

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

CLEANUP AND ABATEMENT ORDER NO. R5-2005-0721

FOR

AMERIPRIDE SERVICES, INC., AND
VALLEY INDUSTRIAL SERVICES, INC.
7620 WILBUR WAY, SACRAMENTO
SACRAMENTO COUNTY

This Order is issued to AmeriPride Services, Inc. (AmeriPride) and Valley Industrial Services, Inc., (hereafter collectively referred to as Discharger) based on provisions of California Water Code Section 13304, which authorizes the Central Valley Regional Water Quality Control Board (hereafter Water Board) to issue a Cleanup and Abatement Order.

The Water Board finds, with respect to the Discharger's acts or failure to act, the following:

BACKGROUND

1. AmeriPride owns and operates an industrial laundry under the name AmeriPride Uniform Services on its property at 7620 Wilbur Way (hereafter referred to as the site) in Sacramento, Sacramento County. The site encompasses approximately 4.6 acres, as shown in Attachment 1, which is made part of this Order. Also shown on Attachment 1 are the locations of monitoring wells and water supply wells affected or potentially affected by the tetrachloroethylene (PCE) groundwater plume, which emanates from the site.
2. Valley Industrial Laundry constructed the original industrial laundry facility at the site in the mid-1960s. The original facility was approximately 16,000 square feet in size. Valley Industrial Laundry performed laundry-cleaning services including dry cleaning and water washing. In 1972, Valley Industrial Laundry transferred all of its assets to Valley Industrial Services, Inc., a newly created, wholly owned subsidiary of Valley Industrial Laundry. Petrolane, Inc., a California corporation, then purchased the stock of Valley Industrial Services, Inc. in exchange for Petrolane stock. As a result of this 1972 transaction, Valley Industrial Services, Inc. became a wholly owned subsidiary of Petrolane, Inc.
3. In 1980, the facility building was expanded to approximately double its size.
4. In 1983, Petrolane sold all California laundry facilities, including the site, to Mission Industries. Because of anti-trust concerns raised by the federal government, Mission Industries sold the site to Welch's Overall Cleaning Company, Inc. (Welch's) within days of acquiring the site.
5. Welch's operated the facility until 31 December 1998 when Welch's was merged into AmeriPride, its parent company. Welch's and AmeriPride expanded the facility, adding a total of approximately 21,000 square feet in 1990 and 2000.

6. Although Valley Industrial Laundry and/or Valley Industrial Laundry, Inc., and Valley Industrial Services, Inc. may have dissolved, during their existence they had insurance policies that, if located, may provide coverage related to this Order. As former owners of the site and operators of the laundry facility, these entities caused or permitted waste to be discharged to waters of the state where it has created and threatens to create a condition of pollution or nuisance.
7. The dry-cleaning solvent, PCE, reportedly was used at the site from the early 1960s to 1982.
8. AmeriPride is in litigation with other parties to determine, as between the parties to the litigation, responsibility to pay for cleanup.
9. According to State Board precedent and pursuant to California Water Code Section 13304, AmeriPride, as the current owner of the site, is a responsible party.
10. In 1997, during remodeling work, AmeriPride detected volatile organic compounds (VOCs), including PCE and trichloroethylene (TCE), in near-surface soil beneath the site at concentrations up to 7,800 micrograms per kilogram ($\mu\text{g}/\text{kg}$) and 69 $\mu\text{g}/\text{kg}$, respectively. AmeriPride conducted additional soil investigations including passive soil gas sampling, Geoprobe[®] soil boring sampling, and soil vapor extraction (SVE) pilot tests to determine the extent of the PCE in soil gas and possible soil cleanup alternatives. SVE wells were installed prior to expansion of the building and have since been connected to an SVE remediation system. The SVE system has been operating since 14 August 2003
11. AmeriPride conducted a series of groundwater investigations to determine the lateral and vertical extent of PCE, and its degradation products, TCE and cis-1,2 dichloroethylene (cis-1,2 DCE) pollution. The groundwater PCE plume extends approximately 2,000 feet laterally in the downgradient direction (to the east) and to depths in excess of 200 feet below ground surface (bgs). The maximum PCE, TCE and cis-1,2 DCE concentrations detected in groundwater during October 2002 were 11,000 microgram per liter ($\mu\text{g}/\text{L}$) PCE in monitoring well MW-1, 220 $\mu\text{g}/\text{L}$ TCE in monitoring wells MW-1 and MW-20, and 750 $\mu\text{g}/\text{L}$ cis-1,2 DCE in monitoring well MW-20.
12. Unsaturated soils beneath the site consist of laterally and vertically variable silts, clays and silty sands underlain by a relatively continuous layer of sand and gravel with cobbles. Groundwater is first encountered beneath the sand/gravel/cobble layer at a depth of approximately 75 feet bgs. Saturated sediments consist of inter-bedded fine- and coarse-grained materials to depths of greater than 600 feet bgs. Groundwater flow at all of the depths monitored for plume definition is generally to the east/northeast; however, groundwater flow directions are influenced by pumping wells screened in various zones within the aquifer system.
13. Several municipal and domestic supply wells are located within the vicinity of the site, as shown on Attachment 1. In August 2001, PCE was detected in groundwater at a concentration of 78 $\mu\text{g}/\text{L}$ in the California-American Water Company (Cal-Am) Wilbur #1

municipal supply well, which is on the northeast boundary of the site. During peak summer demand in 2001, the Wilbur #1 well was pumped at 900 gallons per minute. The Wilbur # 1 well was screened below 426 feet bgs. The PCE detection was confirmed in November 2001 and the Wilbur #1 well was taken off line on 15 November 2001. On 21 January 2003, the California Department of Health Services (DHS) advised Water Board staff that, in accordance with DHS Policy Memo 97-005, wellhead treatment would not be allowed on the Wilbur #1 well until full compliance with the policy can be demonstrated. Cal Am discontinued use of the Wilbur #2 well on 16 December 2001, due to the proximity to the PCE plume, even though PCE has not been detected in the Wilbur #2 well using a detection limit of 0.5 µg/L.

14. In August 2001, PCE was detected at a concentration of 0.60 µg/L in the Chinet #1 supply well, which is approximately 1,800 feet east of the site and supplied process and drinking water to the Huhtamaki facility (formerly Chinet), a paper plate processing plant. At that time Huhtamaki changed its water system so that drinking water in the plant was supplied by a municipal source and the well water was used only as process water. The concentration of PCE in this well has continually increased since PCE was first detected and was 2.9 µg/L on 15 October 2002. Huhtamaki has not provided the Water Board with more recent water quality data analyses from this well.
15. Sacramento County Environmental Management Department (County) was the lead regulatory agency until February 2002, when the County referred the site oversight to the Water Board.
16. In April 2002, PCE was detected in the Chinet # 2 supply well at 14 µg/L. This well was historically used as a backup water supply and a source for fire protection water for the Huhtamaki facility.
17. AmeriPride submitted a draft remedial investigation/feasibility study (RI/FS), dated 31 May 2002, that included remedial alternatives for source area soil and groundwater polluted with PCE. On 31 July 2002, Water Board staff sent AmeriPride comments on the draft RI/FS which in part requested that AmeriPride submit: (1) a work plan to implement the chosen alternatives for soil (soil vapor extraction) and groundwater (extraction and treatment) remediation in the source area by 30 August 2002, and (2) a site-wide RI/FS for cleanup of the entire plume to background levels by January 2003.
18. On 28 August 2002, AmeriPride agreed to undertake the actions as described in Finding 17.
19. On 30 August 2002, Huhtamaki informed Water Board staff that, due to the PCE levels in the Chinet wells, it would have to discontinue use of these wells.
20. In a 19 December 2002 letter, Water Board staff concurred with AmeriPride that site cleanup would be broken into separate operable units for cleanup of soil and groundwater. In subsequent documents, AmeriPride refers to the contaminated soil in the source area as OU1, the groundwater polluted with PCE at concentrations greater than 1,000 micrograms per liter

(µg/L) as OU2, and the remainder of the PCE plume as OU3.

21. On 14 January 2003, Water Board staff agreed that due to the time necessary to properly design a treatment system for the SVE remedy, AmeriPride would not be able to complete and submit the site-wide groundwater RI/FS in January 2003. A new date was not proposed at that time.
22. On 25 April 2003, the Water Board adopted Resolution No R5-2003-0058 approving the *Remedial Action Work Plan* for OU1 and adopted *Cleanup and Abatement Order No. R5-2003-0059*. The Cleanup and Abatement Order required the comprehensive site-wide groundwater RI/FS be submitted on 20 June 2003.
23. On 27 May 2003, AmeriPride filed a petition with the State Water Resources Control Board requesting Reconsideration and a Stay of *Cleanup and Abatement Order No. R5-2003-0059*.
24. On 8 July 2003, the State Water Resources Control Board dismissed the request for a stay.
25. On 20 June 2003, AmeriPride submitted an RI/FS to Water Board staff proposing groundwater extraction, treatment and discharge to cleanup the source area groundwater (OU2) and use of the Chinet #1 production well to cleanup the remainder of the plume (OU3).
26. On 14 August 2003, in compliance with *Cleanup and Abatement Order No. R5-2003-0059*, AmeriPride began soil remediation with soil vapor extraction in OU1.
27. On 3 March 2004, the State Water Resources Control Board dismissed AmeriPride's Petition for Reconsideration of *Cleanup and Abatement Order No. R5-2003-0059*.
28. On 2 April 2004, AmeriPride filed a petition for writ of mandate with the Sacramento County Superior Court of the State of California to stay any further implementation of *Cleanup and Abatement Order No. R5-2003-0059* and to "overturn the CAO, in particular the requirements for alternate water supplies to be provided for the Cal-Am/Wilbur wells and the Huhtamaki/Chinet wells, and that AmeriPride be relieved of the requirement of investigating the source of well contamination in Wilbur 1."
29. On 12 September 2003, Water Board staff concurred with the portion of the 20 June 2003 RI/FS for Groundwater in which AmeriPride proposed to remediate OU2. Water Board staff requested that AmeriPride submit a revised RI/FS with an alternative for cleanup of OU3, without the use of the Chinet #1 well as an extraction well. In this letter, Water Board staff requested that AmeriPride submit, by 9 October 2003, a remedial action work plan for OU2 and a schedule to complete the tasks necessary to prepare a revised RI/FS for cleaning up OU3.
30. In its 8 October 2003 letter, AmeriPride proposed submitting a revised RI/FS on 7 June 2004. AmeriPride requested that when reviewing the revised RI/FS, Water Board staff reconsider

the use of the Chinet #1 to cleanup the distal portion of the plume and as replacement water for Huhtamaki.

31. On 15 October 2004, AmeriPride submitted the *Remedial Investigation/Feasibility Study Report: Downgradient Ground Water*, which recommended cleanup of OU3 using the Chinet #1 well as an extraction well, treating the extracted groundwater with activated granulated carbon and providing the treated water to the Huhtamaki facility as replacement water supply.
32. On 18 March 2005, Water Board staff commented on the 15 October 2004 RI/FS and included reasons why the use of the Chinet #1 well was unacceptable. Water Board staff requested that AmeriPride submit a revised RI/FS that proposed alternatives for cleanup of OU3 without the use of the Chinet #1 well.
33. On 15 April 2005, AmeriPride submitted a letter response to Water Board staff's 18 March 2005 letter, refuting staff conclusions that use of the Chinet #1 was unacceptable. AmeriPride agreed, however, to revise the RI/FS and submit the revised document on 18 September 2005.
34. In a 12 August 2005 letter, Water Board staff commented on the AmeriPride's response to Water Board staff's 18 March 2005 letter stating that use of the Chinet #1 as an extraction well would not be an effective or an acceptable means of cleaning up the polluted groundwater. Extraction from the Chinet #1 would draw clean water into the extraction well from deeper, unpolluted water-bearing zones and would require that highly polluted groundwater be drawn laterally into less polluted and possibly unpolluted zones. Since the first intake screen in the Chinet #1 is at 168 feet below ground surface (bgs) and the zones of highest pollution are approximately between 85 feet bgs and 110 feet bgs, extraction from this well would require that the polluted groundwater be pulled across several low permeability layers. The low permeability layers would retard the downward movement of the groundwater and adsorb PCE to the clay sediments. Water Board staff also stated in the 12 August letter, "AmeriPride is scheduled to start up its source area groundwater remediation system no later than November 2005. The hydrogeologic information gained by the vertical investigation boring in the distal portion of the plume and during the first few months of extraction in the source area should be used to re-calibrate the groundwater model and assist in determining optimal placement of the extractions wells for the downgradient groundwater cleanup, extraction well screen depths and the appropriate pumping rate to capture the entire VOC plume." Water Board staff requested that AmeriPride submit a revised RI/FS for OU3 by 2 January 2006.
35. After mediation on 2 November 2005, without admitting liability, AmeriPride filed a request for dismissal with the Superior Court of California to dismiss its petition for writ of mandate challenging Cleanup and Abatement Order No.R5-2003-0059.

36. Wilbur Well #1 was video logged on 26 September 2005 and was abandoned on 5 December 2005.
37. During the week of 19 December 2005, AmeriPride will start up groundwater remediation in OU2 using extraction and treatment technology.

REQUIREMENTS

38. Tasks required in Cleanup and Abatement Order No. R5-2003-0059 which have not been accomplished as of the date of this Order are as follows:
 - To provide in-kind replacement water for the Huhtamaki facility.
 - To provide a plan to determine how PCE entered the Chinnet #1 well.
 - To determine if the Wilbur #2 presents a conduit for downward migration of polluted groundwater.
 - To submit an acceptable comprehensive Remedial Investigation/Feasibility Study for cleanup of the remainder of the plume (OU3).
39. On 2 November 2005, in a mediation meeting between the Water Board staff and AmeriPride, the two parties agreed to revise *Cleanup and Abatement Order No. R5-2003-0059*. This revision to the Order includes those items agreed upon between the two parties and other provisions necessary to cleanup and abate the effects of pollution caused by activities conducted at the 7620 Wilbur Way facility.
40. Specifically, AmeriPride agreed, without admitting liability, to comply with the revised Order incorporating the following requirements and dates:
 - To cleanup and capture the entire PCE plume within a reasonable amount of time consistent with State Water Resources Control Board Resolution 92-49.
 - Not to petition the State Water Resources Control Board challenging this revised Order and will not challenge this revised Order in court.
 - To dismiss the petition for writ of mandate filed in the Superior Court of California by AmeriPride, *AmeriPride Services, Inc. v. Central Valley Regional Water Quality Control Board*, Sacramento County Superior Court Case No. 04CS00426.
 - By 15 December 2005, provide Water Board staff with a detailed technical report outlining how it will provide replacement water for Huhtamaki. This report will include an analysis of all aspects of the replacement water process, including, but not limited to, location, permitting, storage, conveyance, volume, quality, and scheduling. AmeriPride

will implement the schedule in the approved technical report for replacement water. The schedule will become part of this Order.

- By 15 January 2006, submit to the Water Board a final RI/FS for cleanup of the PCE plume. The RI/FS will include a refined site model for an extraction and treatment scenario for capture and cleanup of the entire PCE plume to the non-detect contour incorporating all available pumping data (including December 2005 data).
 - By 15 February 2006, provide the Water Board with a final detailed technical report for providing replacement water to Huhtamaki responsive to Water Board comments.
 - By 15 June 2006, properly abandon the Chinet #1 and Chinet #2 wells and provide proof that the wells have been properly abandoned. Prior to abandonment, video logs of the two wells must be completed and submitted to Water Board staff.
 - By 15 September 2006, provide in kind replacement water to Huhtamaki. In kind replacement water will be consistent with Water Code Requirements.
 - By 1 January 2007, complete installation of a well extraction system to capture and cleanup the toe of the plume to non detect VOC levels. The system shall include a monitoring well network to confirm capture and cleanup to these levels. To remain in compliance with this Cleanup and Abatement Order, AmeriPride must apply for and receive approval from the Water Board of the toe extraction system and monitoring well network.
41. By complying with this revised Order, AmeriPride makes no admission of fault or liability for pollution to soil and/or groundwater. This Order is intended to replace and supercede Cleanup and Abatement Order No. R5-2003-0059, issued by the Water Board Executive Officer, which will be rescinded 30 days from the date of issuance of this Order if no petitions to the State Water Resources Control Board or other legal actions are filed challenging this Order.
42. Permanent replacement supply for Wilbur #1 and Wilbur #2 has been settled in a Settlement Agreement between California-American Water Company, AmeriPride Services, Inc., and Petrolane, Incorporated. The Settlement Agreement required AmeriPride to pay \$2,000,000.00 to Cal-Am and that “Within ten business days of receipt of the Settlement Payment, Cal-Am shall represent by letter to the [Water] Board that, insofar as Cal-Am is concerned, AmeriPride has satisfied the requirements of the CAO that AmeriPride and Valley Industrial Services, Inc. provide in-kind replacement of water supplies lost from the Wilbur Way Wells [Wilbur #1 and Wilbur #2 water supply wells].” This letter from Cal Am was received on 21 September 2005.

- 43. Huhtamaki is utilizing an interim water supply. Huhtamaki has filed a lawsuit against AmeriPride to recover damages due to the loss of the use of Chinet #1 and Chinet #2 wells.
- 44. This Order requires permanent replacement of water supply lost to Huhtamaki and abandonment of the Chinet #1 and Chinet #2 wells.

AUTHORITY – LEGAL REQUIREMENTS

- 45. The Water Board’s *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, 4th Edition* (hereafter Basin Plan) designates beneficial uses of the waters of the State, establishes water quality objectives (WQOs) to protect these uses, and establishes implementation policies to implement WQOs. The beneficial uses of the groundwater beneath the site are domestic, municipal, industrial, and agricultural supply
- 46. The constituents listed in Finding 11 are wastes, as defined in the Water Code, Section 13050.
- 47. The wastes detected at the site are solvents used in the dry cleaning process and breakdown products that are not naturally occurring, and some are known human carcinogens. Pollution of groundwater with PCE, TCE and cis-1,2 DCE impairs the beneficial uses of the groundwater.
- 48. WQOs listed in the Basin Plan include numeric WQOs, e.g., state drinking water maximum contaminant levels (MCL) that are incorporated by reference, and narrative WQOs, including the narrative toxicity objective and the narrative tastes and odors objective for surface and groundwater. The numeric limits for the constituents of concern listed in the following table implement the Basin Plan WQOs.

Constituent	Limits	WQO	Reference
PCE	0.06 µg/L ¹	Narrative Toxicity	California Public Health Goal in Drinking Water – Office of Environmental Health Hazard Assessment
TCE	0.8 µg/L	Narrative Toxicity	California Public Health Goal in Drinking Water – Office of Environmental Health Hazard Assessment.
cis-1,2 DCE	6 µg/L	California Primary Maximum Contaminant Level	CCR Title 22, Section 64444 California Department of Health Services

¹µg/L--Micrograms per liter

49. The groundwater exceeds the WQOs for the constituents listed in Findings No. 11 and 48. The exceedance of applicable WQOs in the Basin Plan constitutes pollution as defined in Water Code Section 13050. The site contains waste that has created and threatens to continue to create a condition of pollution or nuisance.
50. The State Water Resources Control Board (State Board) has adopted Resolution No. 92-49, the *Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304*. This Policy sets forth the policies and procedures to be used during an investigation or cleanup of waste and requires that cleanup standards be consistent with State Board Resolution 68-16, *Statement of Policy with Respect to Maintaining High Quality of Waters in California* (the antidegradation policy). Resolution 92-49 and the Basin Plan establish the cleanup levels to be achieved. Resolution 92-49 requires the waste to be cleaned up to background, or if that is not reasonable, to an alternative level that is the most stringent level that is economically and technologically feasible in accordance with Title 23 California Code of Regulations Section 2550.4. Any cleanup level alternative to background must, (1) be consistent with the maximum benefit to the people of the state; (2) not unreasonably affect present and anticipated beneficial use of such water; and (3) not result in water quality less than that prescribed in the Basin Plan and applicable Water Quality Control Plans and Policies of the State Board.
51. The State Board's *Water Quality Enforcement Policy*, (P. 19) states in part:
- At a minimum, cleanup levels must be sufficiently stringent to fully support beneficial uses, unless the Regional Board allows a containment zone. In the interim, and if restoration of background water quality cannot be achieved, the [cleanup and abatement order] should require the discharger(s) to abate the effects of the discharge. Abatement activities may include the provision of alternate water supplies.
52. Section 13304(a) of the California Water Code provides that:
- Any person who has discharged or discharges waste into the waters of this state in violation of any waste discharge requirement or other order or prohibition issued by a regional board or the state board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board, clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts. A cleanup and abatement order issued by the state board or a regional board may require the provision of, or payment for, uninterrupted replacement water service, which may include wellhead treatment, to each affected public water supplier or private well owner. Upon failure of any person to comply with the cleanup or abatement order, the Attorney General, at the request of the board, shall petition

the superior court for that county for the issuance of an injunction requiring the person to comply with the order. In the suit, the court shall have jurisdiction to grant a prohibitory or mandatory injunction, either preliminary or permanent, as the facts may warrant.

53. Section 13304(f) of the California Water Code provides that:

Replacement water provided pursuant to subdivision (a) shall meet all applicable federal, state, and local drinking water standards, and shall have comparable quality to that pumped by the public water system or private well owner prior to the discharge of waste.

54. Section 13267(b) of the California Water Code provides that:

In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

55. The technical reports required by this Order are necessary to assure compliance with this Order. Existing data and information about the site indicates that waste has been discharged or is discharging at the site, which is owned or operated, or formerly owned or operated by the Discharger named in this Order.

56. Section 13304(c)(1) of the California Water Code provides in pertinent part that:

[T]he person or persons who discharged the waste, discharges the waste, or threatened to cause or permit the discharge of the waste within the meaning of subdivision (a), are liable to that government agency to the extent of the reasonable costs actually incurred in cleaning up the waste, abating the effects of the waste, supervising cleanup or abatement activities, or taking other remedial action....

57. If the Discharger fails to comply with this Cleanup and Abatement Order, the Executive Officer may request the Attorney General to petition the superior court for the issuance of an injunction.

58. If the Discharger violates this Cleanup and Abatement Order, then the Discharger may be liable civilly in a monetary amount provided by the California Water Code.
59. The issuance of this Order is an enforcement action taken by a regulatory agency and is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000 et seq.), pursuant to Section 15321(a)(2), Title 14, California Code of Regulations.
60. Any person affected by this action of the Water Board may petition the State Board to review the action in accordance with Title 23 California Code of Regulations Sections 2050-2068. The State Board must receive the petition within 30 days of the date of this Order. Copies of the law and regulations applicable to filing petitions will be provided upon request and are available at www.swrcb.ca.gov.

REQUIRED ACTIONS

IT IS HEREBY ORDERED that, pursuant to Section 13300, Section 13304 and Section 13267 of the California Water Code, AmeriPride Services, Inc. and Valley Industrial Services, Inc. (collectively, “Discharger”) shall:

1. Investigate, clean up the waste, and abate the effects of the discharges of waste, forthwith, at 7620 Wilbur Way, Sacramento, in conformance with the State Board’s Resolution No. 92-49 *Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304* and with the Water Board’s *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins* (in particular the Policies and Plans listed within the Control Action Considerations portion of Chapter IV). “Forthwith” means as soon as is reasonably possible. Compliance with this requirement shall include, but not be limited to, completing the tasks listed below and shall include those actions necessary to investigate, clean up and abate the effects of discharges of waste that have emanated from 7620 Wilbur Way beyond the property boundaries. This Order is intended to replace and supercede Cleanup and Abatement Order No. R5-2003-0059, which will be rescinded 30 days from the date of adoption of this Order if no petitions to the State Water Resources Control Board or other legal actions are filed challenging this Order.

Water Supply Replacement

2. By **15 December 2005**, submit a detailed technical work plan outlining how the Discharger will provide in kind replacement water to Huhtamaki for the water supply lost due to pollution and proper abandonment of the Chinet #1 and Chinet #2 water supply wells. This work plan shall include an analysis of all aspects of the replacement water process, including, but not limited to:
 - Proposed location of the replacement supply well.

- Drilling technique.
- Proposed depth.
- All necessary permits to drill and complete a water supply well.
- Proposed methods to confirm the available volume and quality are sufficient to meet Huhtamaki's needs.
- Method for determining what effect pumping the replacement well(s) will have on the existing PCE plume.
- Storage of pumped water during testing.
- Storage of pumped water to accommodate pressure/distribution needs of the Huhtamaki facility.
- Conveyance from the well to storage location and point of use.
- Schedule for conducting the work described in the work plan.

If any proposed long-term action requires Department of Health Services approval prior to implementation, the work plan shall demonstrate that the action will comply with Department of Health Services requirements and that the Discharger has discussed and coordinated the proposal with Department of Health Services and Huhtamaki personnel.

3. By **15 February 2006**, provide the Water Board staff with a final detailed technical work plan for providing replacement water to Huhtamaki responsive to Water Board staff comments. The final technical work plan shall contain a schedule for implementing the proposed work. The schedule shall become a part of this Order upon concurrence by the Water Board staff. Upon receiving concurrence with the technical work plan from Water Board staff, implement the work according to the approved time schedule in the technical work plan.
4. By **15 September 2006**, complete the work to provide in kind replacement water to Huhtamaki in accordance with the approved work plan and consistent with Water Code requirements.

SUPPLY WELL CLOSURE

5. By **15 June 2006**, properly abandon the Chinet #1 and Chinet #2 wells and provide proof that the wells have been properly abandoned. Prior to abandonment, determine the integrity of the casing and the location of well perforations, by completing a video log of each of the two wells and submit to Water Board staff and Sacramento County Environmental Health for permit considerations.

GROUNDWATER REMEDIATION

6. By **15 January 2006**, submit a draft final Remedial Investigation/Feasibility Study (RI/FS) for cleaning up the entire volatile organic compound (VOC) plume to the concentration contour at laboratory detection limit of 0.5 µg/L. The Discharger shall refine the existing

numerical site model for capture and cleanup of the entire PCE plume to the non-detect contour using all pumping data from the site including that acquired in December 2005 and submit the updated model as part of the final RI/FS. The draft final RI/FS shall address all comments on the draft RI/FS submitted previously by Water Board staff. Include in the draft final RI/FS a proposal to contain the toe of the plume to prevent further migration and to ultimately cleanup that portion of the plume. The plume toe containment can be performed as a time critical removal action. Since the plume toe containment proposal will be evaluated in the RI/FS, a separate Engineering Evaluation/Cost Analysis (EE/CA) will not be necessary. The RI/FS portion addressing any time critical removal action shall contain sufficient detail to satisfy any EE/CA requirements. Since it will be a time critical removal action, a public comment period will not be necessary for that portion of the RI/FS.

7. Within **30 days** of staff concurrence with the draft Final *RI/FS*, submit a comprehensive *Groundwater Remedial Action Work Plan* that describes the chosen alternative(s) for groundwater remediation of OU3 and includes a time schedule and specific actions, including any necessary access agreements to conduct the remediation. Implementation of the OU3 remediation may be performed in phases. The approved time schedule to implement the groundwater remediation shall become a part of this Order.
8. By **1 January 2007**, complete the installation and start up of an extraction well(s) and treatment system to capture and clean up the toe of the plume to the laboratory detection limit for PCE of 0.5 µg/L.
9. Within **120 days** of implementing the comprehensive *Groundwater Remedial Action Plan*, submit a comprehensive *Groundwater Remediation Implementation Report*, which describes the status of the groundwater remediation system and assesses the effectiveness of the remediation.
10. By **1 September 2006**, submit a final cleanup plan for remediating OU3.

GENERAL REQUIREMENTS

11. If a court makes a final determination that any entity not named as a "Discharger" in this Order is the agent or alter ego of a Discharger, or is otherwise liable for the acts or omissions of a Discharger that caused or permitted the discharges of waste that are the subject of this Order, the Executive Officer shall revise this Order to name that entity as a "Discharger."
12. All feasibility studies and cleanup plans shall contain the information listed in Attachments 2 and 3, respectively, which are made part of this Order. Work shall be conducted only after the Water Board staff notifies the Discharger that the work plan is consistent with this Order. All reports shall include a cover letter from the Discharger.
13. Fourteen days prior to conducting any field work, submit a Health and Safety Plan that is adequate to ensure worker and public safety during the field activities in accordance with CCR Title 8, Section 5192.

14. As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all reports shall be prepared by, or under the supervision of, a California registered professional engineer or geologist and signed by the registered professional. All technical reports submitted by the Discharger shall include a statement signed by the authorized representative certifying under penalty of law that the representative has examined and is familiar with the report and that to his knowledge, the report is true, complete, and accurate.
15. Upon startup of any remediation system(s), operate the remediation system(s) continuously, except for periodic and required maintenance or unpreventable equipment failure. The Discharger shall notify the Water Board within 24 hours of any unscheduled shutdown of the remediation system(s) that lasts longer than 48 hours. This notification shall include the cause of the shutdown and the corrective action taken (or proposed to be taken) to restart the system. Any interruptions in the operation of the remediation system(s), other than for maintenance, emergencies, or equipment failure, without prior approval from Water Board staff or without notifying the Water Board within the specified time is a violation of this Order.
16. Periodically, but at least annually, evaluate the remedial systems and optimize remedial systems and report on the effectiveness of the optimization in the Annual Report.
17. Notify Water Board staff at least five working days prior to any fieldwork, testing, or sampling.
18. Obtain all local and state permits necessary to fulfill the requirements of this Order prior to beginning work.
19. Continue any remediation or monitoring activities until such time as the Executive Officer determines that sufficient cleanup has been accomplished and this Order has been rescinded.
20. Reimburse the Water Board for reasonable costs associated with oversight of the cleanup of the site soils and groundwater emanating from the site. Failure to do so shall be considered a violation of this Order.
21. If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement or may issue a complaint for administrative civil liability.

This Order is effective upon the date of signature.

THOMAS R. PINKOS, Executive Officer

21 December 2005
