CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER No. R2-2014-0002

RESCISSION OF SITE CLEANUP REQUIREMENTS (ORDERS No. 94-027 and 99-088) for:

BRANDENBURG FAMILY ASSOCIATES ONE,
A CALIFORNIA LIMITED PARTNERSHIP;

BRANDENBURG, STAEDLER & MOORE,
A CALIFORNIA LIMITED PARTNERSHIP; and

PHIL WOOD, DBA PHIL WOOD & COMPANY

for the property located at:

153 WEST JULIAN STREET
SAN JOSE, SANTA CLARA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter the Regional Water Board), finds that:

1. **Regional Water Board Orders**: The Regional Water Board adopted final site cleanup requirements for the site at 153 West Julian Street, San Jose (Site) on February 16, 1994 (Order No. 94-027). The Regional Water Board amended these requirements on October 20, 1999 (Order No. 99-088), to approve an updated remedial action plan and require its implementation if the Site was redeveloped. Order No. 94-027 and Order No. 99-088 both name Brandenburg Family Associates One; Brandenburg, Staedler & Moore; and Phil Wood as dischargers.

2. **Summary of Investigation and Remediation Activities:** Between 1944 and 1969, the previous owner / operator at the Site installed a 1000-gallon underground storage tank (UST) and a 300-gallon UST to store petroleum products. From 1978 to 1988, Phil Wood operated a specialty bicycle parts manufacturing and distributing business at the Site. Phil Wood used 1,1,1-trichloroethane (1,1,1-TCA) to clean metal parts and stored 1,1,1-TCA in the 1,000 gallon UST until 1984. In 1985, the two USTs were removed, along with approximately 162 cubic yards of volatile organic compounds (VOC)-impacted soil. Twenty groundwater monitoring wells were installed to delineate VOCs. A soil vapor extraction system operated from 1988 to 1993. A groundwater extraction system operated from 1988 through 2002. In 2002, the building at the Site was demolished and approximately 9,300 cubic yards of VOC-impacted soil was excavated from a maximum depth of 44-feet below ground surface.

3. **Basis for Rescission**: Rescission of Order Nos. 94-027 and 99-088 is appropriate because the Site meets the Regional Water Board's low-threat site closure criteria as discussed below:

a. **Pollutant sources are identified and evaluated**. The main contaminant source was the release of VOCs including 1,1,1-TCA and its breakdown products from a former UST under the sidewalk on the south side of the former Site building.

b**. The Site is adequately characterized**. The Site was characterized through a series of investigations of soil and groundwater starting in 1985. Twenty groundwater fmonitoring wells were installed between 1986 and 1988 and adequately defined the lateral and vertical extent of the VOC plume in groundwater

c. Exposure pathways, receptors, and potential risks, threats, and other environmental concerns are identified and assessed. Groundwater and vapor migration and exposure pathways have been assessed. The Site is currently vacant and zoned for commercial use. Shallow groundwater beneath the Site is not currently used for drinking water. The plume does not threaten deeper groundwater aquifers, which are used for drinking water, because a regional aquitard separates the shallow and deeper aquifers. Due to the excavation and soil vapor extraction, discussed in findings 2 and 3d, the potential for direct exposure to soil contaminants is minimal. Vapor intrusion is discussed in finding 3e.

d. Pollutant sources are remediated to the extent feasible. The two USTs were removed, and 9,300 cubic yards of VOC-impacted soil were excavated. The Site contaminants have been remediated by a combination of soil excavation and offsite disposal, soil vapor extraction, groundwater extraction, and natural attenuation. Some residual soil gas concentrations remain (discussed in finding 3e) in areas that were outside of the excavation and influence of the soil vapor extraction system.

e. Unacceptable risks to human health, ecological health, and sensitive receptors, considering current and future land and water uses, are mitigated. Soil gas sampling was conducted in 2011 to evaluate the vapor intrusion pathway. As shown in the table below, all results were below their respective commercial Environmental Screening Levels (ESLs) and residential ESLs, with the exception of PCE and benzene, which are slightly above their respective residential ESL.

2011 Soil Gas Concentrations (ug/m^3)					
	Benzene	1,1,1-TCA	1,1-DCA	1,1-DCE	PCE
Maximum Detection	52.6	3,190	445	1,770	369
Residential ESL	42	2,600,000	760	100,000	210
Commercial ESL	420	22,000,000	7,700	880,000	2,100
Notes: ug/m^3 – micrograms per cubic meter 1,1,1-TCA = 1,1,1-trichloroethane 1,1-DCA = 1,1-dichloroethane 1,1-DCE = 1,1-dichloroethene PCE = tetrachloroethene					

f. Unacceptable threats to groundwater and surface water resources, considering existing and potential beneficial uses, are mitigated. The shallow groundwater plume is not impacting any surface water bodies or drinking water wells. All groundwater monitoring wells have been properly destroyed at the Site. As discussed in finding 3c, shallow groundwater beneath the Site is not currently used for drinking water. Additionally, there is a regional aquitard between the shallow, affected aquifer, and the deeper aquifer, which is the aquifer that would be used for domestic use.

g. Groundwater plumes are decreasing. The remediation has reduced groundwater pollution to asymptotic levels. Monitoring results over 26 years indicate that the groundwater plume has been shrinking steadily in size. Monitoring results from the final round of groundwater sampling, performed in 2012, are presented below:

2012 Groundwater Concentrations (ug/L)					
	1,1,1-TCA	1,1-DCA	1,1-DCE	PCE	Vinyl Chloride
Maximum Detection	ND < 1	8.3	11	ND < 1	2.3
California MCL	200	5	6	5	0.5
Notes: ug/L = micrograms per liter MCL = Maximum Contaminant Levels for drinking water ND < 1 = Non-detect, below detection limit of 1 ug/L					

h. Cleanup standards can be met within a reasonable time frame. Natural attenuation is expected to reduce remaining contaminant concentrations in shallow groundwater to below drinking water standards before the groundwater will be used as a source of drinking water.

i. Risk management measures are not needed. The shallow groundwater slightly exceeds drinking water standards for 1,1-DCA, 1,1-DCE, and vinyl chloride. A deed restriction is not needed because shallow groundwater beneath the Site is not currently used as a source of drinking water and is not expected to be used in the foreseeable future, the exceedences above the drinking water standard are very small, and there are no other pathways of concern. Natural attenuation is expected to reduce concentrations below all drinking water standards and residential ESLs. The Site is currently zoned commercial, and the remaining soil vapor concentrations meet commercial ESLs. In the event the Site is ever re-zoned residential, it is standard practice for a redeveloper of a Site with a history of contamination to perform a current soil gas survey, which would inform the developer of any remaining concentrations.

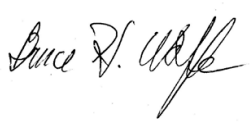
4. California Safe Drinking Water Policy: It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This Order promotes that policy because maximum contaminant levels (designed to protect human health and ensure that water is safe for domestic use) are and will continue to be met in existing and future

supply wells. The remaining groundwater contamination at the Site is in the shallow aquifer, which is not currently used for drinking water and will not be used for drinking water in the foreseeable future. The deeper aquifer underlying the shallow aquifer, which is used for drinking water, meets maximum contaminant levels. A regional aquitard underlying the shallow aquifer will ensure that the deeper aquifer is not threatened by the remaining low concentrations in the shallow aquifer.

5. **CEQA**: This action rescinds orders to enforce the laws and regulations administered by the Regional Water Board. Rescission of the orders is not a project as defined in the California Environmental Quality Act (CEQA). There is no possibility that the activity in question may have a significant effect on the environment. (Cal. Code Regs., tit. 14 §§ 15378 and 15061, subd. (b) (3).)

6. **Notification**: The Regional Water Board has notified the dischargers and all interested agencies and persons of its intent under Water Code section 13304 to rescind site cleanup requirements for the discharge and has provided them with an opportunity to submit their written comments.

IT IS HEREBY ORDERED, pursuant to section 13304 of the Water Code, that Orders No. 94-027 and 99-088 are rescinded.



Digitally signed by Bruce H. Wolfe
DN: cn=Bruce H. Wolfe, o=SWRCB, ou=Region 2, email=bwolfe@waterboards.ca.gov, c=US
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January 28, 2014

Bruce H. Wolfe
Executive Officer