California Regional Water Quality Control Board
North Coast Region

CLEANUP AND ABATEMENT ORDER NO. R1-2003-0089

FOR

MUSA and SUHA AWAD
ANITA CLARK
DELMER MOHR

526 SONOMA AVENUE
SANTA ROSA

Sonoma County

The California Regional Water Quality Control Board, North Coast Region, (hereinafter Regional Water Board), finds that:

1. Musa and Suha Awad own property at 526 Sonoma Avenue (Assessors Parcel Number 010-203-016) in Santa Rosa, California as joint tenants (hereinafter Site). The Awads purchased the Site from Donald and Anita Clark on May 27, 1993. The Clarks purchased the Site from John and Elaine Richter, Clara Gray and Florence Harris on December 23, 1975. Mrs. Florence Harris and Mrs. Ottilie Richter purchased the property from John C. and Caroline Bingman on June 18, 1974.

2. Historical records show that a dry cleaning facility operated at the Site since approximately 1954. In approximately 1965, Delmer Mohr became the business owner and operated the facility using wet-to-dry equipment and tetrachloroethylene (PCE) as the dry cleaning compound until February 1992. In 1993, Musa and Suha Awad installed new dry-to-dry cleaning equipment and operated the business up to August 2000. The business continues to operate under new ownership. The Regional Water Board currently has no reason to suspect the current business owner is a responsible party.

3. Musa and Suha Awad, Anita Clark, and Delmer Mohr are hereinafter referred to as "the Dischargers".

4. The Site is bordered on the north by Sonoma Avenue, the PG&E substation property and the Boyett Petroleum site; on the west by predominantly residential properties; on the south by Julliard Park; and on the east by the Clark's Auto Parts site and Santa Rosa Avenue. Land uses in the vicinity of the Site are a mix of commercial and residential. Santa Rosa Creek is located approximately 250 feet to the north and a water supply well is located approximately 225 feet to the west.

5. Petroleum hydrocarbon releases have occurred at the Boyett Petroleum and Clark's Auto Parts sites. Some commingling of plumes has occurred.

6. PCE is commonly used in the dry cleaning industry as a cleaning solvent. PCE is a potential human carcinogen, and is listed by the State of California pursuant to the Safe Drinking Water and Toxic Enforcement Act of 1986 as a chemical known to the State to cause cancer.

PCE degrades to trichloroethylene (TCE), cis-1,2-Dichloroethylene (DCE) and vinyl chloride (VC). These breakdown products are also potential human carcinogens.

7. Wastes generated during the dry cleaning process include cooling water, condensate water, spent filters and sludge (dirt and lint). The Central Valley Regional Water Quality Control Board conducted a study of wastes from dry cleaners as part of the State Water Resources Control Board Well Investigation Program. Sampling and analysis of cooling water and condensates was conducted. The chemical PCE was present in condensate fluids at up to 30 per cent pure solvent, with an average concentration of dissolved PCE at 151,800 parts per billion (ppb). Cooling water discharges contained PCE concentrations in a range of 3.0 to 4,000 ppb. The study conducted by the Central Valley Regional Water Quality Control Board evaluated dry cleaning processes, which included the type of processes used at the Empire Cleaners. In addition, spent filters and sludge also contain PCE.

8. Discharges of PCE to soil and groundwater at dry cleaning facilities can occur through various mechanisms at various locations including:

    - Faulty dry cleaning equipment,
    - Wet to dry cleaning equipment,
    - Faulty utility connections,
    - Spills and leaks,
    - Waste disposal practices including discharges of waste to land,
    - Floor cracks and/or floor drains.

9. On March 23, 2000, groundwater monitoring wells were installed in Sonoma Avenue to investigate the extent of gasoline and gasoline constituents from a former gasoline station at 203 Santa Rosa Avenue (Clark's Auto Parts). The groundwater samples were analyzed and found to contain PCE at 57 ppb, TCE at 170 ppb, Cis-1,2-DCE at 130 ppb and VC at 82 ppb. Since that time, groundwater sampling at Boyett Petroleum has included an analytical method for dry cleaning compounds. PCE, TCE, Cis-1,2-DCE and VC have been detected in groundwater immediately adjacent to Santa Rosa Creek.

10. Regional Water Board staff conducted a public records search and found:

    - On October 19, 1982, Mr. Delmer Mohr completed an application to the City of Santa Rosa Industrial Waste Department for an industrial waste discharge permit and identified his business practices for sludge disposal as "disposed of as garbage." In a personal communication between Regional Water Board staff and Mr. Mohr on September 11, 2000, he confirmed that he disposed of the sludge in a dumpster.

    - On July 29, 1985, the City of Santa Rosa (City) Department of Industrial Waste issued Permit No. SR-IW0241 to Mr. Delmer Mohr for the discharge of industrial wastewater. The permit prohibited the discharge of dry cleaning solvents to the sanitary sewer.

    - On October 17, 1989, City staff conducted an inspection and found that cooling and condensate water were being discharged to the sanitary sewer via two floor drains (sumps) inside the building at the Site. The City collected a water sample from each of the two floor drains and PCE was detected at 1,000 and 1,400 ppb.

- In August 1990, City staff inspected the facility and a sample was collected from the floor drain and condensate water. PCE was detected in the floor drain sample at 1,100 ppb. The condensate water contained PCE at 120 ppb.

- In October 1990, Permit No. SR-NR2087 was issued to Delmer Mohr prohibiting the discharge of PCE to the sanitary sewer system and requiring that all waste be removed by a licensed, hazardous waste hauler.

11. On November 30, 2000, Regional Water Board staff requested the submittal of a work plan from Anita Clark and Musa and Suha Awad to investigate the lateral and vertical extent of contamination. Mr. Mohr was not included at that time due to his fragile health. Ms. Clark and the Awads agreed to work together and carry out the work.

12. On September 17, 2001, the "Subsurface Investigation" work plan was submitted on behalf of Musa and Suha Awad and Anita Clark. On November 14, 2001, the "Addendum to August 2001 Subsurface Investigation" work plan was submitted. On November 28, 2001, Regional Water Board staff concurred with the proposed scope of work. As of this date, the work plan has not been implemented. The lateral and vertical extent of contamination has not been investigated or defined.

13. The groundwater flow direction is to the north/northwest toward Santa Rosa Creek. The presence of PCE, TCE, Cis-1,2-DCE and VC in groundwater immediately adjacent to Santa Rosa Creek has been documented. Therefore, it is probable that PCE, TCE, Cis-1,2-DCE and VC impacted groundwater is migrating into the permeable sand and gravel located beneath the channeled concrete floor of Santa Rosa Creek.

14. The threat of potential contamination of Santa Rosa Creek is impacting the City of Santa Rosa Prince Memorial Greenway Project (PMGP). The PMGP is a creek restoration and linear park project that includes enhancing creek access, providing recreational opportunities, conserving and restoring natural habitats, enhancing aesthetic values, providing educational opportunities, maintaining hydraulic capacity, and establishing alternative transportation modes including pedestrian and bicycle pathways. The PMGP generally includes the removal of the concrete creek floor and walls and restoration of natural plant and animal habitats. The Regional Water Board issued the City of Santa Rosa Waste Discharge Requirements (WDRs) No. R1-2000-05 for the construction of the PMGP.

15. The removal of the concrete wall and floor of Santa Rosa Creek may allow water currently trapped beneath the concrete channel to mix with surface waters and threaten or impact beneficial uses of Santa Rosa Creek. A pathway may be created exposing humans and aquatic life to PCE, TCE, Cis-1,2-DCE, and VC impacted water. These discharges from the removal of the concrete wall and floor of Santa Rosa Creek by the City or its contractors may result in a violation of WDRs No. R1-2000-05.

16. Additional responsible parties may exist, including past operators. Continued review of the historical record, facts, data, and information may result in additional parties being named in this Order as Dischargers, in which case this Order would be revised.

17. The Dischargers have caused or permitted, cause or permit, or threaten to cause or permit 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. Continuing discharges are in violation of the Porter-Cologne Water Quality Control Act and provisions of the Water Quality Control Plan for the North Coast Region (Basin Plan).

18. Existing and potential beneficial uses of areal groundwater include domestic, irrigation, and industrial supply. Beneficial uses of Santa Rosa Creek, a tributary to the Laguna de Santa Rosa and the Russian River are:

    a. municipal and domestic supply
    b. agricultural supply
    c. industrial process supply
    d. groundwater recharge
    e. navigation
    f. hydropower generation
    g. water contact recreation
    h. non-contact water recreation
    i. commercial and sport fishing
    j. warm freshwater habitat
    k. cold freshwater habitat
    l. wildlife habitat
    m. migration of aquatic organisms
    n. spawning, reproduction, and/or early development.

19. The California Water Code, and regulations and policies developed thereunder require cleanup and abatement of discharges and threatened discharges of waste to the extent feasible. Cleanup and abatement activities are to provide attainment of background levels of water quality or the highest water quality that is reasonable if background levels of water quality cannot be restored. Alternative cleanup levels greater than background concentration shall be permitted only if the discharger demonstrates that: it is not feasible to attain background levels; the alternative cleanup levels are consistent with the maximum benefit to the people of the State; alternative cleanup levels will not unreasonably affect present and anticipated beneficial uses of such water; and they will not result in water quality less than prescribed in the Basin Plan and Policies adopted by the State and Regional Water Board.

20. Water quality objectives in the Basin Plan are adopted to ensure protection of the beneficial uses of water. The most stringent water quality objectives for protection of all beneficial uses are selected as the protective water quality criteria. Alternative cleanup and abatement actions must evaluate the feasibility of, at a minimum: (1) cleanup to background levels, (2) cleanup to levels attainable through application of best practicable technology, and (3) cleanup to protective water quality criteria levels. Exhibit 1, attached to and made part of this Order, sets out the water quality objectives for groundwater.

21. Discharge prohibitions contained in the Basin Plan apply to this site. State Water Resources Control Board Resolution 68-16 applies to this site. State Water Resources Control Board Resolution 92-49 applies to this site and sets out the 'Policies and Procedures for Investigation and Cleanup and Abatement of Discharges under Section 13304 of the California Water Code."

22. The report of findings and remedial action plan required by this Order are necessary to ensure that the prior harm and future threat to water quality created by the discharges described above are properly abated and controlled. More detailed information is available in the Regional Water Board's public file on this matter.

23. The Regional Water Board will ensure adequate public participation at key steps in the remedial action process, and shall ensure that concurrence with a remedy for cleanup and abatement of the discharges at the site shall comply with the California Environmental Quality Act (Public Resources Code Section 21000 et seq.) ("CEQA").

24. The issuance of this Cleanup and Abatement Order is an enforcement action being taken for the protection of the environment and, therefore, is exempt from the provisions of CEQA in accordance with Title 14, California Code of Regulations, Sections 15308 and 15321.

25. Any person affected by this action of the Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with Section 13320 of the California Water Code and Title 23, California Code of Regulations, Section 2050. The petition must be received by the State Water Board within 30 days of the date of this Order. Copies of the law and regulations applicable to filing petitions will be provided upon request. In addition to filing a petition with the State Water Board, any person affected by this Order may request the Regional Water Board to reconsider this Order. To be timely such request must be received by the Regional Water Board within 30 days of the date of this Order. Note that even if reconsideration by the Regional Water Board is sought, filing a petition with the State Water Board within the 30-day period is necessary to preserve the petitioner' s legal rights. If you choose to appeal the Order, be advised that you must comply with the Order while your appeal is being considered.

THEREFORE, IT IS HEREBY ORDERED that, pursuant to California Water Code Sections 13267(b) and 13304, the Dischargers shall cleanup and abate the discharge and threatened discharges forthwith and shall comply with the following provisions of this Order:

A. Conduct all work under the direction of a California registered civil engineer or geologist experienced in soil, groundwater and surface water assessment and remediation.

B. Submit a work plan (or a commitment to implement the existing work plan) to investigate the vertical and lateral extent of contamination including potential source areas by September 1, 2003.

C. Implement the work plan within 30 days of the North Coast Region Executive Officer's concurrence with the work plan.

D. Submit a report of findings for work completed under Provisions B and C within 60 days of work plan implementation. The report shall include an adequate work plan for any additional effort necessary to identify and investigate all sources of contamination and define the lateral and vertical extent of contamination, including any potential impacts to Santa Rosa Creek.

E. Continue with Provisions B, C and D until the Regional Water Board Executive Officer has determined that the horizontal and vertical extent of soil and groundwater contamination has been defined.

F. Submit a draft remedial action plan according to the requirements of the Health & Safety Code Section 25356.1 within 60 days of the Regional Water Board Executive Officer's determination that Provisions C and D have been completed.

G. Submit a final remedial action plan according to the requirements of the Health & Safety Code Section 25356.1 within 30 days of Regional Water Board Executive Officer's notification that the public notice requirements of Section 25356.1 have been completed.

H. Implement the final remedial action plan within 45 days of the Regional Water Board Executive Officer's concurrence with the plan.

I. Submit a report documenting the completion of work identified in the final remedial action plan within 60 days of remedial action plan implementation.

J. By September 1, 2003, submit a list of interested party names and addresses, including all landowners south of Santa Rosa Creek, north of Julliard Park, west of Santa Rosa Avenue and east of South A Street.

K. Complete any additional work deemed reasonably necessary by the Regional Water Board Executive Officer to abate and cleanup the discharge of waste.

L. If, for any reason, the Dischargers are unable to perform any activity or submit any documentation in compliance with the work schedule contained in this Order or submitted pursuant to this Order and approved by the Executive Officer, the Dischargers may request in writing an extension of time as specified. The extension request must be received by the Regional Water Board 5 days in advance of the due date in question and shall include justification for the delay including the good faith effort performed to achieve compliance with the due date. The extension request shall also include a proposed time schedule with new performance dates for the due date in question and all subsequent dates dependent on the extension. A written extension may be granted for good cause, in which case the Order will be revised accordingly.

Ordered by _____
Susan A. Warner
Executive Officer
July 29, 2003

JEF:js/ECCAO