequately meet State Department of Health Services Standards. Issuance of an amended domestic water supply permit by the State Department of Health Services to the City of Burbank is recommended subject to the following provisions:

1. The following sources are approved for use as a domestic water supply by the City:
  - a) Seven (7) extraction wells drilled in the Burbank OU extraction well field along Vanowen Street and the south property line of the Plant B-1 as follows:

<b>Well</b>	<b>Primary Station Code</b>	<b>Status</b>	<b>Treatment</b>
<b>VO-1</b>	01N/14W-10H01S	Active	

<b>VO-2</b>	01N/14W-10B03S	Active	2 VOC Air Stripping Towers, 12 LPGAC Beds, Chloramine Disinfection, Nitrate Blending
<b>VO-3</b>	01N/14W-10B04S	Active	
<b>VO-4</b>	01N/14W-10C03S	Active	
<b>VO-5</b>	01N/14W-10D03S	Active	
<b>VO-6</b>	01N/14W-09A05S	Active	
<b>VO-7</b>	01N/14W-09A06S	Active	

- b) Two active wells with GAC and chloramination treatment at the City's Lake St. site as follows:

<b>Well</b>	<b>Primary Station Code</b>	<b>Status</b>	<b>Treatment</b>
<b>7</b>	01N/14W-11Q01 S	Active	Lake St. Plant - GAC & Chloramine Disinfection
<b>15</b>	01N/14W-14B08 S	Active	

- c) Five active connections with the MWD as follows:

<b>Connection</b>	<b>Location</b>
<b>B-1</b>	Kenneth/Verdugo
<b>B-2</b>	Keystone/Olive
<b>B-3</b>	Olive/Hollywood Way
<b>B-4</b>	Tulare/Scott
<b>B-5</b>	Hollywood Way/San Fernando Rd.

2. The following treatment facilities are approved for use by the City:

<b>Treatment Facility</b>	<b>Treatment Process</b>
<b>The Burbank OU Treatment Plant</b>	2 Air Stripping Towers 12 LPGAC Beds
<b>The Valley Pumping Plant</b>	Chloramination
<b>The Burbank OU Blending Facilities</b>	Nitrate Blending
<b>The Lake St. GAC Plant</b>	LPGAC & Chloramine Disinfection

3. No other sources shall be added and no changes, modifications, or additions in treatment shall be made without first receiving an amended domestic water permit from the DHS.
4. Water leaving the Burbank OU Point of Water System Introduction shall comply with all Maximum Contaminant Levels (MCLs) and Action Levels (ALs) established by the DHS, at all times (see Provision No. 39).
5. There shall be no bypassing of any treatment processes during the initial operation period. These include air strippers, LPGACs, chloramine disinfection and blending facilities. Upon evaluation of performance data, the DHS may consider a request to bypass a treatment process. This requirement applies only to the Burbank OU normal operation and does not apply to the special periods such as system maintenance and using purchased water from the MWD only.

6. The City shall comply with the Title 17 of California Code of Regulations (CCR), to prevent the water system from being contaminated from possible cross-connections.
7. The Burbank OU Facilities shall be inspected daily when in use and operational records of the water treatment processes shall be maintained. The records shall also document any emergency and scheduled interruptions from Burbank OU, including: a) Location of the problem, b) Cause of the interruption, c) Date and approximate time of the problem, d) Precautions taken to minimize contamination of the supply and notification of affected users.
8. A monthly report of the operation of the Burbank OU facilities shall be submitted to the DHS, Hollywood District, by the 10th day of the following month. As a minimum, the report shall include the amount of water processed by the Treatment Plant, by the Valley Pumping Plant and by the Blending Facilities, wells in operation and length of time of use, the amount of chlorine and ammonia used daily, daily free and total chlorine residuals, operational schedule and problems, daily air/water ratio. The report shall also include a summary of all required analytical results of the wells, air stripping tower influent and effluent, LPGAC effluent, and blended water.
9. All analyses shall be performed by a certified laboratory and analytical results shall be submitted on approved DHS reporting forms or through electronic data transfer (EDT).

**Burbank OU Extraction Well Field and Treatment Plant**

10. Water at the Point of Delivery shall comply with all Maximum Contaminant Levels (MCLs) and Action Levels (ALs) established by the DHS for organic chemicals, at all times, (see Provision No. 38).
11. The additive effects of multiple VOC contaminants shall be considered. The following equation must be met at the Point of Delivery (see Provision No. 37), when it can be accomplished in a cost effective manner:

$$\text{HAZARD INDEX (HI)} = \sum_{i=1}^n \left\{ \frac{\text{Contaminant}}{\text{MCL or AL}} \right\}_{i \leq 1}$$

MCL = Maximum Contaminant Level (State Drinking Water Standard);

AL = State Action Level (when MCL is still not available);

12. By December 31, 1996, all operators of the Treatment Plant shall have at least a Grade II certificate in accordance with CCR, Title 17, Division 1, Chapter 5. As a minimum, a Grade III certificate is required for the supervisor of the Treatment Plant.
13. The extraction wells shall be operated according to the approved *Final Phase 1 Operation and Maintenance Plan, Extraction Well Field, July 11, 1994* or its replacement or amendment (see Provision No. 38). The replacement document or amendments shall be approved by the DHS.

14. Each extraction well shall be sampled in accordance with the attached Vulnerability Assessment and Monitoring Frequency Guidelines prepared by the DHS. Previous analytical results may be used to comply with the monitoring requirements, and shall be submitted to the DHS for review, when requesting a waiver.
15. The Treatment Plant shall be operated according to the approved *Final Phase I Operation and Maintenance Plan, Burbank Operable Unit Treatment Plant, July 11, 1994* (see Provision No. 38). Each air stripping tower shall not be operated above its design capacity of 4,500 gpm. Each LPGAC Unit shall not be operated above its design capacity of 750 gpm. The Treatment Plant shall be limited to a maximum flow of 9,000 gpm.
16. The air stripping towers shall be operated in series with LPGAC, when the 12 LPGAC beds are operated in parallel. See Provision No. 38.
17. Virgin carbon shall be initially used for all LPGAC beds. After reactivation, virgin carbon of similar characteristics, such as size and iodine number, shall be used to augment the original volume.
18. The iodine number of the virgin carbon which is initially used for all LPGAC beds shall be determined by a third party to establish the baseline adsorptive capacity and the results shall be submitted to the DHS.
19. The spent LPGAC from the Treatment Plant may be reactivated on site. The reactivated carbon used in the LPGAC shall be limited to only the carbon of the LPGAC beds of the Treatment Plant.
20. The reactivated LPGAC shall be tested for its iodine number by a third party and the test results must be at least 80 percent of the baseline iodine number. If not, then the reactivated LPGAC shall not be used in the Treatment Plant. The results shall be submitted to the DHS for review.
21. The LPGAC regeneration form shall be submitted to the DHS for review.
22. Each time the LPGAC is replaced, the effluent shall be analyzed daily for total suspended solids for the initial five days to ensure that no carbon fines are present.
23. Total coliform and heterotropic plate count (HPC) analyses shall be conducted weekly at Point of Delivery on the combined effluent of LPGAC beds. If either total coliform is present or HPC exceeds 500/ml, the City shall require Lockheed Martin to:
  - 1) Notify the operators of the Valley Pumping Plant immediately;
  - 2) Notify the DHS within 24 hours;
  - 3) Collect total coliform and HPC samples of the effluent from each LPGAC bed which is in use to determine which bed(s) is responsible for the total

coliform positive and/or high HPC result. The results shall be submitted to the DHS by the 10th day of the following month.

24. Prior to determination of the life expectancy of each LPGAC bed, monthly VOC samples from each bed, when in use, shall be taken at the 1/2 sampling port for the initial four months. Starting in the 5th month, the VOC sampling point shall be changed to the 3/4 sampling port and the sampling frequency shall be increased to weekly. The LPGAC bed must be taken out of service when any VOC at the 3/4 sampling port is greater than 0.5 ppb.
25. Both the influent and the effluent of the air stripping towers shall be sampled daily for VOC's during the first month of operation to monitor and evaluate VOC removal performance. The sampling frequency may subsequently be reduced with the approval of the DHS.

### **Valley Pumping Plant**

26. All operators of the City Valley Pumping Plant, including disinfection and blending facilities, shall have at least a Grade II certificate in accordance with CCR, Title 17, Division 1, Chapter 5. As a minimum a Grade III certificate is required for the supervisor of the Valley Pumping Plant.
27. The City shall operate the plant according to the approved *Final Operations and Maintenance Plan, Valley Pumping Plant dated August 1994*, or its replacement or amendment (see Provision No. 39). The replacement document or amendments shall be approved by the DHS.
28. In addition to the continuous monitoring performed, additional samples shall be collected based on the following:
  - a) At least four per year QA/QC VOC samples from the Point of Delivery.
  - b) Monthly samples for nitrates from the Forebay effluent that must be analyzed by a certified laboratory for compliance purposes.
  - c) Daily measurements of the total and free chlorine residuals of the Forebay effluent.
29. The City shall perform a daily field measurement for nitrate of the Forebay effluent for operational control of the blending process. A Hach field test kit may be used for this measurement.
30. The effluent from the Valley Pumping Plant shall contain a chlorine residual of at least 0.2 mg/L. (See provision No. 39).

### **Blending Facilities**

31. The Blending Facilities shall be operated according to the *Operations and Maintenance Manual, Blending Facilities for Burbank Operable Unit, May 1995*, or its replacement or amendment (see Provision No. 39). The replacement document or amendments shall be approved by the DHS.

32. The blended water shall be analyzed for nitrate weekly by a State certified laboratory at the Point of Water System Introduction and shall meet the nitrate MCL. Sampling frequency may be reduced upon approval by DHS.
33. The City shall conduct a daily calculation of the nitrate blending operation and make necessary adjustments when the calculated nitrate level exceeds 39.0 mg/L.
34. The daily calculations of nitrate blending shall be summarized and submitted to the Hollywood District monthly, by the 10th day of the following month.

**General**

35. The requirements for the operator certification contained in Provisions No. 12 and 26 apply only for the current operating responsibilities, i.e., Lockheed Martin operating the Treatment Plant and the City operating Valley Pumping Plant and the Blending Facilities. The requirements will be reevaluated by the DHS if the City becomes responsible for the operation of the Burbank OU Facilities.
36. Upon request, any of the permit provisions may be reviewed and amended based upon the evaluation of monitoring and performance data by the DHS.
37. If Permit Provision No. 11 can not be met, then the City shall notify the DHS on the same day, unless the DHS office is closed, in which case, notification shall be completed within 24 hours. Information regarding the operation of the wells and the Treatment Plant shall be provided to the DHS.
38. If Permit Provisions No. 10, 13, 15, and 16 can not be met, then flow from the Treatment Plant to the Valley Pumping Plant shall cease immediately. The DHS shall be notified on the same day, unless the DHS office is closed, in which case, notification shall be completed within 24 hours. Information regarding the operation of the wells and the Treatment Plant shall be provided to the DHS.
39. If Permit Provisions No. 4, 27, 30, and 31 can not be met, then the Burbank OU Facilities shall cease to operate immediately. The DHS shall be notified on the same day, unless the DHS office is closed, in which case, notification shall be completed within 24 hours. Information regarding the operation of the Burbank OU shall be provided to the DHS.
40. This permit becomes null and void if a letter of the approval from SCAQMD to operate the air stripping facility is not possessed by its operating entity.