



* Must meet all ARARs

** Must meet all legal requirements including MCL for nitrate

FIGURE 10-1: ON-SITE ARARS AND OFF-SITE LEGAL REQUIREMENTS FOR THE GLENDALE SOUTH OU INTERIM REMEDY

RCRA Program administered by the EPA. Therefore, State regulations in the California Code of Regulations (CCR), Title 22, Division 4.5, Environmental Health Standards for the management of Hazardous Wastes (hereinafter the State HWCL Regulations), are now cited as ARARs instead of the Federal RCRA Regulations.

Since the source of the contaminants in the groundwater is unclear, the contaminated groundwater is not a listed RCRA waste. However, the contaminants are sufficiently similar to RCRA wastes that EPA has determined that portions of the State's HWCL Regulations are relevant and appropriate. Specifically, the substantive requirements of the following general hazardous waste facility standards are relevant and appropriate to the VOC treatment plant for Alternatives 2 through 6: Section 66264.14 (security requirements), Section 66264.15 (location standards) and Section 66264.25 (precipitation standards).

In addition, the air stripper would qualify as a RCRA miscellaneous unit if the contaminated water constitutes RCRA hazardous waste. EPA has determined that the substantive requirements for miscellaneous units set forth in Sections 66264.601 -.603 and related substantive closure requirements set forth in 66264.111-.115 are relevant and appropriate for the air stripper. The miscellaneous unit and related closure requirements are relevant and appropriate because the water is similar to RCRA hazardous waste, the air stripper appears to qualify as a miscellaneous unit, and the air stripper should be designed, operated, maintained and closed in a manner that will ensure the protection of human health or the environment.

The land disposal restrictions (LDR), 22 CCR Section 66268 are relevant and appropriate to discharges of contaminated or treated groundwater to land. The remedial alternatives presented do not include land disposal of untreated groundwater. Because of the uncertainty in the levels of contamination and volumes of water to be derived from monitoring and extraction wells at this site, these waters must be treated to meet Federal and State MCLs for VOCs, whichever is more stringent, prior to discharge to land. By meeting the Federal and State MCLs for VOCs before spreading at the Headworks Spreading Grounds, Alternative 6 will satisfy the RCRA LDRs because the groundwater will no longer contain the listed wastes when it is recharged.

The container storage requirements in 22 CCR Sections 66264.170 -.178 are relevant and appropriate for the storage of contaminated groundwater over 90 days.

On-site storage or disposal of the spent carbon from the treatment system could trigger the State HWCL requirements for storage and disposal if the spent carbon contains sufficient quantities of hazardous constituents that cause the spent carbon to be classified as a characteristic hazardous waste. If the spent

carbon is determined to be a hazardous waste under HWCA, the requirements for handling such waste set forth in Sections 66262 and 66268 are applicable.

Certain other portions of the State's HWCL's regulations are considered to be relevant but not appropriate to the VOC treatment plant. EPA has determined that the substantive requirements of Section 66264.15 (general inspection requirements), Section 66264.15 (personnel training) and Sections 66264.30-66264.56 (Preparedness and Prevention and Contingency Plan and Emergency Procedures) are relevant but not appropriate requirements for this treatment system. EPA has made this determination because the treatment plant will be required to have health and safety plans and operation and maintenance plans under CERCLA that are substantively equivalent to the requirements of Sections 66264.15, 66264.30-66264.56.

10.4 Summary of ARARs for the Glendale South OU Interim Remedy

EPA has determined a number of chemical-, and action-specific ARARs for the Glendale South OU interim remedy. All of the alternatives that involve groundwater extraction and treatment could achieve the chemical-specific treatment standards for the groundwater at the point of delivery (see Figure 10-1). However, Alternative 3 which uses perozone is a less certain technology than air stripping or liquid-phase GAC adsorption for such a large volume of water and therefore is somewhat less likely to achieve the chemical-specific ARARs.

11.0 THE SELECTED REMEDY

Based upon consideration of the requirements of CERCLA, the detailed analysis of the alternatives, and public comments, EPA has determined that Alternative 2: Extraction, Treatment of VOCs by air stripping (either single- or dual-stage) or liquid phase GAC, Blending to meet the nitrate standard and Conveyance to a public water distribution system, in combination with Alternative 6 (as a contingency): Extraction, Treatment of VOCs, and Recharge at a Spreading Ground, is the most appropriate interim remedy for the Glendale South OU.

Alternative 2 includes the extraction of 2,000 gpm of contaminated groundwater for 12 years. The extraction wells will be new and will be located to inhibit most effectively the migration of the contaminant plume while maximizing the extraction of the most contaminated groundwater. The most contaminated groundwater is located in the upper or shallowest zone of the aquifer. Various locations and scenarios for extraction wells and rates of extraction are proposed in the FS report for the Glendale South OU; however, all design decisions for this interim remedy will be made during the remedial design phase. During the remedial design phase one of the locations proposed for extraction wells and

scenarios for rates of extraction per individual well may be selected or new ones may be selected.

The extracted groundwater will be filtered to remove any suspended solids, if necessary, and then treated for VOCs using dual-stage or single-stage air stripping with vapor-phase GAC adsorption for emissions control (liquid phase GAC may also be used). Whether air-stripping (dual versus single) or liquid phase GAC will be used will be determined during remedial design as will the exact location for the treatment plant. If air-stripping is used for VOC treatment, the air stream will be treated using a vapor-phase GAC adsorption system to ensure that air emissions meet Federal air quality standards as regulated by the South Coast Air Quality Management District and described in the ARARs section of this ROD.

After the extracted groundwater is treated for VOCs, the treated water exiting the treatment plant shall meet all MCLs and secondary drinking water standards with the exception of nitrate. The VOC-treated water will then be blended with water of such a quality that the treated, blended water will meet all drinking water standards (including the nitrate MCL). The treated and blended water to be delivered to a public drinking water supply shall meet all legal requirements. The water will then be conveyed to the City of Glendale and/or another municipality for distribution through the public water supply system.

As a result of comments by the City of Glendale on the Glendale North OU Proposed Plan (July 1992) and Glendale South OU Proposed Plan (September 1992) which indicated that the City had sufficient water credits to accept the treated water from both of these OUs, and in order to decrease overall costs associated with the OUs, EPA has determined that the treatment plants for the Glendale North and Glendale South OUs will be combined. The total 5,000 gpm of treated water will be conveyed to the City of Glendale for distribution to its public water supply system. The exact configuration of the combined treatment plant will be determined during the remedial design phase of the project. The Glendale North OU Record of Decision also reflects this decision to combine the treatment plants.

However, if EPA determines that combining the treatment plants will significantly delay or hinder the implementation of the Glendale South OU, the treatment plants will not be combined.

EPA has selected Alternative 6, recharge of the treated water at the Headworks Spreading Ground, as a contingency if the City of Glendale or another San Fernando Valley water purveyor does not accept any or all of the treated water (possibly due to water supply needs). As a result, any remaining portion of water not accepted by the City of Glendale will be: first, offered to another San Fernando Valley water purveyor or, second, recharged into the

aquifer, per Alternative 6.

With the exception of blending to meet the nitrate MCL and final use of the treated water, Alternative 6 is identical to Alternative 2 above.

Under Alternative 6, after the extracted groundwater is treated for VOCs, the treated water exiting the treatment plant shall meet all MCLs for VOCs but will not need to meet secondary drinking water standards. The VOC-treated water will then be recharged into the aquifer at a Spreading Ground. To comply with ARARs, nitrate concentrations in the water to be recharged will have to be similar to or lower than the levels of nitrate in the area of the aquifer where the recharge will occur.

Groundwater monitoring wells shall be installed to evaluate the effectiveness of the Alternative 2 or 6 interim remedial action for the Glendale South OU. More specifically, groundwater monitoring will be conducted no less frequently than quarterly to: 1) evaluate influent and effluent water quality, 2) determine and evaluate the capture zone of the extraction wells, 3) evaluate the vertical and lateral (including downgradient) migration of contaminants, 4) to evaluate the effectiveness of the recharge well system and its impact on the remedy and 5) to monitor any other factors associated with the effectiveness of the interim remedy determined to be necessary during remedial design. Monitoring frequency may be decreased to less than quarterly if EPA determines that conditions warrant such a decrease.

The VOC treatment plant of the Glendale South OU interim remedy (whether it be Alternative 2, Alternative 6 or a combination thereof) shall be designed and operated so as to prevent the unknowing entry, and minimize the possible effect of unauthorized entry, of persons or livestock into the active portion of the facility. One means of preventing unauthorized entry would be to erect a perimeter fence around the VOC treatment plant. This fence should be in place prior to initiation of the remedial action and should remain in place throughout the duration of the remedy. The VOC treatment plant shall also be designed and operated so as to prevent releases of contaminated groundwater from the plant.

The selected remedy for the Glendale South OU meets all of EPA's nine evaluation criteria. The selected remedy is equally effective as the other alternatives in the short-term and long term reduction of risk to human health and the environment by removing contaminants from the upper zone of the aquifer, by inhibiting further downgradient and vertical migration of the contaminant plume, and by reducing the toxicity, mobility, and volume of contaminants in the aquifer.

The selected remedy is estimated to remove approximately 80% of the total estimated initial TCE mass after 12 years of

extraction. Thus, at the end of the 12 year interim remedy, a maximum TCE concentration of remaining in the upper zone of the aquifer would be approximately 10 ug/l. The selected remedy is estimated to significantly inhibit downgradient migration of contaminated groundwater as well as vertical migration from the upper to the lower zone of the aquifer. Furthermore, the modeling conducted as part of the FS indicated that the 2000 gpm extraction rate of the selected remedy would be effective in inhibiting the discharge of contaminated groundwater to the Los Angeles River by reducing groundwater levels to below river bottom elevations.

The VOC treatment technologies selected (dual- or single-stage air stripping with vapor phase GAC or liquid phase GAC) are technically feasible and proven effective at meeting ARARs for VOCs in the treated groundwater.

Alternative 2, in combination with Alternative 6, could be implemented, both technically and administratively.

In a letter dated May 28, 1993, the State agreed with EPA's selected remedy. EPA received several public comments during the public comment period, the majority of which expressed support for Alternative 2 primarily because Alternative 2 provides the treated water to a drinking water purveyor. These comments, along with EPA's responses are presented in Part III of this ROD, the Responsiveness Summary.

The selected remedy is protective of human health and the environment, meets ARARs, and unlike some other alternatives such as Alternative 4 which includes discharge of the treated water to the Los Angeles River, provides beneficial uses (distribution to a public water supply and/or recharge) for the treated water. The selected remedy is cost-effective. The estimated cost of Alternative 2 has a total present worth of \$25,020,000, which is in the middle of the range for all six alternatives but this cost would be significantly reduced by combining the treatment plants for the two OUs (total cost savings of up to \$13.8 million for both OUs). The estimated total cost of Alternative 6 is \$22,420,000.

12.0 STATUTORY DETERMINATIONS

As required under Section 121 of CERCLA, the selected interim remedial action is protective of human health and the environment, complies with Federal and State requirements that are legally applicable or relevant and appropriate to the interim remedial action, and is cost effective. The selected remedy utilizes permanent solutions and alternative treatment technologies to the maximum extent practicable and satisfies the statutory preference for remedies that employ treatment to reduce toxicity, mobility, and volume as a principal element.

The selected interim remedial action is protective of human health and the environment in that it removes significant VOC contaminant mass from the upper zones of the aquifer and inhibits further downgradient and vertical migration of contaminated groundwater.

The VOC treatment technologies selected (dual- or single-stage air stripping with vapor phase GAC or liquid phase GAC) are technically feasible and proven effective at meeting ARARs for VOCs in the treated groundwater and the air.

The selected remedy permanently and significantly reduces the toxicity, mobility, and volume of hazardous substances in the aquifer as well as the extracted groundwater.

Because this remedy will result in hazardous substances remaining on-site above health-based levels, EPA shall conduct a review, pursuant to CERCLA Section 121, 42 U.S.C. Section 9621, at least once every five years after commencement of remedial action to ensure that the remedy continues to provide adequate protection of human health and the environment.

13.0 DOCUMENTATION OF SIGNIFICANT CHANGES

The only significant change to the Glendale South OU interim remedy proposed in the Proposed Plan fact dated September 1992 involves the volume of water to be conveyed to the City of Glendale.

As a result of oral comments at the public meetings and written comments by the City of Glendale on the Glendale North OU Proposed Plan (July 1992) and Glendale South OU Proposed Plan (September 1992) which indicated that the City had sufficient water credits to accept the treated water from both the Glendale North and Glendale South OUs, and in order to decrease overall costs associated with the OUs, EPA has determined that the treatment plants for the Glendale North and Glendale South OUs will be combined. The total 5,000 gpm of treated water will be conveyed to the City of Glendale for distribution to its public water supply system. The exact configuration of the combined treatment plant will be determined during the remedial design phase of the project. The Glendale North OU Record of Decision will also reflect this decision to combine the treatment plants.

However, if EPA determines that combining the treatment plants will significantly delay or hinder the implementation of the Glendale South OU, the treatment plants will not be combined. Also, if the City of Glendale does not accept any or all of the treated water (possibly due to water supply needs), any remaining portion of water will be 1) offered to another San Fernando Valley water purveyor or 2) recharged into the aquifer.

The impact of this change is that the City of Glendale will be receiving 5,000 gpm of treated water. In its comments to EPA on both the Glendale North and South OU Proposed Plans, the City indicated that it would be able to accept the additional treated water. The cost of construction and operation and maintenance of the combined treatment plant is expected to be less than the cost of construction and operation and maintenance of individual treatment plants. Recent EPA cost estimates indicate that as much as \$13,888,000 would be saved on the total present worth cost by combining the two treatment plants.

PART III. RESPONSIVENESS SUMMARY

**For Public Comments received during the Public Comment Period
for the Glendale South Operable Unit Interim Remedy
at the San Fernando Valley Superfund Site
Los Angeles County, California**

EXECUTIVE SUMMARY

This Responsiveness Summary addresses comments received from the public, State agencies, and local agencies on EPA's proposed interim cleanup plan for the Glendale South OU. Comments from the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) on the RI report for the Glendale Study Area, the Glendale South FS Report, and the draft Proposed Plan for the Glendale South OU were received by EPA prior to issuing the Proposed Plan and initiating the public comment period. DTSC's comments and EPA's responses are available for review in the Administrative Record for the Glendale South OU and are not included in this responsiveness summary.

EPA held a 107-day public comment period on the RI and FS reports, Proposed Plan and other Glendale South OU administrative record documents between October 5, 1992 and January 19, 1993. A public meeting was held in Glendale on October 21, 1992. Approximately 25 representatives of the community, local agencies, and EPA attended the meeting. EPA staff made a presentation on the Glendale South OU alternatives, including EPA's preferred alternative, and answered questions. A transcript of the meeting is included in the Administrative Record for the Glendale South OU.

EPA received comments orally from three members of the public during the October 21, 1992 public meeting.

EPA also received approximately 10 letters containing comments from interested community members, the City of Glendale, and the Los Angeles Department of Water and Power (LADWP). These letters are included in the Glendale South OU Administrative Record.

EPA received numerous comments from ITT General Controls, Inc. on several issues relating to the RI and FS documents and the Proposed Plan for the Glendale South OU interim remedy. Most of these comments criticized EPA for not justifying its decisions including its preferred alternative selection, suggested that EPA did not provide the proper supporting documentation and stated that the interim remedy for Glendale South OU did not demonstrate consistency with a permanent remedy for the San Fernando Valley sites. EPA responded that the Glendale South OU is an interim action and not a permanent remedy, that the RI/FS and remedy selection were conducted in accordance with the NCP, applicable EPA

guidance, that an entire Administrative Record with supporting documentation is available for review at the San Fernando Valley information repositories, and finally that the Glendale South OU interim remedy would not be inconsistent with nor preclude implementation of any final remedy for the San Fernando Valley sites.

The Responsiveness Summary is divided into two parts. Part I focuses on EPA's responses to the concerns and major issues raised by members of the local community including the City of Glendale. Part II includes detailed responses to the comments received (by ITT) that were more legal or technical in nature.

RESPONSIVENESS SUMMARY

2166-05364

for PUBLIC COMMENTS RECEIVED from

October 5, 1992 through January 19, 1993

ON THE PROPOSED PLAN FOR THE

GLENDALE SOUTH OPERABLE UNIT INTERIM REMEDIAL ACTION

AT THE SAN FERNANDO VALLEY SUPERFUND SITE,

LOS ANGELES COUNTY, CALIFORNIA

This document summarizes and responds to all significant written comments received during the public comment period (107 days) on EPA's Proposed Plan for the Glendale South Operable Unit (OU) of the San Fernando Valley Superfund Site in Los Angeles County, California. This summary is divided into two parts. Part I provides a summary of the major issues raised by commenters representing the local community and focuses on EPA's responses to these comments and concerns. Part II is a detailed response to comments received from ITT that were of a more technical or legal nature. Copies of all comments received by EPA are included in the Glendale South Administrative Record, available for review at the five information repositories for the San Fernando Valley Superfund project (see Appendix A).

RESPONSIVENESS SUMMARY - PART I

GENERAL COMMENTS FROM MEMBERS OF THE LOCAL COMMUNITY

1. Commenter (Upper Los Angeles River Area Watermaster) supports EPA's preferred alternative. However, he has concerns regarding the availability of the Headworks Spreading Grounds as the contingency for disposal of the treated water. Based on a 1961 water stipulation, Disney can use the Spreading Grounds for their water. Also, there are other plans to use Headworks for spreading reclaimed water, and LADWP would have to provide their full consent for EPA to use Headworks. Watermaster believes that a plan could be worked out, but the legal aspects should be considered.

EPA Response: EPA recognizes that discussions/negotiations will be required prior to use of the Headworks Spreading Grounds. Disposal of treated water is a contingency that will be used only if no water purveyors will accept the water.

2. Commenter prefers perozone oxidation treatment method and believes the Capital Cost and Annual O&M Costs presented in Glendale South Proposed Plan appear unusually high for the perozone oxidation treatment method. The commenter presented two cases for

treating 2000 gpm for TCE from: 1) 200 ppb to < 40 ppb and 2) from 200 ppb to < 5 ppb. The estimated capital costs and estimated annual operating costs for these two cases are given as: 1) \$300,000 and \$210,000 and 2) \$600,000 and \$420,000. These cost estimates address major equipment only. The commenter estimates that an entire turnkey design, construct, commission facility would cost no more than 3 to 5 times the major equipment cost.

EPA Response: As a result of comments received during the public comment period for the Glendale North Operable Unit, EPA carefully reevaluated the use of perozone oxidation. Additional research on perozone use and revised cost estimates based on a bench-scale treatability study can be found in the following technical memorandum: Applicability of Perozone Process for the Glendale North Operable Unit Groundwater Remediation (March 12, 1993) included in the Administrative Records for the Glendale North and Glendale South Operable Units which are available at all five information repositories for the San Fernando Valley Superfund Site.

While EPA was able to determine that perozone has been used for some larger-scale projects, the contaminants involved were not always similar to those found in the groundwater of the Glendale Study Area. Therefore, use of perozone for this Operable Unit would be one of the largest VOC treatment applications of the technology. In addition, the effectiveness of using the perozone technology to oxidize contaminants in the groundwater depends on the contaminants present; for instance, TCE, PCE and DCE are treatable, but carbon tetrachloride is not. Carbon tetrachloride has been detected above drinking water standards in the groundwater of both the Glendale North and Glendale South Ous. Additional VOC treatment such as air stripping or liquid-phase GAC would be required to ensure that the treated groundwater would meet all drinking water standards for VOCs.

Also, incomplete oxidation can lead to the formation of by-products such as formaldehyde which would also need to be addressed by subsequent treatment such as liquid-phase GAC to ensure the treated water meets all drinking water standards (with the exception of nitrate which will be addressed by blending). These facts, coupled with the uncertainties associated with design, costs and reliability all combine to make air stripping or liquid-phase GAC preferable to VOC treatment by perozone oxidation for this Operable Unit.

3. Commenter approves of the EPA's proposal that involves groundwater treatment for the shallow aquifer system in the San Fernando Valley. Commenter believes that air stripping is indeed an effective way to remove Volatile Organic Compounds (VOCs) after all the extracted contaminated groundwater has been filtered to remove any suspended solids. Commenter believes that the treatment of air emissions using vapor phase GAC will decrease the cost which is often passed onto the residents.

EPA RESPONSE: Comment noted; EPA agrees with comment.

4. Commenter (Los Angeles Department of Water and Power, LADWP) noted that although the cost of advanced oxidation process (AOP) for groundwater treatment appears favorable when compared to other treatment processes, AOP has not been used in any large-scale, long-term applications that would be considered comparable to the type of use that is currently being considered. The LADWP recently completed its AOP Demonstration Project in November 1991 as a pilot project to provide wellhead TCE treatment for two North Hollywood production wells. The AOP plant has a capacity to treat 2,000 gpm with a maximum TCE level at 300 ppb. The AOP has been operating since March 1992 on a four-day-per-week testing schedule under a Construction and Testing Permit issued by the California Department of Health Services. The AOP plant involves the use of some complicated equipment such as an ozone generator and a hydrogen-peroxide feed system that require testing at high flow rates to acquire data to assess this treatment's effectiveness, reliability, and operational ease, stability and range. LADWP is currently working on solving problems that have been encountered with the hydrogen peroxide injection system, the air drying system, and the electrical system during operation of the AOP plant. LADWP technical staff concurs with the U.S. Environmental Protection Agency that it is premature at this time to endorse an AOP as a preferred process over aeration with air emissions control until rigorous testing and evaluation have been completed at the AOP Demonstration Project. However, it appears appropriate that AOP remain under consideration for application to future projects if testing and evaluation indicate encouraging results.

EPA RESPONSE: Comment noted; EPA agrees with comment.

5. LADWP is generally in favor of the Proposed Plan however they feel that the public meeting would have been more appropriate and effective if held in Los Angeles to correspond with the location of the proposed facilities and service area.

EPA RESPONSE: The public meeting was held in the general vicinity of the proposed project. Furthermore, EPA has decided to combine the Glendale North and Glendale South OU treatment plants at one location in the Glendale North area. The location of the public meeting (in the City of Glendale) was appropriate.

6. Commenter (LADWP) noted that the Proposed Plan mentions dual-stage air stripping in each of the alternatives that use air stripping as a treatment method. However, the costs associated with these alternatives are based on single-stage air stripping. Commenter notes that site limitations, such as height restrictions, may require that dual-stage air stripping be used instead of larger single-stage air stripping units.

EPA RESPONSE: Comment noted; a memo has also been added to the

Administrative Record for Glendale South clarifying the cost issue. EPA agrees that design considerations may impact method of treatment via air stripping.

7. The study areas in the SFV were extended beyond the four sites as listed on the National Priority List to adjacent areas where contamination was also discovered. Thus, on Page 2, top section, second paragraph, the fourth sentence [of the Proposed Plan] should read "... where contamination was also discovered" instead of "... where contamination has or may have migrated."

EPA RESPONSE: EPA prefers the original language because we know that contamination has migrated from sources and may continue to do so in the future. Therefore, EPA does not want to limit the extent of the Superfund Site to just areas where contamination exists today (whether we are aware of its exact location or not).

8. On Page 3, second paragraph [of the Proposed Plan] it should be clarified that although there are no production wells within the Glendale OU - South Plume area, TCE and PCE have been detected in monitoring wells in this area at levels that are significantly above the federal Maximum Contaminant Level. The LADWP and City of Glendale production wells within the Glendale Study Area are located in the Glendale North OU area.

EPA RESPONSE: Comment noted.

9. It may be necessary to treat the groundwater for chromium contamination; this was not discussed in the OUFS although there is a cost estimate for chromium treatment in the Proposed Plan.

EPA RESPONSE: Comment noted; monitoring well data is still being collected and analyzed to determine the potential impact of chromium levels in the groundwater to the treatment plant. EPA believes that the elevated chromium is an isolated phenomenon that should not impact the selected treatment remedy. However, the Proposed Plan for Glendale South does include an estimate for treatment of chromium should that prove to be necessary. Supporting documentation for these cost estimates can be found in the following technical memorandum included in the Glendale South Administrative Record: Chromium Treatment Evaluation (September 28, 1992).

10. Although mention is made that the State had no objections to EPA's preferred alternative, it is not clear whether "the State" refers to the California Department of Health Services - Office of Drinking Water, California State Water Resources Control Board, or other California agencies.

EPA RESPONSE: The California Environmental Protection Agency - Department of Toxic Substances Control is the lead State agency for the San Fernando Valley Superfund Site.

11. In the paragraph discussing Alternative 2 [on page 6 of the Proposed Plan] there is an error in the cost estimate: the total present worth should read "\$25,020,000" instead of "\$25,030,000."

EPA RESPONSE: Comment noted; EPA agrees with comment.

12. In the discussion of Alternative 4 [on page 7 of the Proposed Plan] is a statement that "the State has expressed concern over this alternative." It should be explained that the State Water Resources Control Board is concerned that the treated water disposal method for this alternative [discharge to Los Angeles River] is wasteful of a natural water resource. Also, this alternative results in a reduction of the availability of SFB water for the City of Los Angeles. The cost to replace this lost water for Los Angeles is not addressed. To use purchased supply from the Metropolitan Water District at the treated, interruptible rate to replace the lost groundwater supply would currently cost \$322 per acre-foot.

EPA RESPONSE: Comment noted; EPA agrees with this comment.

13. In the Summary of Alternatives Table [of the Proposed Plan], for Alternative 1, groundwater monitoring should be mentioned under the "Criteria" section instead of "Final Use" as the method of assessing remedial effectiveness through the life of the project.

EPA RESPONSE: The upper three rows of the table (included in the ROD as Table 8-1) are used to describe the components of the six remedial alternatives; the latter rows are used to describe how well the components meet the criteria listed. Therefore, since groundwater monitoring is considered a component of the no-action alternative, EPA feels that it is more appropriate to have it listed in the upper portion of the table.

14. In the Summary of Alternatives Table [of the Proposed Plan] dual-stage instead of single-stage air stripping is listed as one of the treatment components for Alternatives 2, 4, 5, and 6.

EPA RESPONSE: Comment noted. A memorandum has been added to the Administrative Record for Glendale South clarifying that the costs identified for these alternatives are based on single-stage as opposed to dual-stage air stripping.

15. In the Summary of Alternatives Table [of the Proposed Plan] there are errors in the costs as follows: Annual Operation and Maintenance (O&M) for Alternative 2 is listed as "\$3,895,000" and it should read "\$1,852,000." Annual O&M for Alternative 5 is listed as "\$2,414,000", and it should read "\$2,464,000."

EPA RESPONSE: Comment noted. A memorandum has been added to the Administrative Record for Glendale South correcting these cost estimates.