Linda S. Adams
Secretary for
Environmental Protection

Department of Toxic Substances Control

Maziar Movassaghi
Acting Director
8800 Cal Center Drive
Sacramento, California 95826-3200

Arnold Schwarzenegger
Governor

Proposition 65 Notification
Pursuant to California Health & Safety Code § 25180.7
Designated Government Employee Disclosure Requirement

TO: Stanislaus County Board of Supervisors
Dick Monteith, Vice-Chairman
1010 10th Street, Suite 6500
Modesto, California 95354

Stanislaus County Health Services Agency
Mary Ann Lee, Managing Director
830 Scenic Drive
P.O. Box 3271
Modesto, California 95353

2010 DEC 24 A 10:16
BOARD OF SUPERVISORS

FROM: James Michael Vivas, P.E.
Hazardous Substances Engineer
San Joaquin & Legacy Landfills Office
Brownfields & Environmental Restoration Program

DATE: December 22, 2010

PROPERTY NAME: Thirteen Residential Units in the Vicinity of Former Elwoods Cleaners and Former Service Cleaners in Modesto, California

ADDRESSES: In the vicinity of Former Elwoods Cleaners: 115 Elmwood Court: 121 Elmwood Court; 117 West Morris Avenue; 118 West Morris Avenue

In the Vicinity of Former Service Cleaners: 121 Covena Avenue; 1423 A La Loma Avenue; 1423 La Loma Avenue Apartments 113, 117, 119; 116 Covena Avenue Apartments 116 A, 116 B, 116 C; 1419 La Loma Avenue

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This notification by a designated government employee of the California Department of Toxic Substances Control ("DTSC") is made pursuant to the state's Safe Drinking Water and Toxic Enforcement Act of 1986 ("Proposition 65"). More specifically, this notification is being made pursuant to California Health and Safety Code section 25180.7, which is part of Proposition 65.

I have obtained information in the course of my official duties pertaining to the property addresses specified above, indicating that illegal discharges of a hazardous waste have occurred and that such discharges or threatened discharges are likely to cause substantial injury to the public health or safety. In May 2010, at DTSC's request, the USEPA Region 9 in San Francisco agreed to take action as part of an emergency response and conducted indoor air sampling in four residences near Elwoods Dry Cleaning and in nine residences near Sparkleen/Service Cleaners. DTSC's request was based on the results of soil gas sampling conducted by the City of Modesto's between 2001 and 2008 for the investigation of Tetrachloroethylene (also known as PCE) contamination detected in public water supply wells in Modsesto.

Health risk calculations based on the sampling and analyses show the following:

a. All residences near Elwoods exceeded the 1E-06 point of departure risk, with potential total cancer risks ranging from 1.2E-06 to 4.0E-05. The non-cancer hazard never exceeded 1.0

b. All residences near Sparkleen/Service Cleaners exceeded the 1.0E-06 point of departure risk, with potential cancer risk ranging from 1.9E-06 to 4.9E-04. The non-cancer Hazard Index (HI) exceeded 1.0 only once (HI 5.5 at the same residence as the maximum PCE concentration).

c. Overall, most of the cancer risk and non-cancer hazard is attributable to PCE and/or 1,2 DCA: PCE exceeded the CHHSL in all of the 13 residences tested. The highest inhalation risk was 4.8E-04 (at Apartment SP-116A). 1,2 DCA was detected in 7/13 residences and exceeded the CHHSL in all residences where it was detected. The highest cancer risk was 3.1E-05. 1,1,1 TCA was detected in 2/13 residences, never exceeding the CHHSL.

Please see the attached memorandum to me of December 14, 2010 for a summary of the sampling and analyses.

Based on the above discussion and the information contained in the attached memorandum, there is reason to believe that the illegal discharges are likely to cause substantial injury to the public health.

If you have any questions, please call me at 916 255 3682 between 8 AM and 4:30 PM, Monday through Friday or I can be reached by e-mail at mvivas@dtsc.ca.gov.

Stanislaus County Board of Supervisors
Attn: Dick Monteith
Stanislaus County Health Services Agency
Attn: Mary Ann Lee
December 22, 2010
Page 3 of 3

I hereby certify that I am a designated employee and that I have reported the above information concerning a discharge or threatened discharge of hazardous waste to the appropriate officials pursuant to Section 25180.7 of the Health and Safety Code.

Signed _____

Title HAZARDOUS SUBSTANCES ENGINEER

Date DECEMBER 22, 2010

Attachment

cc: Roland Stevens
Assistant City Attorney

Steven R. Becker, P.G.
Supervising Senior Engineering Geologist
San Joaquin & Legacy Landfills Office
Brownfields & Environmental Restoration Program

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MEMORANDUM

TO: Mike Vivas, Project Manager
Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, CA 95826

FROM: Gabriele Windgasse, DrPH
Staff Toxicologist
Human and Ecological Risk Office (HERO)
8800 Cal Center Drive
Sacramento, CA 95826

DATE: December 14, 2010

SUBJECT: Calculation of indoor air inhalation risk based on data from USEPA's emergency response investigation in Modesto, CA

PCA: 12050 Site: 101454-11

Document Reviewed

Per your request, the Human and Ecological Risk Office (HERO) has reviewed and evaluated a portion of the analytical data provided from USEPA (Elwoods Indoor Air April 2010.xls and Sparkleen Indoor Air April 2010.xls) and additional documentation (maps) from USEPA, received in May 2010.

Scope of Work

HERO has reviewed the indoor air concentrations of various Volatile Organic Compounds (VOC) in Elwoods Indoor Air April 2010.xls and Sparkleen Indoor Air April 2010.xls. HERO analyzed the potential cancer risk from inhalation for each residence, using the DTSC-modified Johnson & Ettinger model, and the OEHHA California Human Health Screening Levels (CHHSL) for indoor air.

Background

The City of Modesto has collected environmental samples for the ongoing investigation of the environmental impact of dry cleaning businesses. Based on the active soil gas data collected from 2001 through 2008, DTSC identified 7 areas where the potential cancer risk from vapor intrusion of PCE to indoor air exceeds 1/10,000 (1E-04). In two areas (Elwoods and Sparkleen/Service Cleaners) the estimated indoor air concentration of PCE exceeded the Acute Minimal Risk Level (MRL) of 1356 ug/m^3. The USEPA Region 9 in San Francisco agreed to take action as part of an emergency response and conducted indoor air sampling in four residences near Elwoods Dry Cleaning and in nine residences near Sparkleen/Service Cleaners.

Between one and three samples were collected per residence and the content of 24-hour summa canisters were analyzed with USEPA method TO-15. In addition, two ambient air samples were collected near Elwoods (only PCE was detected, maximum concentration 2.4 ug/m^3) and three ambient air samples near Sparkleen/Service Cleaners (only PCE was detected, maximum concentration 1.1 ug/m^3). Nine contaminants of concern (CoCs) were identified and the indoor air concentrations to were compared to the California Human Health Screening Levels (CHHSLs) for residential indoor air and the USEPA short term residential relocation levels (compare Table A, Elwoods Emergency Sampling Plan; March 2010). The results were shared with DTSC in May 2010, and USEPA proceeded to install a sub-slab depressurization system for one residential complex near Sparkleen. In addition, the City of Modesto installed a Soil Vapor Extraction (SVE) system around Elwoods Drycleaning Service in June 2010.

HERO reviewed the data for each residence and used the maximum concentration of each detected CoC, no matter if the sample was collected in the basement, crawl space or living areas. The Location Indicator "DP" used in the laboratory results was not explained (duplicates were designated differently). CS, (Crawl Space) and IND (Indoor) were explained on the Figures provided from the USEPA. The measured indoor air concentration was used to calculate the potential cancer risk and non-cancer hazard, using the DTSC-modified Johnson & Ettinger Vapor Intrusion model for a residential exposure scenario. After selecting the CoC on the DataEnter sheet, the measured concentration was entered in the "Infinite Source Building Concentration" in the InterCalcs sheet. Below common action levels are listed that are used for the evaluation of PCE in indoor air:

Action levels for PCE in Indoor air:	
CHHSL (indoor air, residential):	0.412 ug/m^3
CHHSL (indoor air, industrial/commercial):	0.693 ug/m^3
OEHHA Chronic REL (8hr):	35 ug/m^3
USEPA Short Term Relocation Limit:	1400 ug/m^3
Minimal Risk Level (MRL) for acute inhalation exposure:	1356 ug/m^3

Residences near Elwood's Drycleaning Service

Only three out of nine CoCs were detected in the samples: 1,1,1 trichloroethane (maximum 1.3 ug/m^3), PCE (maximum 4.0 ug/m^3) and 1,2 dichloroethane (maximum 3.6 ug/m^3)

115 Elmwood Court

Analyte	CHHSL (ug/m^3)	USEPA Short Term Relocation Level (ug/m^3)	Maximum Indoor Air Conc. (ug/m^3)	Location of maximum conc.	Potential Cancer Risk[3]	Potential Non-cancer Hazard[3]
1,1,1 TCA	2,290[1]	4,000	1.3	DP	na	0.00025
PCE	0.412	1,400	4.0	CS	9.7E-06	0.11
1,2 DCA	0.116[2]	-	3.6	DP	3.1E-05	0.0086
Total					4.0E-05	0.1188

[1] USEPA Regional Screening Level (Nov 2010) for Residential Air is 5200 ug/m^3
[2] USEPA Regional Screening Level (Nov 2010) for Residential Air is 0.094 ug/m^3
[3] Cancer risk and non-cancer hazard were calculated with the DTSC-modified Johnson & Ettinger Vapor Intrusion Model (http://www.dtsc.ca.gov/AssessingRisk/upload/HERD_Soil_Gas_Screening_Model_2009rev.xls).

121 Elmwood Court

Analyte	CHHSL (ug/m^3)	USEPA Short Term Relocation Level (ug/m^3)	Maximum Indoor Air Conc. (ug/m^3)	Location of maximum conc.	Potential Cancer Risk	Potential Non-cancer Hazard
1,1,1 TCA	2,290	4,000	Nd		-	-
PCE	0.412	1,400	0.48	CS	1.2E-06	0.013
1,2 DCA	0.116	-	nd		-	-
Total					1.2E-06	0.013

117 West Morris Ave

Analyte	CHHSL (ug/m^3)	USEPA Short Term Relocation Level (ug/m^3)	Maximum Indoor Air Conc. (ug/m^3)	Location of maximum conc.	Potential Cancer Risk	Potential Non-cancer Hazard
1,1,1 TCA	2,290	4,000	0.41	IND	-	-
PCE	0.412	1,400	1.8	CS	4.4E-06	0.049
1,2 DCA	0.116	-	nd		-	-
Total					4.4E-06	0.049

118 West Morris Ave

Analyte	CHHSL (ug/m^3)	USEPA Short Term Relocation Level (ug/m^3)	Maximum Indoor Air Conc. (ug/m^3)	Location of maximum conc.	Potential Cancer Risk	Potential Non-cancer Hazard
1,1,1 TCA	2,290	4,000	nd		-	-
PCE	0.412	1,400	3.1	IND	7.5E-06	0.085
1,2 DCA	0.116	-	1.1	IND	9.5E-06	0.0026
Total					1.7E-05	0.0876

Residences near Sparkleen/Service Cleaners

The only CoCs detected were 1,2 dichloroethane (maximum 1.8 ug/m^3) and PCE (maximum 200 ug/m^3).

121 Covena Ave

Analyte	CHHSL (ug/m^3)	USEPA Short Term Relocation Level (ug/m^3)	Maximum Indoor Air Conc. (ug/m^3)	Location of maximum conc.	Potential Cancer Risk	Potential Non-cancer Hazard
PCE	0.412	1,400	1.6	CS	3.9E-06	0.044
1,2 DCA	0.116	-	1.1	IND	9.5E-06	0.026
Total					1.34E-05	0.07

113 and 117 and 119 Covena Ave
Apartment SP-116A

Analyte	CHHSL (ug/m^3)	USEPA Short Term Relocation Level (ug/m^3)	Maximum Indoor Air Conc. (ug/m^3)	Location of maximum conc.	Potential Cancer Risk	Potential Non-cancer Hazard
PCE	0.412	1,400	200	IND	4.8E-04	5.5
1,2 DCA	0.116	-	1.8	IND	1.6E-05	0.0043
Total					4.96E-04	5.5043

Apartment SP-116B

Analyte	CHHSL (ug/m^3)	USEPA Short Term Relocation Level (ug/m^3)	Maximum Indoor Air Conc. (ug/m^3)	Location of maximum conc.	Potential Cancer Risk	Potential Non-cancer Hazard
PCE	0.412	1,400	23	IND	5.6E-05	0.63
1,2 DCA	0.116	-	0.34	IND	2.9E-06	0.00082
Total					5.8E-05	0.63082

Apartment SP-116C

Analyte	CHHSL (ug/m^3)	USEPA Short Term Relocation Level (ug/m^3)	Maximum Indoor Air Conc. (ug/m^3)	Location of maximum conc.	Potential Cancer Risk	Potential Non-cancer Hazard
PCE	0.412	1,400	17	IND	4.1E-05	0.47
1,2 DCA	0.116	-	0.15	IND	1.3E-06	0.00036
Total					4.2E-05	0.47036

1419 and 1423 La Loma Ave (1423A, 1419; 119, 117, 113)

Apartment SP-113

Analyte	CHHSL (ug/m^3)	USEPA Short Term Relocation Level (ug/m^3)	Maximum Indoor Air Conc. (ug/m^3)	Location of maximum conc.	Potential Cancer Risk	Potential Non-cancer Hazard
PCE	0.412	1,400	6.3	IND	1.5E-05	0.17
1,2 DCA	0.116	-	nd		-	-
Total					1.5E-05	0.17

Apartment SP-117

Analyte	CHHSL (ug/m^3)	USEPA Short Term Relocation Level (ug/m^3)	Maximum Indoor Air Conc. (ug/m^3)	Location of maximum conc.	Potential Cancer Risk	Potential Non-cancer Hazard
PCE	0.412	1,400	0.79	IND	1.9E-06	0.022
1,2 DCA	0.116	-	nd		-	-
Total					1.9E-06	0.022

Apartment SP-119

Analyte	CHHSL (ug/m^3)	USEPA Short Term Relocation Level (ug/m^3)	Maximum Indoor Air Conc. (ug/m^3)	Location of maximum conc.	Potential Cancer Risk	Potential Non-cancer Hazard
PCE	0.412	1,400	1.1	IND	2.7E-06	0.03
1,2 DCA	0.116	-	0.34	IND	2.9E-06	0.00084
Total					5.6E-06	0.03084

Apartment SP-1419

Analyte	CHHSL (ug/m^3)	USEPA Short Term Relocation Level (ug/m^3)	Maximum Indoor Air Conc. (ug/m^3)	Location of maximum conc.	Potential Cancer Risk	Potential Non-cancer Hazard
PCE	0.412	1,400	5.3	IND	1.3E-05	0.15
1,2 DCA	0.116	-	nd		-	-
Total					1.3E-05	0.15

Apartment SP-1423A

Analyte	CHHSL (ug/m^3)	USEPA Short Term Relocation Level (ug/m^3)	Maximum Indoor Air Conc. (ug/m^3)	Location of maximum conc.	Potential Cancer Risk	Potential Non-cancer Hazard
PCE	0.412	1,400	13	IND	3.2E-05	0.36
1,2 DCA	0.116	-	nd		-	-
Total					3.2E-05	0.36

Results and Discussion

1. Cancer Risk and Non-Cancer Hazard
    a. All residences near Elwoods exceeded the 1E-06 point of departure risk, with potential total cancer risks ranging from 1.2E-06 to 4.0E-05. The non-cancer hazard never exceeded 1.0
    b. All residences near Sparkleen/Service Cleaners exceeded the 1.0E-06 point of departure risk, with potential cancer risk ranging from 1.9E-06 to 4.9E-04. The non-cancer Hazard Index (HI) exceeded 1.0 only once (HI 5.5 at the same residence as the maximum PCE concentration).
    c. Overall, most of the cancer risk and non-cancer hazard is attributable to PCE and/or 1,2 DCA: PCE exceeded the CHHSL in all of the 13 residences tested. The highest inhalation risk was 4.8E-04 (at Apartment SP-116A). 1,2 DCA was detected in 7/13 residences and exceeded the CHHSL in all residences where it was detected. The highest cancer risk was 3.1E-05. 1,1,1 TCA was detected in 2/13 residences, never exceeding the CHHSL.
    d. It should be noted that in residences near Elwoods where both 1,2 DCA and PCE were detected, the potential cancer risk from 1,2 DCA exceeded the potential cancer risk from PCE, while this was not the case for most of the residences near Sparkleen/Service Cleaners, where risks from 1,2 DCA were generally lower than the potential risks associated with PCE

2. Areas not sampled near Sparkleen/Service Cleaners
   Note that two of the small residential units at 1423/1419 La Loma Ave could not be

sampled, and that not all of the residential units at 113, 117, 119 Covena Ave were sampled.

Conclusions and Recommendations

1. Elwoods Area
   HERO concludes that the indoor air concentrations in residences near Elwoods exceed the CHHSLs for PCE and 1,2 DCA. However, the commencement of the SVE system at the Elwoods facility, should reduce the soil gas and indoor air concentrations of VOCs in the near future. HERO recommends confirmation indoor air samples when the cleanup goal for the SVE has been reached. If the indoor air concentrations are still above the CHHSLs, the SVE should be continued.

2. Sparkleen/Service Cleaners
   HERO recommends obtaining additional data from the USEPA to determine indoor air concentrations after the installation of the sub-slab depressurization system at 113, 117 and 119 Covena Ave. The potential cancer risk exceeded 1E-05 in 6 out of 9 residences before mitigation measures. HERO is especially concerned about the residences west of the 113 Covena Ave. apartment complex: not every residence in this area was made accessible for sampling and the potential excess cancer risk exceeded 1E-05 in 4 out of 6 residences that were investigated. HERO recommends mitigation measures at these residences as the sub-slab depressurization system at 113 Covena Ave. will not protect these residents. HERO also recommends to follow up with the USEPA on the proposed soil gas sampling to determine the extent of the soil gas plume, particularly if it extends to the large apartment complex north of 113 Covena Ave.

3. Other areas of investigation
   During a field meet with USEPA the possibility was discussed to sample soil gas in two other areas in Modesto (Acme and Cesi Cleaners), where the uncertainty associated with the soil gas sampling was greatest and residential populations were located near the cleaners. HERO recommends following up with this sampling proposal to the USEPA or incorporating it into DTSC's investigation of the Modesto Drycleaners, to determine the impact on public health from vapor intrusion concerns in these areas.

If you have additional questions please contact me at Tel. 916-255 4332, or email: gwindgas@dtsc.ca.gov

Reviewed by: Claudio Sorrentino, PhD
Senior Toxicologist, Northern California Unit Chief
Human and Ecological Risk Office, DTSC

for C.S.