CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

CLEANUP AND ABATEMENT ORDER NO. 98-11

AMETEK INC.
&
KETEMA INC.
790 Greenfield Drive, El Cajon
San Diego County

1. Ametek Inc. (Ametek) operated an aerospace and electronic manufacturing business at 790 Greenfield Drive in El Cajon, California (the Site). They installed a disposal sump in the late 1960's and operated it until the early 1980's. Ametek caused chlorinated solvents to be deposited in the ground and to be discharged to ground water at concentrations in excess of water quality objectives.

2 In late 1987, Ametek removed the sump and excavated approximately 155 cubic yards of contaminated soil to bedrock to remove wastes from the soil. Ketema Inc. (Ketema) acquired the aerospace manufacturing business and the Site from Ametek in 1988. Ketema did not utilize the sump to dispose of wastes. Upon acquisition of the property Ketema began its ground water investigation. Ground water wells were installed, site assessment began, and ground water sampling conducted. No active remediation has been conducted therefore, continued migration of ground water pollution has occurred. Continued migration of ground water pollution has caused concentrations of chlorinated solvents in the ground water to exceed applicable water quality objectives.

3. Ketema has represented to the Regional Board that it accepts responsibility for any investigation, cleanup, or abatement required by the Regional Board to address existing conditions of pollution and contamination in ground water caused by discharges of chlorinated solvents to the sump at the Site.

4. Ketema submitted several technical reports (See Appendix A for titles) related to the investigation, monitoring, and cleanup of ground water contamination at the Site. The reports included a recommendation that no further corrective action, other than monitoring be required. The reports do not sufficiently address all requirements set forth in State Board Resolution No. 92-49.

5. This enforcement action is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, §21000 et seq.) in accordance with §15321, Chapter 3, Title 14, California Code of Regulations.

IT IS HEREBY ORDERED that Ametek Inc. and Ketema Inc., (hereinafter the "Dischargers") shall, pursuant to CWC §13304:

1. Prepare and submit a Final Ground Water Site Assessment to the Regional Board April 9, 1998. The Final Ground Water Site Assessment shall:

   a) clearly illustrate the location of all new and existing ground water monitoring wells and provide the rationale for selection of all new well locations.
   b) clearly document field sampling, well construction and well development for all new wells not already reported on (See Appendix A).
   c) clearly tabulate historical and new ground water monitoring data including dates of collection for each constituent monitored from each well.
   d) clearly illustrate in graphical form the vertical and horizontal extent of ground water pollution in the ground water aquifer beneath the Site and off site.

2. Prepare and submit a complete Feasibility Study to the Regional Board by June 15, 1998. The complete Feasibility Study shall evaluate the technical effectiveness, feasibility and costs of all reasonable site mitigation and treatment technologies for the cleanup and abatement of wastes discharged. This evaluation shall include rationale for the selection or rejection of each mitigation alternative. Site mitigation could include combinations of active and passive remediation on and off the Site or any combination thereof.

3. Prepare and submit a Ground Water Management Plan to the Regional Board by April 9, 1998. The Ground Water Management Plan shall identify specific ground water monitoring well locations, identify contaminants of concern, frequency of monitoring, duration of monitoring and purpose of monitoring (e.g. water quality data, containment zone monitoring, etc.).

4. Prepare and submit a Remedial Action Plan (RAP) to the Regional Board by September 1, 1998. The RAP shall describe implementation of the preferred remedial alternative. The Dischargers shall implement the plan no later than 60 days after its approval, unless modified by the Regional Board.

5. Take interim remedial actions, as necessary, to abate or correct the effects of the discharge and/or mitigate emergency situations as necessary. Interim remedial actions may occur concurrently with an other phase of soil and water investigation and/or cleanup and abatement. The Dischargers may submit proposals for appropriate interim remedial action(s) at any time during the cleanup and abatement process.

6. Provide regular, periodic written evaluations of the effectiveness of the selected cleanup and abatement method(s) implemented at the Site. The exact method(s) of evaluation and schedule of these written reports shall be proposed by the Dischargers in the RAP required by Directive 3 of this Order.

7. Prepare and submit a workplan for the Verification Sampling and Ground Water Monitoring no later than 60 days after the implementation of the selected remedial alternative has been completed. The Regional Board may amend this Order to identify the final soil and ground water cleanup levels to be obtained at the Site.

8. Notify the Regional Board in writing, by phone or facsimile of their intention to begin cleanup in accordance with the approved remedial alternative(s).

A. PROVISIONS

1. **Compliance:** Comply with any conditions set by the Regional Board, including mitigation of any adverse consequences from site remediation activities; and

2. **Suspend Cleanup:** Modify or suspend cleanup activities when directed to do so by the Regional Board.

3. **No Nuisance:** Neither the treatment nor the discharge of wastes shall create a condition of pollution or nuisance.

4. **Wastes Generated by Investigation:** The Dischargers shall properly manage, treat and dispose of wastes and polluted soils and ground water in accordance with applicable federal, state and local regulations.

5. **Operation and Maintenance (O&M):** The Dischargers 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.

6. **Access to Site and Records:** In accordance with CWC Section 13267(c), the Dischargers shall allow the Regional 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 ground water or soil which is accessible, or may become accessible, as part of any investigation or remedial action program undertaken by the Dischargers.

7. **Contractor/Consultant Qualifications:** All hydrogeologic documents (plans, specifications, and reports) shall be signed by or stamped with the seal of a California Registered Geologist, a Specialist Geologist, California Certified Engineering Geologist, or a California Registered Civil Engineer with appropriate hydrologic experience.

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

9. **Reporting of Hazardous Substance Release:** The Dischargers must notify the Regional Board by telephone or facsimile within 24 hours of any emergency conditions created by the discharge of wastes in, or on, any waters of the State, or discharged or deposited where it is, or likely will be, discharged in, or on, any waters of the State, (619) 467-2952 during regular office hours (Monday through Friday, 0800 to 1700) or FAX (619) 571-6972. The initial notification must be followed by a detailed written description of the discharge, an explanation of the conditions which lead to the discharge of wastes and the emergency remedial actions implemented to mitigate the effects of the discharge. The written notification shall be sent to the Regional Board by registered mail within five working days. This reporting is in addition to reporting to the Office of Emergency Services required pursuant to the Health and Safety Code.

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

11. **Notifications/Reporting requirements:** 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 CWC Sections 13350(d), in an amount not to exceed $5,000 for each day in which the violation occurs, or referral to the attorney general for injunctive relief or civil or criminal liability.

B. REIMBURSEMENT OF REGULATORY OVERSIGHT COSTS

The Regional Board is entitled to, and may, seek reimbursement for all reasonable costs actually incurred by the Regional Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, the abatement or effects thereof, or other remedial action required by this cleanup and abatement order. Reimbursable costs may include costs incurred by the Regional Board since November 8, 1996. Within 30 days of receipt of a billing statement for such costs, the Dischargers shall reimburse the Regional Board.

JOHN H. ROBERTUS
Executive Officer

Date issued: February 9, 1998

APPENDIX A

1. Fluor Daniel GTI, Ground water Sampling Report Ketema A&E 790 Greenfield Drive, El Cajon, California, November 21, 1996.

2. John Menatti, Luce, Forward, Hamilton & Scripps LLP, Workplan for Installation and Sampling of Additional Wells Ketema A&E, 790 Greenfield Drive, El Cajon, California, January 30, 1997.

3. Fluor Daniel GTI, Addendum to Production Well Section of the Ground water Monitoring Report, February 14, 1997.

4. John Menatti, Luce, Forward, Hamilton & Scripps LLP and Dr. Jay Jones, Environmental and Geotechnical Consulting Services, Amended Workplan for Installation and Sampling of Additional Wells Ketema A&E, 790 Greenfield Drive, El Cajon, California, March 13, 1997.

5. Environmental Support Technologies, Inc., Ground water Assessment Report Ketema A&E Facility 790 Greenfield Drive, El Cajon, California, April 9, 1997.

6. Environmental Support Technologies, Inc., Ground water Assessment Report Ketema A&E Facility 790 Greenfield Drive, El Cajon, California, June 2, 1997.

7. Jay Jones RG, PH.D, Plume Management Plan (PMP) Ketema A&E Site 790 Greenfield Drive, El Cajon, California of Environmental and Geotechnical Consulting Services dated June 26, 1997

8. Menatti, John A. and Jones, Dr. Jay., Addendum to June 26, 1997 Plume Management Plan, Down Gradient Site Survey Report and Request for Concurrence of Monitoring Well Location, September 24, 1997.

9. Jones, Dr. Jay., Follow up discussion of the potential for vinyl chloride formation in groundwater downgradient of the Ketema A&E site., October 7, 1997.

10. Jones, Dr. Jay., Ketema Site TCE Mass Balance Calculations., January 28, 1998.