

STAFF REPORT EL CAMINO & EVERGREEN PROPERTIES SACRAMENTO, SACRAMENTO COUNTY

SUMMARY

The purpose of this item is for the Regional Water Quality Control Board, Central Valley Region (Regional Board) to consider the adoption of a resolution authorizing the Executive Officer to enter into a prospective purchaser agreement (hereafter 'agreement') and covenant not to sue with Signature Properties, Inc. (Signature). Signature plans to purchase two Brownfield properties for development that are located in an economically depressed area of Sacramento and that have soil and groundwater pollution. The soil pollution consists of minor petroleum releases with some surface soils containing low levels of pesticides and metals. Groundwater pollution consists of petroleum, perchloroethene and other solvents that have migrated beneath the site from off-site sources. Signature is not responsible for these pollution releases.

In exchange for a covenant not to sue from the Board, Signature will agree to conduct some cleanup, and implement measures to assure that future residents are not at risk from the site pollution. Signature will also provide access for groundwater investigations as needed by the responsible parties.

INTRODUCTION

The agreement and covenant not to sue covers two properties located at 900-940 El Camino Avenue, 2740 Boxwood Street, and at 2308-2320 Evergreen Street in Sacramento (collectively, the Properties). The locations of the Properties are shown in the figure below.

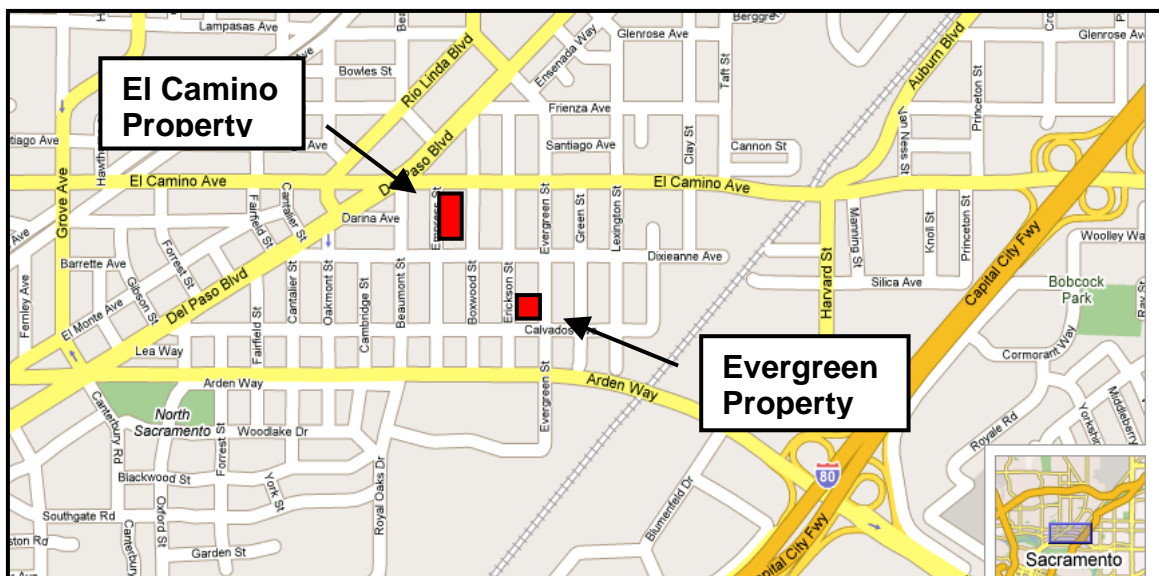


Figure 1: Location of the Properties

Signature plans to purchase the Properties for development into approximately 80 units of single-family housing. The combined size of the two Properties is about 5.38 acres. Expected benefits to the community from the proposed redevelopment project include the productive use of Brownfield property using existing infrastructure in addition to the creation of new infrastructure in the form of infill housing. Additional benefits from the development include the creation of new jobs and the generation of additional real estate, municipal and sales taxes and fees. The Sacramento Housing and Redevelopment Agency has submitted a letter to Water Board staff in support of the project. This letter is provided in Attachment 1.

The property located on El Camino (the El Camino property) is currently vacant. The northern portion of the El Camino property is paved with asphalt and was apparently used for vehicle sales activities. The southern portion of the El Camino property consists of a gravel lot with overgrown vegetation. From the mid 1950s to 1960s, a lumber company and market occupied the southern portion of the El Camino property. A picture of the El Camino property looking from El Camino Avenue to the Southeast is shown below.



Figure 2: Photo of the El Camino Property

The property located on Evergreen Street (the Evergreen property) is currently vacant and covered by vegetation. Two residences existed on the Evergreen property during the 1960s and 1970s. No structures have been on the Evergreen property since that time. A storm water drainage ditch traverses the Evergreen property. A picture of the Evergreen property looking from Calvados Avenue to the North is shown below.



Figure 3: Photo of the Evergreen Property

At many Brownfield sites, a potential barrier to reuse of the site is that pollution may exist at or under the site due to wastes formerly discharged at the Properties or due to wastes that were discharged off the site that have, or may in the future, migrate onto or under the Property. While a potential developer can estimate the costs associated with cleaning up the property, uncertainty may remain regarding the developer's potential future liability associated with the groundwater pollution. In this case, the groundwater pollution was likely caused by releases of waste at a nearby property or properties, releases for which Signature is not responsible as a Discharger.

A legislated solution to this problem has been provided in the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA", also known as the "Superfund Law"). Section 113(f)(2) of CERCLA states, in part, that:

"A person who has resolved its liability to the United States, or a State in an administrative or judicially approved settlement shall not be liable for claims for contribution regarding matters addressed in the settlement."

Contribution claims, as described in Section 113(f)(1) of CERCLA, occur when one or more parties who are responsible for the pollution at a site requests the Federal Court to allocate response costs among the liable parties (in essence, to determine each parties' appropriate "contribution" to the cleanup cost).

In this case, the Agreement and Covenant Not to Sue between Signature and the Water Board would, in effect, constitute an administrative settlement resolving Signature's liability to the State for the property and thus, it would remove Signature's potential exposure to third party claims for contribution to the cleanup

of the underlying groundwater pollution, which was not caused by Signature or by activities as the properties Signature plans to develop.

Signature proposes to take certain actions, as more fully described below, to assure that the waste is removed from the Properties or does not otherwise pose a threat to future residents at the Properties or to the environment. For instance, there remains a potential exposure pathway from the pollutants in groundwater that may migrate to the indoor air of the future residences. Signature will install vapor barriers beneath the homes to manage this potential risk. A copy of the proposed agreement is provided in Attachment 2.

SITE INVESTIGATIONS

Two Phase I Environmental Site Assessments were conducted on the Properties (ADR Environmental Group, June 2005 and ENGEO, December 2005). The Phase I Reports concluded that neither the Evergreen nor the El Camino properties were used for activities likely to have resulted in the discharge of chemicals to soil or shallow groundwater.

A soil vapor study of the Evergreen property prepared by ENGEO in October 2005 suggests that VOCs may be present in shallow groundwater beneath the property. None of the concentrations detected, however, exceed California Human Health Screening Levels (CHHSLs) for vapor intrusion to indoor air or, in the absence of a CHHSL, a U.S. EPA Preliminary Remediation Goal (PRG). The compounds identified by ENGEO at and beneath the Evergreen property are presented in Table 1, below, along with the applicable CHHSL or PRG levels.

Compound	No. of Samples	High ($\mu\text{g}/\text{m}^3$)	Median ($\mu\text{g}/\text{m}^3$)	CHHSL/PRG ($\mu\text{g}/\text{m}^3$) ¹
Ethanol	3	62	9.0	N/A
Acetone	3	130	37	3,300,000
2-Propanol	3	8.9	<7.5	N/A
Carbon Disulfide	3	2.7	<2.4	730,000
Methylene Chloride	3	17	<2.6	4,100
Hexane	3	13	5.0	210,000
2-Butanone (MEK)	3	34	11	5,100,000
Benzene	3	10	4.5	36.2
Heptane	3	6.6	<3.1	N/A
4-Methyl-2-pentanone	3	3.2	<3.0	N/A
Toluene	3	36	25	135,000
Ethyl Benzene	3	6.8	5.6	1,100,000
Xylenes	3	34	34	632,000
4-Ethyltoluene	3	15	14	N/A
1,3,5-Trimethylbenzene	3	4.4	4.4	6,200
1,2,4-Trimethylbenzene	3	20	18	6.2

Table 1; Soil Vapor Results From the Evergreen Property

¹ PRGs have been multiplied by a thousand to account for attenuation from soil to indoor air in accordance with DTSC guidance.

Under the oversight of Regional Board staff, Signature performed additional Phase II investigations of the Properties, including additional soil vapor sampling. A June 2006 report from BSK Associates (BSK) presented the results of the additional soil vapor investigation and surface soil investigation at the Properties. Tables 2 and 3 summarize the detected constituents from BSK's investigation.

Compound	El Camino Property		Evergreen Property		PRGs (mg/kg)
	No. of Samples	High (mg/kg)	No. of Samples	High (mg/kg)	
Arsenic	3	14	5	3.6	0.062
Barium	3	98	5	140	5,400
Cadmium	3	1.0	5	<1	37
Total Chromium	3	29	5	26	210
Cobalt	3	8.6	5	8.5	900
Copper	3	35	5	20	3,100
Lead	3	150	5	130	150
Mercury	3	<0.1	5	0.18	23
Molybdenum	3	<5	5	<5	390
Nickel	3	24	5	21	1,600
Vanadium	3	35	5	40	78
Zinc	3	250	5	98	23,000
Organochlorine Pesticides					
Chlordane	3	<0.05	5	0.19	1.6

Table 2: Soil Sample Detections and PRGs

As shown in the table above, one of the three surface soil samples at the El Camino property contained elevated levels of arsenic, lead, and zinc. At the Evergreen property, one of the three samples taken from the drainage channel contained elevated levels of lead and zinc. The elevated metals detections at both Properties are below levels of concern. Organochlorine pesticides were detected in a surface sample collected from the northern portion of the drainage ditch on the Evergreen property. This data indicates the likely source of the pesticides is storm water runoff from properties to the north of the Evergreen property.

Additional Phase II investigations for VOCs were also performed. VOCs were detected in soil vapor samples but at levels that do not present a threat to human health or the environment. Chemical volatilization from VOCs in the groundwater beneath the Properties is believed to be the source of at least some of the VOCs detected in soil vapor. Table 3 summarizes the maximum detected levels of waste constituents in comparison to their respective environmental screening levels.

Compound	El Camino Property			Evergreen Property			CHHSL/PRG ² (µg/m ³)
	No. of Samples	High (µg/m ³)	Median (µg/m ³)	No. of Samples	High (µg/m ³)	Median (µg/m ³)	
Freon 12 (Dichlorodifluoromethane)	3	6.4	<4.4	4	6.2	<3.9	N/A
1,3-Butadiene	3	<2.0	<1.8	4	18	10	0.061
Freon 11 (Trichlorofluoromethane)	3	9.9	<5.0	4	<4.6	<4.4	N/A
Ethanol	3	9.9	7.6	4	<6.2	<5.7	N/A
Freon 113	3	11	7.4	4	31	<6.3	31,000
Acetone	3	450	220	4	350	260	3,300
2-Propanol	3	29	<8.2	4	31	<7.9	N/A
Carbon Disulfide	3	13	4.7	4	3.7	<2.6	730
Hexane	3	4.7	4.0	4	6.2	<2.8	210
2-Butanone (MEK)	3	20	17	4	18	10	5,100
Tetrahydrofuran	3	3.1	<2.5	4	<2.4	<2.3	0.99
Chloroform	3	4.7	<4.4	4	<4.0	<3.9	0.083
2,2,4-Trimethylpentane	3	5.6	<3.9	4	4.1	3.8	N/A
Benzene	3	3.4	3.0	4	7.6	3.6	36.2
Heptane	3	5.8	<3.4	4	4.1	3.4	N/A
Toluene	3	16	8.6	4	15	11	135,000
Tetrachloroethene (PCE)	3	53	<5.7	4	36	7.2	180
Ethyl Benzene	3	13	8.2	4	11	9.2	1,100
Xylenes	3	73	43	4	62	53	632,000
4-Ethyltoluene	3	5.2	<4.1	4	6.7	4.1	N/A
1,2,4-Trimethylbenzene	3	7.2	4.6	4	9.1	5.1	6.2

Table 3: Phase II Soil Vapor Sampling Results

As shown in the table above, a comparison of soil data from the properties with soil screening numbers for residential land use shows that current conditions at the Properties do not present a significant threat to human health. Drinking water is and will be supplied from community drinking water supplies. Based on the evaluation of human health risks via the potential exposure pathways under a residential land use scenario, it is concluded that there is no significant risk posed by the VOCs detected at the site.

A groundwater grab sample collected from the El Camino property did not contain VOCs above reportable detection limits. Attempts to collect groundwater grab samples at the Evergreen property were unsuccessful because the sample probe could not penetrate a hardened soil interval above the groundwater table. However, groundwater in the vicinity of the site is known to be polluted from nearby facilities that discharged waste dry cleaning solvents. For the purposes of designing the risk management measures described below, it is assumed that

² CHHSLs were used for benzene, toluene and xylenes; all other numbers are PRGs. N/A stands for 'not applicable', which means that neither CHHSLs nor PRGs are available for the given compound. PRGs have been multiplied by a thousand to account for attenuation from soil to indoor air in accordance with DTSC guidance.

the groundwater beneath the properties is, or may be in the future, polluted by moderate levels of perchloroethene

RISK MANAGEMENT MEASURES

In order to ensure that activities at the properties will not aggravate or contribute to the condition of pollution, the proposed agreement requires Signature to take certain actions to implement and comply with risk management measures.

These risk management measures are as follows:

- Installation of vapor barriers: To protect future residents from the potential intrusion of VOC vapors from the groundwater into the indoor air of residences, Signature will include installation of a water/vapor barrier beneath all residential units constructed on the Properties.
- Deed Restriction: Signature will record a Deed Restriction on the Properties prohibiting the use of groundwater at and beneath the Properties for all purposes, including, but not limited to, drinking, irrigation, and industrial use.
- Removal of Asphalt and Wastes: Signature will remove the asphaltic pavement from the El Camino property and, if found to be present by observation or sampling, further remove soils beneath the pavement polluted with petroleum hydrocarbons or metals that may pose a risk to groundwater or human health.
- Pavement over Ditch Soil: Signature will assure that the polluted soils in the storm water drainage ditch on the Evergreen Property will be overlain by a paved street. New storm water drainage structures will be designed and installed for this property.
- Groundwater Monitoring: Signature will install a groundwater monitoring well into the A-aquifer at the El Camino property at a location to be reasonably agreed between Signature and Regional Board staff and will permit access to the monitoring well as may be reasonably required for future sampling in connection with evaluation and/or remediation of area-wide groundwater issues. Signature's obligation will be limited to installing the well, developing the well and performing one round of sampling with analysis for VOC levels in the groundwater. Signature will have no further obligation for sampling, maintaining, monitoring, destruction or closing of the well. Following installation of the well, Signature and Regional Board staff will discuss transfer of ownership of the monitoring well to an appropriate third party and will work to accomplish such transfer as soon as practicable. In the event that transfer of ownership of the well is not completed within 18 months following the effective date of the Agreement, then, upon 30 days prior written notice to Regional Board staff, Signature

will have the right to close and/or remove the well in accordance with applicable laws and good engineering practice.

Each of the above-listed risk management measures will be implemented in accordance with documents, plans, and/or specifications that Water Board staff has previously reviewed and provided Signature with written concurrence of such documents plans and/or specifications. Under the draft agreement, if Signature fails to implement these measures, the Water Board retains its enforcement rights against Signature (and its successors) as if the agreement did not exist.

PUBLIC PARTICIPATION

Signature mailed a fact sheet on the construction project and the agreement to property owners near the Properties on 23 October 2006. The local and regional press and representatives from local, county and state government also received the fact sheet. The fact sheet notified these potentially interested parties of a 30-day public comment period, which ends 27 November 2006. To date, no public comments have been received. The fact sheet is provided in Attachment 3.

SUMMARY

Following the planned removal of the asphaltic material and petroleum hydrocarbon wastes at the El Camino property, there appears to be no waste constituents in the soil at the properties that threatens groundwater quality or human health with the exception of some residual pesticides in a storm water ditch on the Evergreen Property. A new road associated with the development will cover those wastes. Human health risks associated with the groundwater pollution will be managed with vapor barriers and groundwater use restrictions. Under those conditions, adoption of the Resolution by the Regional Board would allow the Executive Officer to enter an agreement that provides Signature with contribution protection from known pollution at the site and allows Signature to proceed with this Brownfield development project.