California Regional Water Quality Control Board
Santa Ana Region

RESOLUTION NO. 01-57

State Fiscal Year 2001-2002 Emergency, Abandoned and Recalcitrant Site Priority List for the Santa Ana Region

WHEREAS:

1. Chapter 6.75 of the California Health and Safety Code authorizes underground storage tank (UST) cleanup funds to be provided to Regional Water Quality Control Boards and local UST agencies for direct cleanup of petroleum-contaminated UST sites requiring emergency or prompt corrective action to protect human health or the environment; and

2. The State Water Resources Control Board has requested the Regional Water Quality Control Boards to submit a Priority List of UST sites which threaten human health or the environment and which have been ordered by the Regional Water Board or the local UST agency to initiate corrective actions, but have not begun the requested corrective actions; and

3. A resolution adopting the Regional Water Quality Control Board's Priority List for the Emergency, Abandoned and Recalcitrant Fund must be submitted annually to the State Water Resources Control Board; and

THEREFORE, BE IT RESOLVED THAT:

1. The State Fiscal Year 2001-2002 Emergency, Abandoned and Recalcitrant Site Priority List for the Santa Ana Region, shown in Attachment "A" to this resolution, be adopted.
2. The Executive Officer is directed to forward the list to the State Water Resources Control Board.
3. The Regional Board authorizes the Executive Officer to add, delete or modify the projects shown in Attachment "A" during the fiscal year, as necessary.

I, Gerard J. Thibeault, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Santa Ana Region, on April 19, 2001.

Gerard J. Thibeault
Executive Officer

California Regional Water Quality Control Board
Santa Ana Region

April 19, 2001

STAFF REPORT

ITEM: 12

SUBJECT: State Fiscal Year 2001-2002 Emergency, Abandoned and Recalcitrant Site Priority List for the Santa Ana Region, Resolution No. 01-57

DISCUSSION:

Chapter 6.75 of the California Health and Safety Code authorizes underground storage tank (UST) cleanup funds to be provided to Regional Water Quality Control Boards and local UST agencies for direct cleanup of petroleum-contaminated UST sites requiring emergency or prompt corrective action to protect human health or the environment. The State Water Resources Control Board (SWRCB) has directed the Regional Water Quality Control Boards to submit a Priority List of UST sites which threaten human health or the environment and which have been ordered by the Regional Water Board or the local UST agency to initiate corrective actions, but have not begun the requested corrective actions. A resolution adopting the Regional Water Quality Control Board's Priority List to the Emergency, Abandoned and Recalcitrant Fund must be submitted annually to the SWRCB. The SWRCB is able to enter into contracts to provide funds to local agencies and Regional Water Quality Control Boards to perform corrective actions at such abandoned or recalcitrant sites. The SWRCB will pursue activities seeking reimbursement of those funds from the past and current owners of the subject property, including placing a lien against the subject property.

The State Fiscal Year 2001-2002 Emergency, Abandoned and Recalcitrant Site Priority List currently includes two sites and is included with the resolution as Attachment "A".

RECOMMENDATION:

Adopt Resolution No. 01-57 as presented with the Priority List shown on Attachment "A".

Santa Ana Regional Water Quality Control Board
Emergency, Abandoned, and Recalcitrant Site Priority List
State Fiscal Year 2001-2002

Site	Lead Agency Contact	Pollution	Enforcement Compliance	Proposed Abatement	Funding Requested
Former Circle K* 5990 Limonite Avenue Pedley Riverside County	Carl Bernhardt SARWQCB	Gasoline affected soil and groundwater, No analysis for MTBE	Circle K filed bankruptcy 1991 and responsibility to investigate and remediate the site reverted to property owner. Two USTs were removed in 1993. Current property owner is non-responsive to requests to conduct further work. The site was placed on the 2000-2001 EAR Account Fund list	The groundwater monitoring wells have not been sampled for several years and the extent of groundwater contamination was never defined. Additional monitoring is needed to assess the extent of groundwater contamination and to evaluate the appropriate remedial measures.	$250,000
Caliber Investment Property* 3270 W. Lincoln Avenue Anaheim Orange County	Richard Wilson City of Anaheim Public Utilities	Gasoline affected Soil and groundwater, MTBE detected	The site was operated as a Target brand service station, which was closed in 1996. The USTs were removed in May 1999. The results of subsequent soil and groundwater investigations indicated significantly elevated concentrations of gasoline constituents including MTBE. The present property owner claims they do not have the financial capability to continue investigation and remediation at the site. The site owner's application was denied because of Target's past history of non-compliance. The site owner has become recalcitrant.	Additional groundwater monitoring wells are necessary to define the extent of the groundwater contamination and to evaluate the necessary remedial actions including the implementation of interim groundwater remedial actions.	$200,000

*A more detailed site summary is attached

SITE SPECIFIC INFORMATION

I. Former Circle K site
5990 Limonite in Pedley, California

Site History

Beginning in February 1989, Circle K Corporation drilled seven soil borings and five groundwater monitoring wells in the vicinity of the underground storage tanks (USTs) at the subject site. The results of the investigation conducted by Circle K indicated that the underlying soil and groundwater were impacted by releases of gasoline from the existing USTs. In May 1991, Circle K filed for bankruptcy. Circle K last sampled the groundwater monitoring wells in February 1992. Because of the Circle K bankruptcy, the responsibility to investigate and remediate the releases of gasoline from the USTs reverted back to the property owner. In April 1995, two 10,000 gallon USTs were removed from the site. The analytical results of soil samples collected from the tank excavation confirmed that releases of gasoline have occurred at the site. Sometime between 1995 and 1998, the property was sold to the existing property owner. Regional Board staff made several attempts to contact the owners of the subject property. The existing property owner has not responded to any directives made by this agency.

Why Prompt Action is Required:

The groundwater monitoring wells at the site were last sampled in February 1992. The results are summarized below:

Well	DATE	TPH (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylene (ug/l)
CK-GW-1	2/92	57,540	3,156	3,951	773.5	3,778.5
CK-GW-2	2/92	<500	19.2	3.2	<0.5	12.1
CK-GW-3	2/92	<500	6.6	2.4	<0.5	40.9
CK-GW-4	2/92	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED	NOT SAMPLED
CK-GW-5	2/92	3,942	349.3	29.5	103.6	65.2
"Low Risk" Threshold		None	250	300	860	1750

The concentration of benzene, toluene, and xylenes detected in well CK-GW-1 significantly exceeded the "Low-Risk" threshold values established by the Regional Board. Furthermore, the soil and groundwater at the site has never been analyzed for MTBE. In addition, the lateral extent of the gasoline-affected groundwater has never been fully defined. Therefore, additional site assessment is necessary to determine the risk that this site poses to the underlying drinking water aquifer and what additional corrective actions are warranted.

The subject site is located in the southwestern corner of the Chino III groundwater subbasin of the Upper Santa Ana River Basin. Beneficial uses include municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply. Two public supply groundwater production wells are reportedly located within 3500 feet of the subject site. The subject site is located approximately 4500 feet north of the Santa Ana River. Therefore, the site posses a potential threat to the underlying drinking water supplies.

Proposed Cleanup or Abatement

Since the lateral extent of the plume of gasoline affected-groundwater has not been defined and the groundwater wells have not been sampled since 1992, the necessity of conducting additional cleanup or abatement is not known. The proposed work at the site, at a minimum, would consist of the following:

- Quarterly sampling and analysis of the five groundwater monitoring wells;
- Measurement of the groundwater elevation in each well to calculate the groundwater gradient;
- Installation of additional wells to adequately define the lateral extent of the gasoline-affected groundwater; and
- Evaluation of the necessity of further remedial actions.

If the results of the additional groundwater monitoring and investigation indicate that additional remedial actions may be warranted, then corrective actions would be implemented at the subject site. These actions could include installation of a groundwater pump and treat system, installation of a soil vapor extraction system or an air-sparging/vapor extraction system, implementation of enhanced bioremediation, or a combination of these remedial approaches.

Amount of funding Requested

The subject site was funded in the 2000–2001 EAR Account for $250,000. The SWRCB is currently transferring $30,000 from the fund to the Department of General Services in order to initiate groundwater monitoring at the site. Since only a small portion of the approved funds will be utilized in the 2000-2001 fiscal year, we are requesting that $250,000 of the 2001-2002 EAR Account fund be reserved for the subject site. Since the necessity to conduct additional remedial actions at the site has not been established, the total cost to remediate the site can not be estimated at this time.

II. Caliber Investment property
3270 W. Lincoln Avenue, Anaheim

Site History

The subject site was operated as a Target brand gasoline service station under the name of Americo Anaheim Service Center. The station was closed in 1996. In November 1996, six soil borings were drilled at the site. The results of this investigation indicated that the underlying soil had been affected by releases of gasoline from the underground storage tanks (USTs) at the site. Based on these findings, City of Anaheim Public Utilities staff made several requests that additional site assessment be conducted. The USTs were removed in May 1999. In July 1999, City of Anaheim Public Utilities staff issued the property owner a notice of violation for failure to conduct further site assessment. In August 2000, three groundwater monitoring wells were installed at the site. The results of the investigation indicated that the underlying groundwater was impacted by releases of gasoline from the former USTs. Based on these findings, Anaheim Public Utilities staff requested further groundwater assessment.

The existing property owner claims that they do not have the financial capability to continue site investigation and remediation of the gasoline releases at the site. The existing property owner applied to the SWRCB cleanup fund, but their application was rejected because the former gasoline station was part of the Target gasoline station chain. Issues regarding Target's history of non-compliance have hindered succeeding owners of the Target site from accessing the UST Cleanup fund. No further work has been done at the site. Anaheim Public Utilities staff requested that the site be included on the RWQCB's EAR Account Priority List for the 2001-2002 fiscal year because the existing property owner refuses to conduct any further work at the site and the site poses a significant treat to the underlying drinking water supplies.

Why Prompt Action is Required:

The groundwater monitoring wells at the site were last sampled in August 2000. The results are summarized below:

Well	DATE	TPH (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylene ((ug/l)	MTBE ((ug/l)
MW-1	9/19/00	110,000	5,400	20,000	2,300	12,000	110,000
MW-2	9/19/00	62,000	2,200	3,400	1,400	11,000	87,000
MW-3	9/19/00	64,000	1,900	4,600	2,200	11,000	51,000
"Low Risk" Threshold		None	250	300	860	1750	None

High concentrations of MTBE were detected in the groundwater monitoring wells. In addition, the concentration of benzene, toluene, ethylbenzene, and xylenes detected in all three groundwater monitoring wells significantly exceeded the "Low-Risk" threshold values established by the Regional Board. Furthermore, the lateral and vertical extent of the gasoline-affected groundwater has never been fully defined. Therefore, additional site assessment is necessary to determine the risk that this site poses to the underlying drinking water aquifer and what additional corrective actions are warranted.

The subject site is located in the Santa Ana Forebay subbasin of the Lower Santa Ana River Basin. Beneficial uses include municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply. The nearest public supply groundwater production well is reportedly located within 2800 feet of the subject site. Therefore, the site poses a potential threat to the underlying drinking water supplies.

Proposed Cleanup or Abatement

Since the lateral and vertical extent of the plume of gasoline affected-groundwater has not been defined, the actual extent of additional cleanup and abatement is not known. The proposed work at the site, at a minimum, would consist of the following:

- Quarterly sampling and analysis of the existing groundwater monitoring wells;
- Measurement of groundwater elevation in each well to calculate the groundwater gradient;

- Installation of additional wells to adequately define the full extent of the gasoline-affected groundwater; and

- Evaluation of the necessity of further remedial actions, including implementation of interim corrective actions.

As the results of the additional groundwater monitoring and investigation are generated, the necessary remedial actions will be evaluated and corrective actions would be implemented at the subject site. These actions could include installation of a groundwater pump and treat system; installation of a soil vapor extraction system, air-sparging/vapor extraction system or dual-phase extraction system; implementation of enhanced bioremediation; or a combination of these remedial approaches

Amount of Funding Requested

Anaheim Public Utilities staff estimates that the cost to adequately characterize and remediate the site could amount to approximately $200,000 per year for at least five years. We are requesting that $200,000 of the 2001-2002 EAR Account fund be reserved for the subject site. Since the full extent of the gasoline-affected groundwater has not been defined, the appropriate additional remedial actions at the site have not been established. Therefore, the total cost to characterize and remediate the site can not be estimated at this time.