

SECOR INTERNATIONAL INCORPORATED

www.secor.com 57 Lafayette Circle, 2nd Floor Lafayette, CA 94549

Lafayette, CA 94549 925-299-9300 TEL 925-299-9302 FAX

January 7, 2005

102633

Mr. Barney Chan
Hazardous Materials Specialist
Alameda County Health Care Services Agency
Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

RE: Lead Leachability Evaluation

PG&E Piedmont Substation E

Toxics Case RO0002633

408 Linda Avenue Piedmont, California

SECOR PN: 050T.50173.01.0002

Dear Mr. Chan:

SECOR International Incorporated (SECOR) has prepared this letter on behalf of Pacific Gas and Electric Company (PG&E) for the former Substation E that is located at 408 Linda Avenue in Piedmont, California (the Site). The purpose of this letter is to address your concerns expressed in a letter to PG&E dated October 21, 2004, regarding the potential leachability of lead (Pb) in surficial soils at the Site. This letter documents sources from academic and regulatory literature that support the conclusion that lead is not expected to leach from surficial soils to groundwater under conditions that have been observed or measured at the Site. The following sections provide a review of the distribution/occurrence of lead in soils at the former Substation E, the geochemistry and leachability of lead in soils, and a discussion of potential lead leachability at the Site.

Site Summary

Soil samples from nine locations (SESP-1 through SESP-9) and four borings (B1-B4) collected in 1999 show decreasing concentrations with depth, from 170 milligrams per kilogram (mg/kg) to 1,600 mg/kg at the surface to near background concentrations less than 2 feet below ground surface, from 4 mg/kg to 178 mg/kg. Sampling to date at the Site clearly indicates that lead concentrations above background are limited to approximately the top 2 feet of soil. The occurrence of elevated lead only in the near surface soil is consistent with the likely source of the lead (leaded paint chips). Excavation of soil in 2001

Mr. Barney Chan January 7, 2005 Page 2 of 4

to a depth of up to 24 inches below grade across a large portion of the Site removed the primary source of lead-containing soils, leaving concentrations near background levels remaining. Confirmation sampling following the 2001 excavation reported significant reductions in lead concentration with depth. Additional excavation to remove the first 24 inches of surface soils along the eastern boundary of the site that had previously been inaccessible is scheduled for January 2005.

Review of Lead Geochemistry

Lead leachability in soils is typically governed by a combination of factors. These include:

Form of lead, both anthropogenic and background levels of naturally occurring
lead;
pH;
adsorption/desorption reactions on mineral surfaces;
chelation and complexation by solid phase organic matter;
complexation by inorganic anions;
mineral or solid phase precipitation/dissolution reactions; and
Soil grain size (adsorption surface area influencing the depth of soluble lead
penetration).

The following factors influence or regulate Pb solubility in soils:

- > Form of lead present in soil;
- Soil pH; and
- Mobility and adsorption to mineral surfaces.

At the subject Site, the lead source has been identified as lead-based paint. The lead is most likely in the form of lead oxide, where the lead is a divalent cation (Pb²⁺) bound to oxygen making up the pigment in the oil or latex matrix. Lead oxide, though generally considered insoluble, has a low solubility product at neutral pH (in other words, lead oxide dissolves to release a low concentration of Pb²⁺ into the surrounding pore water). The solubility of lead oxide is pH dependent. Lead oxide becomes more soluble (releases more Pb²⁺) at extremes in pH and is least soluble at neutral pH, the pH of most ambient soils.

SECOR

Mr. Barney Chan January 7, 2005 Page 3 of 4

In soils, even if lead dissolves at neutral pH, lead mobility is controlled less by the solubility of the lead compound (lead oxide in this case) than by its tendency to adsorb to mineral surfaces as quantified by the Kd or adsorption constant. The median literature log Kd value used by the U. S. Environmental Protection Agency (EPA) for lead adsorption in soils is 4.1 liters per kilogram (L/Kg), which is extremely high when compared to a highly mobile and less adsorptive species such as hexavalent chromium, which has a log Kd = 1.1 L/Kg (Ambrose, Robert, B., US EPA, HydroGeoLogic Inc. and Allison Geoscience Consultants Inc., Partition Coefficients for Metals in Surface Water, Soil and Waste, June 22, 1999).

Because the values are based on a logarithmic scale, a difference of 4.1 to 1.1 means lead is 1000 times more adsorptive than hexavalent chromium and therefore has an extremely high affinity for mineral surfaces. Therefore, at neutral pH, even the extremely low concentration of lead that might dissolve out of the lead oxide is immobilized by lead's strong tendency to adsorb onto mineral surfaces, preventing the movement of lead, even in the saturated zone.

Lead Leachability at the Site

The dominant factors controlling lead mobility in soils as described above are pH and adsorption onto minerals such as phyllosilicate clays (clay minerals) and iron oxides/hydroxides in soils. At neutral pH, clay minerals which are also typical of bay area soils, have a negatively charged surface with which the lead cation will form a strong complex. SECOR tested soils at Substation E and found the pH to be 6.88. The soil sample was also submitted for analysis by a certified environmental analytical laboratory which verified that the pH is near neutral or 6.22. During visual inspection of the soil sample, SECOR observed iron oxides/hydroxides, and clay minerals, noting the brown and yellow color of the mineral assemblages and the fine texture of the particles (clays are typically less than 2 microns in diameter).

Based on these two factors, SECOR expects little or no leaching of lead through soil, beyond adsorption onto mineral surfaces in immediate contact with the contaminated particle. As indicated above, soil sampling to date at the Site has documented that lead is limited to approximately the top 2 feet of soil where paint particles were likely entrained into the soil during landscaping or erosion/redeposition. The physical evidence therefore supports the theoretical predictions for lead mobility in soil at the Site.

Mr. Barney Chan January 7, 2005 Page 4 of 4

Conclusions

The data indicate that little or no leaching of lead is occurring in the sediment. Therefore, groundwater impacts are not likely because neutral soil pH limits the leachability of lead, and the adsorption potential of the soil mineral assemblages aids in the removal of lead from infiltrating rainwater before it moves to the water table. This is supported by direct evidence of decreasing lead concentrations with depth at all locations tested across the Site.

If you should have any questions regarding this letter, please contact Sally Goodin at 510-301-2261 or Dr. Angus McGrath at (925) 299-9300 extension 241.

Sincerely,

SECOR International Incorporated

Angus McGrath, Ph.D.

Principal Geochemist

cc: Sally Goodin, PG&E

Terry Winsor, PG&E



SECOI INTERNATIONAL INCORPORATED

WWW.Secor.com 57 Lafayette Circle, 2nd Floor Lafayette, CA 94549 925-299-9300 TEL 925-299-9302 FAX

January 7, 2005

2633 SL

Mr. Barney Chan
Hazardous Materials Specialist
Alameda County Health Care Services Agency
Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

RE:

Lead Leachability Evaluation
PG&E Piedmont Substation E
Toxics Case RO0002633
408 Linda Avenue
Piedmont, California
SECOR PN: 05OT.50173.01.0002

Dear Mr. Chan:

SECOR International Incorporated (SECOR) has prepared this letter on behalf of Pacific Gas and Electric Company (PG&E) for the former Substation E that is located at 408 Linda Avenue in Piedmont, California (the Site). The purpose of this letter is to address your concerns expressed in a letter to PG&E dated October 21, 2004, regarding the potential leachability of lead (Pb) in surficial soils at the Site. This letter documents sources from academic and regulatory literature that support the conclusion that lead is not expected to leach from surficial soils to groundwater under conditions that have been observed or measured at the Site. The following sections provide a review of the distribution/occurrence of lead in soils at the former Substation E, the geochemistry and leachability of lead in soils, and a discussion of potential lead leachability at the Site.

Site Summary

Soil samples from nine locations (SESP-1 through SESP-9) and four borings (B1-B4) collected in 1999 show decreasing concentrations with depth, from 170 milligrams per kilogram (mg/kg) to 1,600 mg/kg at the surface to near background concentrations less than 2 feet below ground surface, from 4 mg/kg to 178 mg/kg. Sampling to date at the Site clearly indicates that lead concentrations above background are limited to approximately the top 2 feet of soil. The occurrence of elevated lead only in the near surface soil is consistent with the likely source of the lead (leaded paint chips). Excavation of soil in 2001

Mr. Barney Chan January 7, 2005 Page 2 of 4

to a depth of up to 24 inches below grade across a large portion of the Site removed the primary source of lead-containing soils, leaving concentrations near background levels remaining. Confirmation sampling following the 2001 excavation reported significant reductions in lead concentration with depth. Additional excavation to remove the first 24 inches of surface soils along the eastern boundary of the site that had previously been inaccessible is scheduled for January 2005.

Review of Lead Geochemistry

Lead leachability in soils is typically governed by a combination of factors. These include:

Form of lead, both anthropogenic and background levels of naturally occurring
lead;
pH;
adsorption/desorption reactions on mineral surfaces;
chelation and complexation by solid phase organic matter;
complexation by inorganic anions;
mineral or solid phase precipitation/dissolution reactions; and
Soil grain size (adsorption surface area influencing the depth of soluble lead
penetration)

The following factors influence or regulate Pb solubility in soils:

- > Form of lead present in soil;
- Soil pH; and
- Mobility and adsorption to mineral surfaces.

At the subject Site, the lead source has been identified as lead-based paint. The lead is most likely in the form of lead oxide, where the lead is a divalent cation (Pb²⁺) bound to oxygen making up the pigment in the oil or latex matrix. Lead oxide, though generally considered insoluble, has a low solubility product at neutral pH (in other words, lead oxide dissolves to release a low concentration of Pb²⁺ into the surrounding pore water). The solubility of lead oxide is pH dependent. Lead oxide becomes more soluble (releases more Pb²⁺) at extremes in pH and is least soluble at neutral pH, the pH of most ambient soils.

Mr. Barney Chan January 7, 2005 Page 3 of 4

In soils, even if lead dissolves at neutral pH, lead mobility is controlled less by the solubility of the lead compound (lead oxide in this case) than by its tendency to adsorb to mineral surfaces as quantified by the Kd or adsorption constant. The median literature log Kd value used by the U. S. Environmental Protection Agency (EPA) for lead adsorption in soils is 4.1 liters per kilogram (L/Kg), which is extremely high when compared to a highly mobile and less adsorptive species such as hexavalent chromium, which has a log Kd = 1.1 L/Kg (Ambrose, Robert, B., US EPA, HydroGeoLogic Inc. and Allison Geoscience Consultants Inc., Partition Coefficients for Metals in Surface Water, Soil and Waste, June 22, 1999).

Because the values are based on a logarithmic scale, a difference of 4.1 to 1.1 means lead is 1000 times more adsorptive than hexavalent chromium and therefore has an extremely high affinity for mineral surfaces. Therefore, at neutral pH, even the extremely low concentration of lead that might dissolve out of the lead oxide is immobilized by lead's strong tendency to adsorb onto mineral surfaces, preventing the movement of lead, even in the saturated zone.

Lead Leachability at the Site

The dominant factors controlling lead mobility in soils as described above are pH and adsorption onto minerals such as phyllosilicate clays (clay minerals) and iron oxides/hydroxides in soils. At neutral pH, clay minerals which are also typical of bay area soils, have a negatively charged surface with which the lead cation will form a strong complex. SECOR tested soils at Substation E and found the pH to be 6.88. The soil sample was also submitted for analysis by a certified environmental analytical laboratory which verified that the pH is near neutral or 6.22. During visual inspection of the soil sample, SECOR observed iron oxides/hydroxides, and clay minerals, noting the brown and yellow color of the mineral assemblages and the fine texture of the particles (clays are typically less than 2 microns in diameter).

Based on these two factors, SECOR expects little or no leaching of lead through soil, beyond adsorption onto mineral surfaces in immediate contact with the contaminated particle. As indicated above, soil sampling to date at the Site has documented that lead is limited to approximately the top 2 feet of soil where paint particles were likely entrained into the soil during landscaping or erosion/redeposition. The physical evidence therefore supports the theoretical predictions for lead mobility in soil at the Site.

Mr. Barney Chan January 7, 2005 Page 4 of 4

Conclusions

The data indicate that little or no leaching of lead is occurring in the sediment. Therefore, groundwater impacts are not likely because neutral soil pH limits the leachability of lead, and the adsorption potential of the soil mineral assemblages aids in the removal of lead from infiltrating rainwater before it moves to the water table. This is supported by direct evidence of decreasing lead concentrations with depth at all locations tested across the Site.

If you should have any questions regarding this letter, please contact Sally Goodin at 510-301-2261 or Dr. Angus McGrath at (925) 299-9300 extension 241.

Sincerely,

SECOR International Incorporated

Angus McGrath, Ph.D.

Principal Geochemist

CC:

Sally Goodin, PG&E

Terry Winsor, PG&E

ALAMEDA COUNTY HEALTH CARE SERVICES





ENVIRONMENTAL HEALTH SERVICES

ENVIRONMENTAL PROTECTION

Alameda, CA 94502-6577

(510) 567-6700

FAX (510) 337-9335

1131 Harbor Bay Parkway, Suite 250

DAVID J. KEARS, Agency Director

October 21, 2004

Ms. Sally Goodin PG&E P.O. Box 7640, Mail Code B24A San Francisco, CA 94120

Dear Ms. Goodin:

Subject: Toxics Case RO0002633, 408 Linda Ave., Piedmont, CA 94611

Alameda County Environmental Health staff has reviewed the case file for the referenced site including the October 14, 2004 Proposed Supplemental Remedial Action for Lead in Shallow Soil Former Pacific Gas and Electric Company Substation E 408 Linda Avenue, Piedmont, California. As you are aware, our office will be commenting on the remediation of the soil outside of the existing substation building only. We cannot comment on the environmental or human health risk of the building, interior or exterior. In regards to the outside soil investigation, our office has the following technical comments to the proposed remedial actions.

TECHNICAL COMMENTS

- 1. Given the historic site use, the contaminants tested, lead, PCB and petroleum hydrocarbons are appropriate. Based upon current analytical data, lead is the only contaminant of concern exceeding environmental screening levels. In addition, given the presence of lead in only shallow soils, it is reasonable that the source of the elevated lead contamination is the lead based paint from the exterior of the building. The supplemental remedial action proposes to excavate the eastern strip of the property, where concentrations of lead exceeded residential ESL, 200 ppm, to a depth of approximately 24" and collect three confirmation soil samples. This proposal is approved.
- 2. Based upon the past analytical data, our office requests that two additional soil samples be collected in the locations of SESP-1 and SESP-4. It is noted that these are two locations, which initially had detected lead exceeding the residential ESL, but no confirmation sample taken. Your sample should be at a depth > the excavated depth of 10".
- 3. The laboratory results from Torrent Laboratory, Inc. for samples S-1 through S-4, taken on 6/28/04 were received with a cover sheet that was unsigned and undated. Please provide a copy of the signed and dated cover sheet attached to the same analytical results.
- 4. Please evaluate the potential of lead impact to groundwater at this site.

The proposal is approved with the condition that the above items are addressed.

You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M. Chan

Hazardous Materials Specialist

aug M Che

C: B. Chan, D. Drogos

10_21_04 408LindaAve

S AGENCY



AGENC

DAVID J. KEARS, Agency Director

August 3, 2004

Ms. Sally Goodin PG&E P.O. Box 7640, Mail Code B24A San Francisco, CA 94120 ENVIRONMENTAL HEALTH SERVICES ENVIRONMENTAL PROTECTION 11:31 Harbor Bay Parkway Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

Subject: Site Investigation at PG&E's Piedmont Substation "E", 408 Linda Ave., Piedmont, CA 94611

Dear Ms. Goodin:

ACEH has received your request for review of reports and request for a no further action letter at the above-referenced site in regards to lead, PCBs and asbestos impacts. Under California Health and Safety Code Section 101480, ACEH has the authority to establish site cleanup goals and to certify cleanup of a contaminated site. ACEH is willing to review your consultant's reports and to comment on the completeness of investigation and the appropriate response based on your consultant's findings and conclusions. Please be aware that ACEH will only comment on the validity and appropriateness of the technical conclusions and recommendations by responsible professionals, with respect to the data submitted to ACEH.

In order for ACEH to review reports relevant to the site, we would require an oversight account for the above-referenced site. To set up your account, please send a check in the amount of \$6,000 payable to Alameda County Environmental Health. Please send your check to the attention of our Finance Department.

This initial deposit may or may not be sufficient to provide all necessary regulatory oversight. ACEH will deduct actual costs incurred based upon the hourly rate specified below. If these funds are insufficient, additional deposit will be requested. Otherwise, any unused monies will be refunded to you or your designee.

The deposit is authorized in Section 6.92.040 of the Alameda County Ordinance Code. Work on this project is being debited at the Ordinance specified rate, currently \$160.00 per hour.

Please write 'Toxics" (the type of project), the site address and AR# 0311896 on your check.

If you have any questions regarding this request, please call Barney Chan at (510) 567-6765.

Sincerely.

Division Chief

cc: Donna Drogos, ACEH Barney Chan, ACEH V# 1059719

WARNING - THIS DOCUMENT CONTAINS A VOID PANTOGRAPH, COLORED BACKGROUND AND WATERMARK ON THE BACK

Pacific Gas and Electric Company 77 Beale Street, San Francisco, CA



Mellon GCM 135 Santilli Hey Everett, MA 02149 53-292 113

23987

Date: 08/18/2004

Check No. 0004519

Pay \$*******6,000.00*

SIX THOUSAND

To The Order Of

AND 00/100 DOLLARS

ACCOUNTS PAYABLE

ALAMEDA COUNTY ENV HLTH SVCS 1131 HARBOR BAY PKY #250 ALAMEDA CA 94502-6577 LM Lawrey SVP, CFO & TREASURER Wichel Donully ASSISTANT TREASURER

VOID AFTER 90 DAYS

#0000004519# #011302920# 0599?&#

PLEASE FOLD FIRST THEN DETACH ALONG PERFORATION

ALAMEDA COUNTY ENV HLTH SVCS
Check no. 0004519
Date 08/18/2004
Your account number 1059719
Payment Document 2000065935
Our account with you N/A

Invoice	Date	Discount	Net Amount	Comments
	08/16/04	0.00	6,000.00	JOAN PETERKIN 3-4921/AR#0311896 408 LINDA/PIEDMNT
Totals:	USD	0.00	6,000.00	For Payment Inquiries, Call 1-800-756-PAID

Special Handle Code: 01

LOGOUT



UNAUTHORIZED RELEASE FORM WIZARD

-=YOUR URF HAS NOT YET BEEN SUBMITTED TO GEOTRACKER=-CLICK ON "SUBMIT UNAUTHORIZED RELEASE FORM" TO SUBMIT THE URF.

THIS WILL BE YOUR URF TRACKING NUMBER: 2322171866

SLIC RELEASE/CONTAMINATION SITE REPORT

REPORT DATE

HAZARDOUS MATERIAL INCIDENT REPORT FILED WITH OES?

I. REPORTED BY -

II. RESPONSIBLE PARTY -

III. SITE LOCATION

FACILITY NAME

FACILITY ID

PG&E SUBSTATION E

FACILITY ADDRESS

ORIENTATION OF SITE TO STREET

408 LINDA AVE. PIEDMONT, CA 94611

ALAMEDA COUNTY

CROSS STREET

V. SUBSTANCES RELEASED

SUBSTANCE RELEASED

DESCRIPTION

QUANTITY LOST

PCB'S LEAD

UNKNOWNUNKNOWN UNKNOWNUNKNOWN

VI. DISCOVERY/ABATEMENT

DATE DISCHARGE BEGAN

UNKNOWN

DATE DISCOVERED

HOW DISCOVERED

DESCRIPTION

DATE STOPPED

STOP METHOD

DESCRIPTION

VII. SOURCE/CAUSE

SOURCE OF DISCHARGE

DISCHARGE DESCRIPTION

CAUSE OF DISCHARGE

VIII. CASE TYPE

CASE TYPE

SOIL IMPACTED

IX. REMEDIAL ACTION REMEDIAL ACTION

BEGIN DATE

END DATE

DESCRIPTION

X. GENERAL COMMENTS

XI. CERTIFICATION

I HEREBY CERTIFY THAT THE INFORMATION REPORTED HEREIN IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE.

XII, REGULATORY USE ONLY

LOCAL AGENCY CASE NUMBER

REGIONAL BOARD CASE NUMBER

RO0002633

LOCAL AGENCY

<u>INITIALS</u>

ORGANIZATION NAME

EMAIL ADDRESS

CONTACT NAME BARNEY CHAN

BC

ALAMEDA COUNTY LOP

ADDRESS

1131 HARBOR BAY PARKWAY

ALAMEDA, CA 94502

CONTACT DESCRIPTION

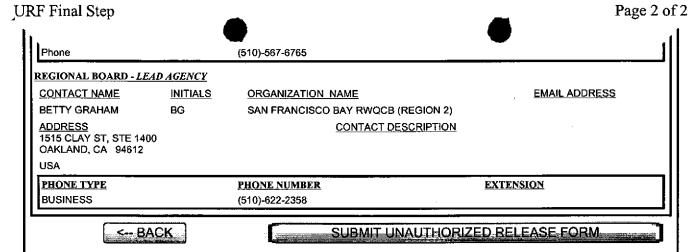
Hazardous Materials Specialist Alameda County Department of Environmental Health

USA

PHONE TYPE

PHONE NUMBER

EXTENSION



LOGGED IN AS ROSEANNA

ALAMEDA COUNTY HEALTH CARE SERVICES

AGENCY





August 3, 2004

Ms. Sally Goodin PG&E P.O. Box 7640, Mail Code B24A San Francisco, CA 94120 ENVIRONMENTAL HEALTH SERVICES

ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

Subject: RO 0002633, Site Investigation at PG&E's Piedmont Substation "E", 408 Linda Ave., Piedmont, CA 94611

Dear Ms. Goodin:

ACEH has received your request for review of reports and request for a no further action letter at the above-referenced site in regards to lead, PCBs and asbestos impacts. Under California Health and Safety Code Section 101480, ACEH has the authority to establish site cleanup goals and to certify cleanup of a contaminated site. ACEH is willing to review your consultant's reports and to comment on the completeness of investigation and the appropriate response based on your consultant's findings and conclusions. Please be aware that ACEH will only comment on the validity and appropriateness of the technical conclusions and recommendations by responsible professionals, with respect to the data submitted to ACEH.

In order for ACEH to review reports relevant to the site, we would require an oversight account for the above-referenced site. To set up your account, please send a check in the amount of \$6,000 payable to Alameda County Environmental Health. Please send your check to the attention of our Finance Department.

This initial deposit may or may not be sufficient to provide all necessary regulatory oversight. ACEH will deduct actual costs incurred based upon the hourly rate specified below. If these funds are insufficient, additional deposit will be requested. Otherwise, any unused monies will be refunded to you or your designee.

The deposit is authorized in Section 6.92.040 of the Alameda County Ordinance Code. Work on this project is being debited at the Ordinance specified rate, currently \$160.00 per hour.

Please write 'Toxics' (the type of project), the site address and AR# 0311896 on your check.

If you have any questions regarding this request, please call Barney Chan at (510) 567-6765.

Sincerely,

Division Chief

cc: Donna Drogos, ACEH Barney Chan, ACEH

Pacific Gas and Electric Company

March 18, 2004

Environmental Services P.O. Box 7640 San Francisco, CA 94120 415/973-7000 Direct Dial 415/973-Telecopy 415/973-9201



Ms. Donna Drogos Alameda County Environmental Health 1131 Harbor Bay Parkway Alameda, California 94502 Alameda County MAR 2 2 2004

Professional Health

RE:

Former PG&E Substation E Piedmont California

Dear Ms. Drogos:

Pacific Gas & Electric Company (PG&E) is herewith submitting two reports that document the cleanup at PG&Es Substation E located at 408 Linda Avenue in Piedmont, California. The reports are entitled Final Report Soil Clearance Testing for Lead and Final Report Hazardous Materials Clearance Sampling Building Interior. Substation E formerly provided power to the area from 1926 until 1991. The substation has been taken out of service and all equipment removed; the structure is currently vacant.

The Final Report Soil Clearance Testing for Lead documents the excavation and offsite disposal of soil outside of the substation that had been impacted by lead-based paint. Ms. Susan Hugo of Alameda County Environmental Health (ACEH) approved the workplan for the remediation and was involved during the soil removal. Soil sampling outside the substation had indicated that the upper 6 inches to 1 foot of soil contained lead at concentrations up to 1,600 milligrams per kilogram (mg/kg). The soil was excavated until the clearance criterion of an average residual lead concentration less than 147 mg/kg was met (the maximum residual lead concentration was 178 mg/kg).

The second report documents the equipment removal and cleanup of the inside of the substation. This work was also completed in accordance with the workplan approved by Ms. Hugo. All equipment has been removed from the substation and appropriately recycled or disposed. The walls, floors, sumps and drains have been cleaned. Areas of peeling lead-based paint were encapsulated with coatings.

Based on our telephone conversation, I understand that a new caseworker will need to be assigned. Once you have identified the new caseworker, I think it would be most helpful for us to meet and visit the site. PG&E is hoping to sell this property and there is quite a lot of interest in seeing it redeveloped, so we would appreciate anything you can do to expedite the process. After your review of the reports and concurrence with their findings, we would like a letter from ACEH indicating that no further actions are required. If you have any questions, need additional information and/or to schedule the site visit, please call me at 510-301-2261. Thanks very much for your assistance.

Sincerely,

Sally Goodin Senior Geologist

Sally Gooden

Enclosures:

Final Report Soil Clearance Testing for Lead, KELLCO Services, Inc., February 19, 2004

Final Report Hazardous Materials Clearance Sampling Building Interior, KELLCO Services, Inc., February 19 2004



245 Market Street San Francisco, CA 94105 Mailing Address Mail Cade N13 1 PO. Box 770000 San Francisco, CA 94177

January 10, 2001

Ms. Susan Hugo Alameda County Environmental Health 1131 Harbor Bay Parkway Alameda, CA 94502

RE: Resubmittal of Soil Remediation Plan Addendum PG&E Substation "E" Piedmont, California

Dear Ms. Hugo:

Attached please find the soil remediation plan with corrected site plan.

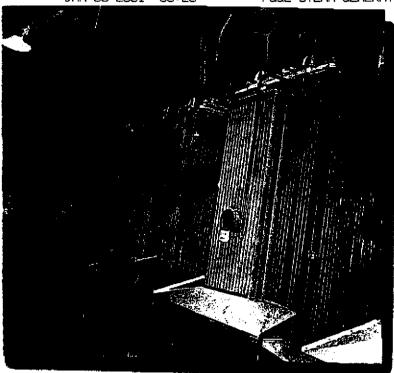
If you have any questions, please contact me at (415) 973-0707.

Sincerely,

Sara Everitt

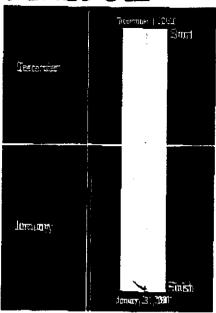
Attachment

STATES TO AN 8: WE



quipment stored in the former electrical power distribution Substation will be removed.

SCHEOULE

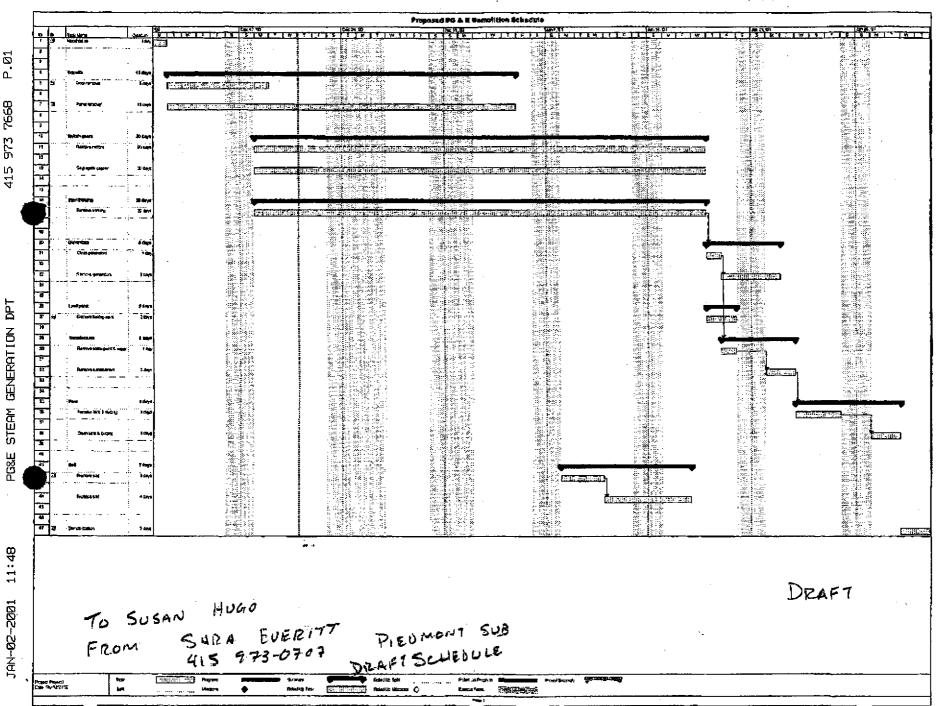


ेत वाक्षातामार तमानुष्या, सारहाक, भारत टारामानुसार महीना है प्र स्टब्स, देन्द्रियोगीय । संस्थातान स्टामानं द्वाराचीयान

For more information, please call Paul Chase at (415) 373-5742

John Meade Project Manager Room 1176C, 245 Market Street San Francisco, CA 94105

***	Date 1/3	101 pages 2
Post-it® Fax Note	UC20-100	OGHE
Co./Dept.	Phone #	415)973-0708
Phone#	Fax#	



5885 Hollis Street, Emeryville Proposed Office Building Principal Changes from June Submission

	June 2000 Design	December 2000 Design		
Site area (sq.ft.)	95,837	95,837		
Gross building area	95,549	94,919		
1st floor	48,857	48,160		
2nd floor	46,692	46,759		
Floor area ratio	1.00	0.99		
	•			
Parking	Above-grade structure	All below-grade		
Parking spaces required	229	228		
Parking spaces provided	361	279		
Site coverage	74.40%	55,50%		
Open area	25.60%	45.50%		
Building height-office	29'2"	20/51		
		30'6"		
Building height-parking	41'10"	n/a		
No change in exterior materials				

Post-it* Fax Note 7671	Date 2/21 pages
To Susan Hugo	From Elaine Kirk
CO./DANCEHS	Co. Marks Manne
Phone #	Prione # 415/392 3558
Fax * 510/337-9335	Fax#

copies to: Staci Honning

iday stop



STEVE MASLANKA/STAFF pening day of the Piedmont Scout nt Tai.



3 to a customer's car on Saturday.

"The tree quality is very good. But there has been a little increase in price."

The noble firs, in particular, are a bit more expensive this year, said

PG&E to prepare substation for sale

By Staci Homrig SPECIAL TO THE PIEDMONTER

During the next couple months, Piedmont residents may notice some activity at the old Pacific Gas and Electric Company substation on Linda Avenue, between Oakland and Grand avenues.

The Piedmont Distribution Substation was built in 1926 to provide power for the neighborhood streetlights and the old Key Line trolleys, but it hasn't been used since 1991. The trolley line is long gone and streetlights are now powered by modernized equipment from a nearby facility.

PG&E has continued to own and maintain the 0.4-acre site this past decade, in case the substation was needed to serve the community. After having conducted a through review of the area's long-term service requirements, PG&E determined that the electric needs of the neighborhood can be met by its other facili-

Therefore, PG&E has decided to dismantle the remaining equipment in the substation so its building and land, near Linda Playfield and Beach Elementary School, can be used for a better purpose.

Throughout December and January, crews will remove the remaining equipment from inside the two-story building. The crews will also do a small amount of soil excavation, because paint containing lead has flaked onto the ground over the years.

Once the equipment is removed, PG&E will clean up the building, install clean fill material, ground cover and mulch and put it up for sale. It's likely to go on the market in 2001.

Piedmont city administrator Geoff Grote said PG&E has kept the city informed about the project - both in terms of removing the remaining equipment inside and the scope of the environmental clean-up work to be done at the site.

Grote added that city officials are aware that the substation building and land is projected to go on the market next year, but the city currently has no plans to acquire the property.

"The council could certainly discuss (a purchase) if they wish to," he said. "However, council members have not given any instruction to acquire the property, nor have they indicated a desire to do so."

Even though most of the work will take place inside the building, PG&E will erect a temporary fence around the property to ensure the safety of everyone in the neighborhood.

PG&E is working with city and school officials so that the work causes as little disruption as possible. However, there will be temporary road closures of Linda Avenue while large electrical equipment is removed, loaded and transported safely. Immediate neighbors will be informed when these closures are to occur.

PG&E has sent notification letters to all neighbors explaining the work plan. For more information, call Paul Chase at (415) 973-6742.

Staff writer Lisa Coffey Mahoney contributed to this report.

Piedmonters help launch parade

Join grand marshals Mickey and Minnie Mouse at the first Oakland Holiday Parade on Saturday.

The parade begins at noon at Broadway and 11th Street and goes north to 20th, turns right onto Harrison alongside Lake Merritt and ends at Grand Avenue.

The parade began as the idea of two Piedmonters, Oakland Metropolitan Chamber of Commerce President Joe Harahurda and Catholic

highlight Children's Hospital Oakland in the community that would be fun, accessible to everyone and give back to the region's kids, our supporters and past and current patients. When I met Joe Haraburda and found out that he also wanted to do a parade, the idea just took off!" Meyer said. We have the most remarkable group of people working tirelessly together to pull this event off, and I can guar-

Housing

FROM PAGE A1

used since 1991. Crews have also been doing a small amount of soil excavation because paint containing lead has flaked into the ground over the years.

The substation was built in 1926 to provide power for neighborhood streetlights and the Key Line trolleys.

"The clean-up of the building and the soil around the building has been under way for some time and is expected to be completed soon," Grote said. "My understanding is that PG&E will follow that process with declaring the building surplus and selling it. So, I think the timing (of the city's inquiry about the property) is apropos."

PG&E spokesperson Paul Chase said the substation property has been declared surplus, and that the utility company has no further use it.

"We are going to be selling the property as is after we are able to asssure ourselves that we've cleaned up the property of any hazardous material and removed all of the equipment out of the building." he said.

"We do not have a date for that. We have not begun the process of marketing it, because we want to make sure we're satisfied with the condition of the building first."

Chase added that an appraisal of the property has not yet been prepared.

Meanwhile, Grote confirmed that the Association of Bay Area Governments (ABAG) has set certain goals for Piedmont, as well as all other Bay Area cities, regarding the construction and redevelopment of housing units. ABAG is one of more than 560 regional planning agencies across the nation working to help solve problems in areas such as land use, housing, environmental quality and economic development.

"The ABAG numbers require 49 housing units of all sorts (to be built in Piedmont) over the next seven years," said Grote. "Of those, the majority are market, but a substantial percentage are either moderate cost or low cost."

Kennedy said that right now there are no penalties for not fulfilling the ABAG requirements. But that could change. "It's quite likely in the coming year or two, legislation will be proposed in the state Senate and Assembly that will penalize cities who do not make even an effort to fulfill that obligation," he said, "I know that Senator (Don) Perata's office has talked about that as a means to spur more affordable housing development."

Kennedy suggested that at the same time Grote is getting specifics about the cost of the property from PG&E, city officials should put together a Request For Proposals (RFP) to be distributed to the development community at large, soliciting proposals to develop the site — including some affordable housing.

"Ultimately, I think that the city would not have to come out of pocket for this at all," he said. "The city would simply hold (the property) in escrow for a period of maybe 180 days and ultimately convey it to the final recipient, which would be the developer who proposed the best or most desirable RFP in the eyes of the city."

The developer would assume the financial obligations and the risk in developing the site, said Kennedy. while also making an agreement with the city to set aside a certain number of units for teachers.

"If the city decided that it did not want to pursue this, all it would do is indicate that to PG&E and the property would go back on the market." Kennedy added.

Grote indicated he would contact PG&E officials and report back to the City Council at a future date.

Developer urges city to buy PG&E substation

He suggests creating low-cost housing at the Linda Avenue site

By Lisa Coffey Mahoney STAFF WRITER

Encouraged by Piedmont resident and real estate developer Patrick Kennedy, the City Council has asked city administrator Geoff Grote to check into the cost of purchasing the PG&E substation on Linda Avenue.

Kennedy would like to see the city take possession of the approximately 17,000-sq. ft. site — even if only temporarily - and arrange for development of a variety of housing units, including market rate, moderate and low-cost units.

"The numbers we're talking about aren't huge here. I think maybe you could develop eight to 10 units of housing on the site if you use the existing structure," said Kennedy. "I wouldn't say (the building) is an architectural gem, but it is certainly a noteworthy structure in Piedmont history."

At Monday's City Council meeting, the developer suggested that some of the moderate and/or lowcost units could be earmarked for Piedmont Unified School District teachers.

"The city has a chance right now to provide something in the way of affordable housing. I have been told that several teachers in the city of Piedmont public schools have left because of a lack of affordable housing," said Kennedy. "If you can just keep two or three teachers and set an example that the city is willing to try to help them. I think it would benefit both the city and the school district, as well as improve relations."

Council members, however, had a lengthy list of concerns about such a project, primarily that the city doesn't have any expertise in development and that it doesn't have funds for the purchase of the property.

"Other cities are in the business of doing things like this. We're not in this business. So, I get concerned about why we should get in this business. Who knows what potential liability is out there," said Vice Mayor Emile Labadie.

"It's clear that the city does not have cash to acquire the property, and I would be reticent to see the city actually owning property," said Mayor Al Peters.

"I think we're premature in just speculating at this point until we actually contact PG&E to find out what the reality is," said Councilman Michael Bruck. "I think it's less likely we'll proceed with this project, but I think it's worth an initial contact."

Kennedy said that he has developed about 300 housing units it. Berkeley, with another 350 in various stages of development, "I've worked with a lot of city programs and state programs in providing affordable housing," he said. "I know that today there are a number of programs that would be available from the state which the city of Piedmont could utilize to provide some affordable housing."

Late last year, PG&E began dismantling the remaining equipment in the substation, which hadn't been

See HOUSING, Page A8



Pacific Gas & Electric Co.

r	8	X

Number of pages including cover sheet: 3

To:	SAN HUGO
	2810 11490
	G. 1512 1200
Phone:	(510) 567-6780 : (510) 337-9335

From:	in mi	FADE	 SARI	Evere
	Pied			
<u> </u>	7.300			
Phone	: 4/5 none:(4/	972-	5878	7
		~~~ e	_ KT10	t

remarks:	☐ Urgent	For your review	Reply ASAP	Please comm
	Revi	sed schedule	47	
	crp	y Jacks	au	
•	•			

## DRAFT (Revise #2)

Fact Sheet
8-1/2 x 11 Page
1 color grayscale or B/W
Back 1/2 page - Address & Mailing Label
Date: November 2000

Page 1:

PG & E logo - Piedmont Substation "E"

Pacific Gas and Electric Company is committed to protecting our workers, the environment and especially the people who share the communities in which we operate. To keep the community around the Piedmont Substation informed, we have prepared this description of an upcoming equipment removal project in your neighborhood.

Headline -- SUBSTATION "E" EQUIPMENT REMOVAL

2 Photos: 1 photo of transformers (PG & E to provide)

Over the next several months, a Pacific Gas and Electric Company contractor will be removing equipment from the former Piedmont Substation. Located on Linda Avenue, between Oakland and Grand avenues, the 0.4 acre property and its 6,000—square-foot building are being prepared for sale.

The distribution substation, which was housed in the two-story concrete structure with a tile roof, provided electrical power to the neighborhoods in the area from 1926 until 1991. Pacific Gas and Electric Company discontinued use of this Substation when a modernized facility nearby was brought on line to continue to provide service to the area.

The project will include the removal of electrical equipment that includes DC converters, electrical distribution transformers, regulators and miscellaneous fans, motors, switching equipment, cables and controls. During this equipment removal project, Pacific Gas and Electric Company's contractor will also clean portions of the building interior that have oil-stained surfaces and remove asbestos containing materials not integral to the building. Outside the building, the contractor will remove shallow soil containing small amounts of lead-based paint and replace it with clean fill material, and sod/or mulch.

While most of the work to be performed is primarily inside the Substation building, the site will be temporarily fenced for safety and security during the 8-11 weeks of site work. Pacific Gas and Electric Company notified the Alameda County Environmental Health Department of the upcoming work and they will oversee the clean-up portions of the project. A third-party health and safety consultant will monitor all activities.

Page 1:

Shadow Box: (inside the fold)

Headline -- Minimizing Impacts to our Neighbors

Pacific Gas and Electric Company is working with the City of Piedmont and the local school board officials to determine how best to minimize disruptions to the neighborhood during the equipment ramoval process. Pacific Gas and Electric Company will assure it's contractor comply fully with City requirements that limit operation hours to 8 a.m. to 6 p.m. Transportation of equipment and materials will be scheduled to accommodate Beach Elementary School drop-off and pick-up times. Short term street closures will occur as needed to transport heavy equipment. No parking zones may temporarily be established in front of the substation on Linda Street during portions of the project. The removal contractor will notify neighbors in advance of these street closures.

Page 2 (Top portion):

Shadow Box:

Timeline:

The equipment removal process will be completed within 8-11 weeks, depending on weather conditions.

Proposed Schedule:

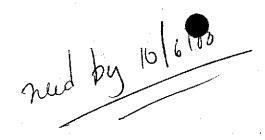
"Bare bones" graph showing approximate start and finish dates.

Page 2:

Exterior Photo of Building

For more information, please call Paul Chase at 415/973-6742

Page 2: (bottom portion)
PG & E Return Address
Mailing Label



691A

## KELLCO

Services, Inc.

Rudy Von Burg Ph.D. D.A.B.T., CIH, CEI Toxicologist / Risk Assessor Environmental Services Asbestos and Lead Consulting & Analysis

3137 Diablo Ave. Hayward, CA 94545-2701 (510) 786-9751 (fax) (510) 786-9625



## Pacific Gas and -Electric Company

**David Harnish, R.G.**Senior Environmental Scientist Environmental Support and Services

77 Beale Street San Francisco, CA 94105

Mailing Address Mail Code B24A P.O. Box 7640 San Francisco, CA 94120

415.973.6902 Internal: 223.6902 Fax: 415.973.9201 Internet: dehn@pge.com

Power Generation

245 Market Street San Francisco, CA 94105

Mailing Address
Mail Code N13
P.O. Box 770000
San Francisco, CA 94177

October 2, 2000

SID 6691

Ms. Susan Hugo Alameda County Environmental Health 1131 Harbor Bay Parkway Alameda, CA 94502

Below is a description that you requested when I call on September 28, 2000 to explain an incidental release of water containing a small amount of oil at Piedmont Substation "E".

Water containing oil (Non PCB) was being removed from an equipment cooling passage to prepare for the equipment removal and closure project. The check valve on the vacuum holding tank malfunctioned and allowed 7 to 10 gallons of solution to release. The release was mainly contained on the side walk. The area was barricaded and the spill was cleaned up using absorbent material.

Since the incident involved a small amount of benign material and did not threaten the environment. No other agencies were notified.

If you have any additional questions, please contact me at (415) 973-0707.

Regards

Sara W. Everitt

	ALAMEDA SUNTY HA DEPOSIT / R	ZARDOUS MATER EFUND ACCOUNT	RIALS DIVISION SHEET	ON printed******
	ntact:		StID: 669 PROJECT#: PROJECT T' INSP: Susa ACCT. SHE	140A YPE:*** *** an Hugo
Pg&e 77 Beal		77 B San Payo	PAYOR fic Gas & El eale Francisco r Contact: N r Phone : 4	CA 94106 # 109 Jancy Hendrickson
Date	Action Taken	Time In Out =====	Depstd Bal	Money our Spent/ Money nce Depositd Balance
08/01/2000 08/01/2000	Rcpt# 847570 Deposit \$2,000.00 @\$ Admin Charge: 1 hour	3100.Hour		20.2,000.00 2,000.00 9. 100.00 1,900.00

	<u> </u>
	· ·
	·
UPON COMPLETI	ON OF PROJECT
PROJ COMPLETED BY :	State Forms A, B & C ATTACH: Billing Adjustment*
DATE OF COMPLETION :	DATE SENT TO BILLING:
TOTAL COST OF PROJECT:	REFUND AMOUNT: Rev. 7/96
* Billing adjustment forms needed when site is in our UST progra	m. REPORT: WrkShtA (Admin)



July 20, 2000

Environmental Services P.O. Box 7640 San Francisco, CA 94120 415/973-7000 Direct Dial 415/973-Telecopy 415/973-9201



Ms. Susan Hugo Alameda County Department of Environmental Health 1131 Harbor Bay Parkway, 2nd Floor Alameda, CA 94502

Re: Cleanup of Former PG&E Linda Avenue Substation, Piedmont

Dear Susan:

Thank you for agreeing to oversee cleanup of the former Linda Avenue electrical substation in Piedmont, California. The substation was formerly a hub for electrical power to the former local Key Line trolley and also served surrounding Piedmont neighborhoods. Since 1991, the substation has been inactive and de-energized. PG&E has designated the property as surplus, and it is being prepared for sale.

In making sale preparations, PG&E completed an investigation in and around the building for hazardous materials characteristically used at substations: mineral oil, mineral oil containing PCB, and lead (from paint). The investigation report is enclosed. PG&E's objective is to remediate hazardous materials found in and around the substation building to agency-approved levels that allow the property to be safely redeveloped. Based on the results in the enclosed report, we anticipate remediating soil in a portion of the property for lead from paint that flaked off the building. We will also attempt to clean trace levels of PCB from the interior surfaces of the building, although the few detections of PCBs in wipe sample are below regulatory cleanup levels. The ultimate reuse of the property will be determined by the future owner and not by PG&E, but we anticipate that the property may be redeveloped for community use.

We are currently selecting a consultant to oversee the remediation. Once a firm is selected, we would like to meet with you to discuss the cleanup. Once we agree on the approach, the consultant will prepare a remediation workplan for your review. We plan to conduct the remediation this summer.

Enclosed are the investigation report and a check for \$2,000 for the anticipated oversight costs. Please feel free to call me at 415-973-6902 with any questions.

Sincerely,

David Harnish

Senior Environmental Scientist

Attachments

pc: John Meade Linda Marshall OO JUL 21 PH 2: 24

AATAARA MARA

### WARNING - THIS DOCUMENT CONTAINS A VOID PANTOGRAPH, COLORED BACKGROUND AND WATERMARK ON THE BACK



77 Beale Street, San Francisco, CA



Mellon GCM 28 Cabot Rd Medlord, MA 02155 53-292 0113

Date: 05/04/2000

Check No. 7869606

Pay \$******2,000.00*

*TWO THOUSAND*

* AND 00/100 DOLLARS

To The Order Of

ACCOUNTS PAYABLE

ALAMEDA COUNTY ENV HETH SVCS 1131 HARBOR BAY PKY #250 ALAMEDA CA 94502-6577 LM Harry SVP, CFO & TREASURER Gebriel Togneri ASSISTANT TREASURER

**VOID AFTER 90 DAYS** 

# 7B69606

# #10 1 1 3 D 2 9 2 O # C 5 9 9 7 B #*

PLEASE FOLD FIRST THEN DETACH ALONG PERFORATION

ALAMEDA COUNTY ENV HLTH SVCS
Check no. 7869606
Date 05/04/2000
Your account number 1059719
Payment Document 2000046945
Our account with you N/A

Invoice	Date	Discount	Net Amount	Comments
	05/02/00	0.00	2,000.00	TESSIE SHEPARD @3-7740
Totals:	USD	0.00	2,000.00	For Payment Inquiries, Call 1-800-756-PAID

Special Handle Code: 01