CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER No. 96-101

ADOPTION OF SITE CLEANUP REQUIREMENTS FOR:

CHEMCENTRAL CORPORATION
7050 W. 71ST STREET
BEDFORD PARK, IL 60638

for the property located at

31702 HAYMAN STREET
HAYWARD
ALAMEDA COUNTY

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

1. **Site Location**: Chemcentral San Francisco Facility (hereinafter the site) is located at 31702 Hayman Street and is in the South Hayward Industrial Park. It occupies an area of about 4.8 acres. Surrounding land use is mixed industrial and commercial. The nearest surface water body is the Dry Creek which is at least 5,000 feet southeasterly from the site. It is about 6 miles from the east shore of the San Francisco Bay.

2. **Site History**: Prior to 1965, the site was reportedly used for agricultural purposes. Chemcentral acquired the site and operated a solvent and chemical packaging and distributing business there since 1965. Formerly, the site contained 51 underground tanks, 49 of which were used to store solvents and other chemical liquids for packaging. Currently only 46 of these tanks are in active use. These tanks are located in the Underground Storage Tank Farm Area (UST Area), which occupies about 16,000 square feet. Two other underground gasoline and diesel storage tanks, which were removed in 1995, were located on site for the purpose of fueling up trucks.

   In December 1989, a preliminary environmental assessment including an environmental record search on neighboring properties and an inspection of the facility was conducted by Chemcentral to assess the subsurface conditions. Following that assessment, Chemcentral performed a subsurface investigation at the site, and reported that soil and groundwater pollution by a variety of hydrocarbon compounds was detected.

3. **Named Dischargers**: Chemcentral has reportedly operated the same business since 1965. As unauthorized releases of some chlorinated and non-chlorinated chemical compounds at concentrations significantly higher than appropriate drinking water standards were detected below the site, Chemcentral is named as a discharger (hereinafter the discharger).

   If additional information is submitted indicating that other parties caused or permitted any waste to be discharged on the site where it entered or could have entered waters of the state or have contributed to any offsite commingling of contamination plumes, the Board will consider adding that party's name to this order.

4. **Regulatory Status**: This site is currently not subject to Board order.

5. **Site Hydrogeology**: The site lies within the Dry Creek Cone which is characterized by fine-grained alluvial deposits mainly consisting of clay with minor sand lenses. Two water-bearing zones have been identified during the various phases of investigation; and these two zones are reportedly not completely isolated from each other. Groundwater below the site occurs at a shallow depth of approximately 16 to 25 feet below ground surface (bgs). The groundwater gradient beneath the site is generally in a west to southwest direction.

6. **Remedial Investigation**: During the August 1990 Phase 1 subsurface investigation which included a soil-gas survey, soil borings, well installation, four wells were installed to assess the extent of the groundwater pollution. A second phase of soil and groundwater investigation was conducted in early 1991. In this phase of investigation, most of the chemicals detected were found at higher concentrations near and directly downgradient of the UST and truck loading areas. A third phase of investigation of the site was performed in December 1992, and the results of this investigation confirmed that groundwater pollution had migrated off-site.

   A remedial investigation/feasibility study report was issued by Chemcentral in October 1993 summarizing the subsurface pollution status and the evaluation result of various applicable groundwater remediation technologies for the cleanup of the site. Groundwater pollution by a variety of chemicals including, but not limiting to, Trichloroethylene (TCE), Tetrachloroethylene (PCE), cis-1,2-Dichlorothylene (1,2-DCE), Benzene, Toluene, Ethylbenzene, total Xylenes (collectively known as BTEX), Methylene Chloride (MC), Acetone, 2-Butanone, 4-Methyl-2-pentanone, 2-Hexanone, Vinyl Chloride (VC), Chloroethane (CE), etc.. It was reported that these chemicals in groundwater samples existed at concentrations much higher than the corresponding drinking water standards. For instance, up to 4,500 ppb of TCE, 130,000 ppb of Acetone, 71,000 ppb of Toluene, 12,000 ppb of 1,2-DCE have been detected in one of the monitoring wells at the immediate downgradient location of the UST Area.

   Currently there are fourteen (14) shallow zone and four deeper zone monitoring wells on site. With the completion of the three phases of off-site investigation conducted between

1994 and 1995, there are nine shallow zone monitoring wells installed off-property for the purpose of defining the extent of the groundwater plume. Because of the complex nature of the subsurface hydrogeologic conditions and the possible existence of commingling plume problem, additional off-site investigation is necessary.

7. **Interim Remedial Measures**: Based on the recommendations of the 1993 remedial investigation/feasibility study report, the discharger installed a pilot groundwater extraction and air pollution control system to test for the efficiency and effectiveness of the proposed large scale system of the same type. The pilot system was operated for several months before its termination. Now, the large scale air pollution control system has been delivered on site. Due to the manufacturer's unexpected decision to cease its business and the non-availability of power supply from PG& E for the air pollution control system, the discharger has been unable to implement the proposed groundwater remediation. Despite the many problems encountered in the process of expediting groundwater remediation, the discharger still looks for other solutions to get the remediation system started as soon as possible. In addition, the discharger is currently studying the inclusion of a soil vapor extraction system in its remediation actions to help remove the chemicals from the UST Area.

   Interim remedial measures need to be implemented at this site to reduce the threat to water quality, public health, and the environment posed by the discharge of waste and to provide a technical basis for selecting and designing final remedial measures.

8. **Adjacent Sites**: It has been reported that unauthorized releases of chemicals occur at several other locations in the vicinity of the site. These include Dexter Corporation's chemical packaging facility which is on the crossgradient side of the site (storing and packaging similar chemicals to Chemcentral), United States Pipe & Foundry and Lincoln Hayward VI Property both of which are on the upgradient sides of the site. Whether these sites' groundwater pollution will affect Chemcentral is not clear.

9. **Basin Plan**: The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on June 21, 1995. This updated and consolidated plan represents the Board's master water quality control planning document. The revised Basin Plan was approved by the State Water Resources Control Board and the Office of Administrative Law on July 20, 1995, and November 13, 1995, respectively. A summary of regulatory provisions is contained in 23 CCR 3912. The Basin Plan defines beneficial uses and water quality objectives for waters of the State, including surface waters and groundwaters.

   The potential beneficial uses of groundwater underlying and adjacent to the site include:

   a. Municipal and domestic water supply
   b. Industrial process water supply
   c. Industrial service water supply

d. Agricultural water supply

At present, there is no known use of groundwater underlying the site for the above purposes. However, the proximity of the site to the Niles Cone deposits (within 0.5 miles) from which Alameda County Water District extracts groundwater to supplement its municipal water supply to the population in the cities of Fremont, Newark, and Union City, and the potential hydraulic communication between the shallow water bearing zone and the deeper aquifers support the need for protection of the above-mentioned beneficial uses for the groundwater below and in the vicinity of the site.

10. **Other Board Policies**: Board Resolution No. 88-160 allows discharges of extracted, treated groundwater from site cleanups to surface waters only if it has been demonstrated that neither reclamation nor discharge to the sanitary sewer is technically and economically feasible.

Board Resolution No. 89-39, "Sources of Drinking Water," defines potential sources of drinking water to include all groundwater in the region, with limited exceptions for areas of high TDS, low yield, or naturally-high contaminant levels.

11. **State Water Board Policies**: State Water Board Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California," applies to this discharge and requires attainment of background levels of water quality, or the highest level of water quality which is reasonable if background levels of water quality cannot be restored. Cleanup levels other than background must be consistent with the maximum benefit to the people of the State, not unreasonably affect present and anticipated beneficial uses of such water, and not result in exceedance of applicable water quality objectives.

State Water Board Resolution No. 92-49, "Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304," applies to this discharge. This order and its requirements are consistent with the provisions of Resolution No. 92-49, as amended.

12. **Preliminary Cleanup Goals**: The discharger will need to make assumptions about future cleanup standards for soil and groundwater, in order to determine the necessary extent of remedial investigation, interim remedial actions, and the draft cleanup plan. Pending the establishment of site-specific cleanup standards, the following preliminary cleanup goals should be used for these purposes:

a. Groundwater: Applicable water quality objectives (e.g. maximum contaminant levels, or MCLs) or, in the absence of a chemical-specific objective, risk-based levels (e.g. drinking water equivalent levels).

b. Soil: 1 mg/kg total volatile organic compounds (VOCs), 10 mg/kg total semi-

volatile organic compounds (SVOCs), and background concentrations of metals.

13. **Basis for 13304 Order**: The discharger has caused or permitted waste to be discharged or deposited where it is or probably will be discharged into waters of the State and creates or threatens to create a condition of pollution or nuisance.

14. **Cost Recovery**: Pursuant to California Water Code Section 13304, the discharger is hereby notified that the Board is entitled to, and may seek reimbursement for, all reasonable costs actually incurred by the Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this order.

15. **CEQA**: This action is an order to enforce the laws and regulations administered by the Board. As such, this action is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to Section 15321 of the Resources Agency Guidelines.

16. **Notification**: The Board has notified the discharger and all interested agencies and persons of its intent under California Water Code Section 13304 to prescribe site cleanup requirements for the discharge, and has provided them with an opportunity to submit their written comments.

17. **Public Hearing**: The Board, at a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, pursuant to Section 13304 of the California Water Code, that the discharger (or its agents, successors, or assigns) shall cleanup and abate the effects described in the above findings as follows:

A. PROHIBITIONS

1. The discharge of wastes or hazardous substances in a manner which will degrade water quality or adversely affect beneficial uses of waters of the State is prohibited.

2. Further significant migration of wastes or hazardous substances through subsurface transport to waters of the State is prohibited.

3. Activities associated with the subsurface investigation and cleanup which will cause significant adverse migration of wastes or hazardous substances are prohibited.

B. TASKS

1. OFF-SITE INVESTIGATION WORKPLAN

COMPLIANCE DATE: September 16, 1996

Submit a workplan acceptable to the Executive Officer to define the lateral and vertical extent of the groundwater pollution off-site. An implementation schedule should be included in the workplan. Should separate phases of investigation be proposed, each phase of investigation should be clearly defined in the document.

2. COMPLETION OF OFF-SITE INVESTIGATION

COMPLIANCE DATE: February 28, 1997

Submit a technical report acceptable to the Executive Officer documenting completion of necessary tasks identified in the Task 1 workplan. The technical report should include all data findings and professional interpretation of field data for the purpose of completing the lateral and vertical extent of the groundwater pollution emanating from the site. If commingled plumes exist, the report should include recommendations to address the delineation and cleanup requirements of the groundwater pollution. If the investigation was conducted in separate phases, each part would have a workplan followed by a completion report. The referenced completion date is the deadline for submittal of the last investigation report.

3. COMPLETION OF INTERIM REMEDIAL ACTIONS

COMPLIANCE DATE May 30, 1997

Submit a technical report acceptable to the Executive Officer documenting the implementation of previously identified interim remediation system. For ongoing activities, such as soil vapor extraction or groundwater extraction, the report should document start-up as opposed to completion. Should the implemented interim remedial actions be different from those previously proposed, the report should provide a detailed description accounting for the changes and present a projection of the implemented interim remedial actions on the fate of the groundwater pollution.

4. PROPOSED FINAL REMEDIAL ACTIONS AND CLEANUP STANDARDS

COMPLIANCE DATE: December 15, 1997

Submit a technical report acceptable to the Executive Officer containing:

a. Results of the remedial investigation
b. Evaluation of the installed interim remedial actions
c. Feasibility study evaluating alternative final remedial actions
d. Risk assessment for current and post-cleanup exposures
e. Recommended final remedial actions and cleanup standards
f. Implementation tasks and time schedule

Item c should include projections of cost, effectiveness, benefits, and impact on public health, welfare, and the environment of each alternative action.

Items a through c should be consistent with the guidance provided by Subpart F of the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR Part 300), CERCLA guidance documents with respect to remedial investigations and feasibility studies, Health and Safety Code Section 25356.1(c), and State Board Resolution No. 92-49 as amended ("Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304").

Items a through e should consider the preliminary cleanup goals for soil and groundwater identified in finding 12.

5. **Delayed Compliance**: If the discharger is delayed, interrupted, or prevented from meeting one or more of the completion dates specified for the above tasks, the discharger shall promptly notify the Executive Officer and the Board may consider revision to this Order.

C. PROVISIONS

1. **No Nuisance**: The storage, handling, treatment, or disposal of polluted soil or groundwater shall not create a nuisance as defined in California Water Code Section 13050(m).

2. **Good Operation and Maintenance (O&M)**: The discharger shall maintain in good working order and operate as efficiently as possible any facility or control system installed to achieve compliance with the requirements of this Order.

3. **Cost Recovery**: The discharger shall be liable, pursuant to California Water Code Section 13304, to the Board for all reasonable costs actually incurred by the Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this Order. If the site addressed by this Order is enrolled in a State Board-managed reimbursement program, reimbursement shall be made pursuant to this Order and according to the procedures established in that program. Any disputes raised by

the discharger over reimbursement amounts or methods used in that program shall be consistent with the dispute resolution procedures for that program.

4. **Access to Site and Records**: In accordance with California Water Code Section 13267(c), the discharger shall permit the Board or its authorized representative:

   a. Entry upon premises in which any pollution source exists, or may potentially exist, or in which any required records are kept, which are relevant to this Order.

   b. Access to copy any records required to be kept under the requirements of this Order.

   c. Inspection of any monitoring or remediation facilities installed in response to this Order.

   d. Sampling of any groundwater or soil which is accessible, or may become accessible, as part of any investigation or remedial action program undertaken by the discharger.

5. **Self-Monitoring Program**: The discharger shall comply with the Self-Monitoring Program as attached to this Order and as may be amended by the Executive Officer.

6. **Contractor / Consultant Qualifications**: All technical documents shall be signed by and stamped with the seal of a California registered geologist, a California certified engineering geologist, or a California registered civil engineer.

7. **Lab Qualifications**: All samples shall be analyzed by State-certified laboratories or laboratories accepted by the Board using approved EPA methods for the type of analysis to be performed. All laboratories shall maintain quality assurance/quality control (QA/QC) records for Board review. This provision does not apply to analyses that can only reasonably be performed on-site (e.g. temperature).

8. **Document Distribution**: Copies of all correspondence, technical reports, and other documents pertaining to compliance with this Order shall be provided to the

   City of Hayward Fire Department.
   Alameda County Water District

   The Executive Officer may modify this distribution list as needed.

9. **Reporting of Changed Owner or Operator**: The discharger shall file a technical

report on any changes in site occupancy or ownership associated with the property described in this Order.

10. **Reporting of Hazardous Substance Release**: If any hazardous substance is discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, the discharger shall report such discharge to the Regional Board by calling (510) 286-1255 during regular office hours (Monday through Friday, 8:00 to 5:00).

    A written report shall be filed with the Board within five working days. The report shall describe: the nature of the hazardous substance, estimated quantity involved, duration of incident, cause of release, estimated size of affected area, nature of effect, corrective actions taken or planned, schedule of corrective actions planned, and persons/agencies notified.

    This reporting is in addition to reporting to the Office of Emergency Services required pursuant to the Health and Safety Code.

11. **Periodic SCR Review**: The Board will review this Order periodically and may revise it when necessary. The discharger may request revisions and upon review the Executive Officer may recommend that the Board revise these requirements.

I, Loretta K. Barsamian, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on July 17, 1996.

Loretta K. Barsamian
Executive Officer

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FAILURE TO COMPLY WITH THE REQUIREMENTS OF THIS ORDER MAY SUBJECT YOU TO ENFORCEMENT ACTION, INCLUDING BUT NOT LIMITED TO: IMPOSITION OF ADMINISTRATIVE CIVIL LIABILITY UNDER WATER CODE SECTIONS 13268 OR 13350, OR REFERRAL TO THE ATTORNEY GENERAL FOR INJUNCTIVE RELIEF OR CIVIL OR CRIMINAL LIABILITY

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Attachments: Facility Location Map
Self-Monitoring Program

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM FOR:

CHEMCENTRAL CORPORATION
7050 W. 71ST STREET
BEDFORD, IL 60638

for the property located at

31702 HAYMAN STREET
HAYWARD
ALAMEDA COUNTY

1. **Authority and Purpose**: The Board requests the technical reports required in this Self-Monitoring Program pursuant to Water Code Sections 13267 and 13304. This Self-Monitoring Program is intended to document compliance with Board Order No. 96-101.

2. **Monitoring**: The discharger shall measure groundwater elevations in all monitoring wells, and shall collect and analyze representative samples of groundwater for chemicals by EPA Methods 8240.8270 on a quarterly basis. Analysis of total petroleum hydrocarbons as gasoline and diesel by EPA Methods 5030 and 3510 may be required.

   The discharger shall sample any new monitoring or extraction wells quarterly and analyze groundwater samples for the same constituents as mentioned above. The discharger may propose changes in the monitoring program; any proposed changes are subject to Executive Officer approval.

3. **Quarterly Monitoring Reports**: The discharger shall submit quarterly monitoring reports to the Board no later than 30 days following the end of the quarter (e.g. report for first quarter of the year due April 30). The first quarterly monitoring report shall be due on October 30, 1996. The reports shall include:

   a. Transmittal Letter: The transmittal letter shall discuss any violations during the reporting period and actions taken or planned to correct the problem. The letter shall be signed by the discharger's principal executive officer or his/her duly authorized representative, and shall include a statement by the official, under penalty of perjury, that the report is true and correct to the best of the official's knowledge.

   b. Groundwater Elevations: Groundwater elevation data shall be presented in tabular

form, and a groundwater elevation map should be prepared for each monitored water-bearing zone. Historical groundwater elevations shall be included in the fourth quarterly report each year.

c. Groundwater Analyses: Groundwater sampling data shall be presented in tabular form, and an isoconcentration map should be prepared for one or more key contaminants for each monitored water-bearing zone, as appropriate. The report shall indicate the analytical method used, detection limits obtained for each reported constituent, and a summary of QA/QC data. Historical groundwater sampling results shall be included in the fourth quarterly report each year. The report shall describe any significant increases in contaminant concentrations since the last report, and any measures proposed to address the increases. Supporting data, such as lab data sheets, need not be included (however, see record keeping - below).

d. Groundwater Extraction: If applicable, the report shall include groundwater extraction results in tabular form, for each extraction well and for the site as a whole, expressed in gallons per minute and total groundwater volume for the quarter. The report shall also include contaminant removal results, from groundwater extraction wells and from other remediation systems (e.g. soil vapor extraction), expressed in units of chemical mass per day and mass for the quarter. Historical mass removal results shall be included in the fourth quarterly report each year.

e. Status Report: The quarterly report shall describe relevant work completed during the reporting period (e.g. site investigation, interim remedial measures) and work planned for the following quarter.

4. **Violation Reports**: If the discharger violates requirements in the Site Cleanup Requirements, then the discharger shall notify the Board office by telephone as soon as practicable once the discharger has knowledge of the violation. Board staff may, depending on violation severity, require the discharger to submit a separate technical report on the violation within five working days of telephone notification.

5. **Other Reports**: The discharger shall notify the Board in writing prior to any site activities, such as construction or underground tank removal, which have the potential to cause further migration of contaminants or which would provide new opportunities for site investigation.

6. **Record Keeping**: The discharger or his/her agent shall retain data generated for the above reports, including lab results and QA/QC data, for a minimum of six (6) years after origination and shall make them available to the Board upon request.

7. **SMP Revisions**: Revisions to the Self-Monitoring Program may be ordered by the

Executive Officer, either on his/her own initiative or at the request of the discharger. Prior to making SMP revisions, the Executive Officer will consider the burden, including costs, of associated self-monitoring reports relative to the benefits to be obtained from these reports.

I, Loretta K. Barsamian, Executive Officer, hereby certify that this Self-Monitoring Program was adopted by the Board on July 17, 1996.

Loretta K. Barsamian
Executive Officer