



California Regional Water Quality Control Board

San Francisco Bay Region



Linda S. Adams
Secretary for
Environmental Protection

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<http://www.waterboards.ca.gov/sanfranciscobay>

Arnold Schwarzenegger
Governor

Date: February 26, 2007
File No. 43S0247 (mej)

Barry Swenson Builders
Attn: Jeff Major
777 North 1st Street, 5th Floor
San Jose, California 95112
jmajor@barryswensonbuilder.com

SUBJECT: No Further Action, PCB Impacted Soil, Former North American Transformer, South Yard Area, 1200 Piper Drive, Milpitas, Santa Clara County

Dear Mr. Major:

This letter confirms the completion of site investigation and remedial action related to polychlorinated biphenyls (PCBs) in soil at the subject site.

In late 2005, Barry Swenson Builders contracted Terrasearch, Inc. to perform an Additional Phase II Environmental Site Assessment of the South Yard area of the former North American Transformer facility in Milpitas. The assessment determined elevated concentrations of PCBs (Aroclor 1254 and 1260) were present within the surficial and subsurface soil (up to 157 ppm) beneath the site. Based on the results of the Additional Phase II ESA, Terrasearch, Inc. estimated at least 15,550 cubic yards of PCB-impacted soil was present above the Water Board's Environmental Screening Levels (ESLs) for residential use. Biotech Restorations of North Carolina sub-contracted with Barry Swenson Builders to use an innovative biotechnology called Factor to biologically remediate the PCBs on site through indigenous bacteria. The site was bio-remediated using BioTech Restoration's Factor biotechnology under a Remedial Action Plan (RAP) approved by Water Board staff. A grading permit was also obtained from the City of Milpitas to conduct the soil treatment. Prior to treatment of the soil, 13 groundwater monitoring and/or extraction wells in the South Yard area belonging to Jones Chemical were destroyed under destruction permits from the Santa Clara Valley Water District. From November 2005 through October 2006, approximately 15,000 cubic yards of PCB-impacted soil was bio-remediated to concentrations below ESLs for total PCBs. Approximately 550 cubic yards of PCB-impacted soil that did not achieve cleanup objectives was excavated and disposed of off-site to complete site remediation.

Based upon the available information and considering the planned high-density residential land use, and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the PCB releases at the subject site is required. As you are also aware, underlying groundwater at this site has been impacted by the

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releases of volatile organic compounds originating from the Jones Chemical site located upgradient. With respect to future development of the subject property, potential health impacts associated with the underlying Jones Chemical plume (i.e. via vapor intrusion into structures) must be adequately evaluated and, if necessary, mitigated.

If you have any questions, please contact Mr. Mark Johnson of my staff at (510) 622-2493 [email mjohnson@waterboards.ca.gov].

Sincerely,

Bruce H. Wolfe
Executive Officer

Attachment
cc w/attach:

George Cook, SCVWD
Rob Campbell, Terrasearch, RobC@TERRASEARCHINC.com
Ron Goloubow, LFR, ron.goloubow@lfr.com

City of Milpitas
Attn: City Manager
455 East Calaveras Blvd.
Milpitas, CA 95035

City of Milpitas
Planning Department
Attn: Planning Director
455 East Calaveras Blvd.
Milpitas, CA 95035

CASE CLOSURE SUMMARY

I. AGENCY INFORMATION

Date: 23 February 2007

Agency Name: SF Bay Regional Water Quality Control Board	Address: 1515 Clay Street, Suite 1400
City/State/Zip: Oakland, CA 94612	Phone: 510-622-2300
Responsible Staff Person: Mark Johnson	Title: Senior Engineering Geologist

II. SITE INFORMATION

Site Facility Name: Former North American Transformer South Yard Facility				
Site Facility Address: 1200 Piper Drive, Milpitas, California				
RB Case No.:		Local Case No.:		Priority:
Responsible Parties (include addresses and phone numbers)				
Barry Swenson Builders (soil)				
Jones Chemical (groundwater-off-site)				
Tank No.	Size in Gallons	Contents	Closed In—Place/Removed?	Date
Not Applicable				

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: PCB contamination in surficial soil (Aroclor 1254 and 1260)		
Site characterization complete? Yes		Date Approved by Oversight Agency:
Monitoring wells installed? Not for this work		Number: Proper screened interval?
Highest GW Depth Below Ground Surface: 16 feet		Lowest Depth: 25 feet Flow Direction: west-northwest
Most Sensitive Current Use: None		
Most Sensitive Potential Use and Probability of Use: None, but may threaten deeper aquifer systems		
Are drinking water wells affected? No		Aquifer Name:
Is surface water affected? No		Nearest surface water name: Berryessa Creek
Off-Site Beneficial Use Impacts (Addresses/Locations): None		
Report(s) on file? Yes		Where is report(s) filed? RWQCB – Region 2

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL									
Material	Amount (Include Units)		Action (Treatment or Disposal w/Destination)				Date		
Tanks	---								
Piping	---								
Free Product	---								
Soil	15,550 cubic yards (c.y.)		Factor bio-remediation of 15,000 c.y. and disposal of 550 c.y. to Altamont Landfill in Livermore, CA				02/01/07		
Groundwater	---								
Barrels	---								
MAXIMUM DOCUMENTED POLLUTANT CONCENTRATIONS—BEFORE AND AFTER CLEANUP									
POLLUTANT	Soil (ppm)		Water (ppb)		POLLUTANT	Soil (ppm)		Water (ppb)	
	Before	After	Before	After		Before	After	Before	After
PCBs	157	0.96	---	---					
Comments (Depth of Remediation, etc.):									
Depth of remediation was from ground surface to approximately 2 feet bgs across the site.									

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Yes		
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Yes		
Does corrective action protect public health for current land use? Yes		
Site Management Requirements: Storm Water Pollution Control during grading and protection of 2 remaining wells.		
Monitoring Wells Decommissioned: 13	Number Decommissioned:	Number Retained: 2

List Enforcement Actions Taken: None
List Enforcement Actions Rescinded: None

V. TECHNICAL REPORTS, CORRESPONDENCE, ETC., WHICH THIS CLOSURE RECOMMENDATION WAS BASED UPON

Lowney Associates, Inc., Soil and Ground Water Quality Evaluation and Health Risk Assessment at 1200 Piper Drive (NAT South Yard), Milpitas, California.	12/12/2001
Terrasearch, Inc., Additional Phase II Environmental Site Assessment at former NAT South Yard, 1200 Piper Drive, Milpitas, California. Project No. 10530.E	01/17/2005
Terrasearch, Inc., Remedial Action Plan for former NAT South Yard, 1200 Piper Drive, Milpitas, California. Project No. 10530.E	09/13/2005
Terrasearch, Inc., Remedial Performance Evaluation Letter Report at former NAT South Yard, 1200 Piper Drive, Milpitas, California. Project No. 10530.E	07/19/06
Terrasearch, Inc., Closure Report for Bio-Remediation Activities at former NAT South Yard, 1200 Piper Drive, Milpitas, California. Project No. 10530.E	02/20/07

VI. ADDITIONAL COMMENTS, DATA, ETC.

Site History:

Barry Swenson Builder purchased the property from North American Transformer (NAT) in 2002. The site was formerly used as the South Yard storage facility for NAT. Transformers containing PCBs were stored on the subject site prior to being delivered to client. Barry Swenson Builder contracted with Lowney Associates in December 2001 to evaluate the impact of PCBs on the property. PCBs were detected over 1 part per million (ppm); however, Lowney stated the risk was not a concern. In late 2005, Barry Swenson Builders contracted Terrasearch, Inc. to perform an Additional Phase II Environmental Site Assessment and determined elevated concentrations of PCBs (Aroclor 1254 and 1260) were present within the surficial and subsurface soil (up to 157 ppm) beneath the site. Based on the results of the Additional Phase II ESA, Terrasearch, Inc. estimated at least 15,550 cubic yards of PCB-impacted soil was present above residential screening levels. Biotech Restorations of North Carolina sub-contracted with Barry Swenson Builder to use a new biotechnology called Factor to naturally remediate the PCBs on site through indigenous bacteria. A Remedial Action Plan (RAP) was prepared by Terrasearch, Inc. in September 2005 and submitted to the Water Board for approval. The RAP was approved by the Water Board in September 2005; however, 15 groundwater monitoring and groundwater extraction wells were scattered over the site. Jones Chemical installed the wells under a cleanup order from the Water Board in an effort to bio-remediate the groundwater. The groundwater was impacted by volatile organic compounds (VOCs) released from the up-gradient Jones Chemical facility. The Water Board approved the destruction of 13 wells. Well destruction permits were obtained through the Santa Clara Valley Water District through Levine Fricke Recon.

Once the wells were destroyed and a Stormwater Pollution Prevention Plan was obtained through the City of Milpitas Building Department, the PCB-impacted soil was excavated until excavation depth confirmation soil samples indicated total PCB concentrations less than 0.22 ppm. The excavated soil was temporarily stored on site and placed over the entire site as a 2-foot lift. On November 19, 2005, Factor, lime, manure and urea were added to the soil over the entire site and thoroughly mixed to 2 feet bgs followed by irrigation by ECI of Richmond, California. The soil was thoroughly mixed once every 10 days and irrigated at least 3 times a week from November 2005 through May 2006. Initial confirmation soil samples collected from the entire property indicated elevated concentrations of PCBs (greater than 1 ppm) in limited centrally located areas and on the western portion of the property. In August 2006, the centrally located elevated PCB areas were excavated and the soil moved to the western proposed re-treatment area. In September 2006, additional Factor, lime, manure and urea were added to the westernmost portion of the site, thoroughly mixed and irrigated for one month. Significant PCB reductions were realized in the westernmost portion of the site; however, an isolated area within the westernmost portion of the site indicated elevated PCB concentrations. Therefore, approximately 550 cubic yards of soil were mechanically excavated from the site by EnvAmerica, Inc. of San Francisco, California and disposed between January and early February 2007.

This document and the related CASE CLOSURE LETTER shall be retained by the lead agency as part of the official site file.