



# California Regional Water Quality Control Board

## Santa Ana Region



Alan C. Lloyd, Ph.D.  
Agency Secretary

3737 Main Street, Suite 500, Riverside, California 92501-3348  
Phone (951) 782-4130 - FAX (951) 781-6288  
<http://www.waterboards.ca.gov/santaana>

Arnold Schwarzenegger  
Governor

February 28, 2005

Mr. Robert D. Wyatt  
Allen Matkins Leck Gamble & Mallory LLP  
Three Embarcadero Center, 12<sup>th</sup> Floor  
San Francisco, CA 94111-4074

Ms. Linda H. Biagioni  
Vice President, Emhart Industries, Inc.  
Vice President for Environmental Affairs, Black & Decker Corporation  
701 East Joppa Road  
Towson, MD 21286

CLEANUP AND ABATEMENT ORDER NO. R8-2005-0053

Dear Mr. Wyatt and Ms. Biagioni:

Enclosed is Cleanup and Abatement Order No. R8-2005-0053 issued to Emhart Industries, Inc. and Black & Decker (U.S.), Inc. The Order is issued under the Executive Officer's delegated authority and is in effect upon issuance. The Order is being issued at this time in order to preserve the Regional Board's claim against Emhart Industries, Inc., which filed for dissolution and caused notice to be published on March 12, 2002. Under Connecticut statutes, in order to remain valid, a proceeding to enforce the claim must be initiated within three years of publication of the dissolution notice. That deadline is March 12, 2005. The issuance of this Order constitutes the commencement of the required action.

In the event that Emhart and Black & Decker desire to be heard on the Order, a hearing before the Regional Board or a Hearing Panel composed of members of the Board is scheduled for August 18 and 19, 2005. Note that the Order does not include specific deadlines at this point; rather, the first deadline will be set by future action of the Board. A detailed hearing notice will be issued at a later date. The currently scheduled hearing commencement date is intended to allow the parties time to complete currently scheduled depositions of witnesses familiar with West Coast Loading Corporation activities and documents and time to notice and hold any further depositions that may be conducted relative to this proceeding. The hearing commencement date is subject to change.

*California Environmental Protection Agency*



If you have any questions regarding this matter, please contact Kurt Berchtold, Assistant Executive Officer, at (951) 782-3286 or Jorge Leon, Senior Staff Counsel, at (916) 341-5180.

Sincerely,



Gerard J. Thibeault  
Executive Officer

Enclosure: Cleanup and Abatement Order No. R8-2005-0053

cc (w/ enclosure):

Regional Board

Jorge Leon, SWRCB - OCC

Phil Wyels, SWRCB - OCC

Marilyn Levin, Deputy Attorney General

Gary Tavetian, Deputy Attorney General

Inland Empire Perchlorate Regulatory Task Force Members (mailing list attached)



California Regional Water Quality Control Board  
Santa Ana Region

Cleanup and Abatement Order No. R8-2005-0053

for  
Emhart Industries, Inc.  
and  
Black & Decker (U.S.), Inc.

Corporate Successors of the  
West Coast Loading Corporation

Formerly Located on the 160-Acre Property Bounded Approximately by  
Casa Grande Park Avenue on the North, Locust Avenue on the East,  
the Extension of Alder Avenue on the West, and  
the Extension of Summit Avenue on the South,  
City of Rialto, San Bernardino County

The California Regional Water Quality Control Board, Santa Ana Region  
(hereinafter Regional Board), finds that:

1. In February 1951, Kwikset Locks, Inc. (KLI), a manufacturer of household door locks, formed the West Coast Loading Corporation (WCLC).
2. During 1951 and 1952, WCLC (as a subsidiary of KLI) constructed a manufacturing plant on 160 acres of property, consisting of the southwest quarter of Section 21, Township 1 North, Range 5 West, San Bernardino Base and Meridian in the City of Rialto, County of San Bernardino, State of California. From 1951 to 1957, WCLC (as a subsidiary of KLI) wholly owned and occupied this property.
3. During the period from 1952 to 1957, WCLC used the 160-acre property for the manufacture of explosive cartridges, photoflash cartridges, flares, ground burst simulators, and other incendiary devices. WCLC manufactured many of these products under subcontract to KLI for use by the military, under KLI's contract with the U.S. Government. WCLC also processed chemicals at the Rialto site for use by other government contractors in the manufacture of solid rocket propellant. WCLC also processed chemicals for the manufacture of flares and other products containing perchlorate for non-defense purposes.
4. From 1952 (or earlier) to 1957, various chemicals were delivered, stored, and used for WCLC's manufacturing activities at the 160-acre site. The

chemicals that were used, stored, and processed at WCLC during their occupancy of the site included ammonium perchlorate, potassium perchlorate, potassium chlorate, aluminum, iron oxide, and various compounds of nitrate, lead, and barium.

5. WCLC's records indicate that very large amounts of perchlorate salts were handled at the facility. For example, a purchase order dated September 2, 1955, and delivery confirmations show that 47,000 pounds of potassium perchlorate were purchased from Western Electrochemical Co., Henderson, Nevada, and delivered to Rialto for use by WCLC.
6. As a further example, invoices and purchase orders, dated March 8, 1957, indicate that Grand Central Rocket Company received 43,250 pounds of ammonium perchlorate from WCLC after WCLC processed (i.e., dried) the ammonium perchlorate to a moisture content of 0.03% or less. The purchase orders state that Grand Central Rocket Company had supplied the material to WCLC. These business records for the work done under contract with Grand Central Rocket Company demonstrate that the handling, drying, and storage of very large amounts of perchlorate salts occurred at the WCLC site. The stringent requirements for low moisture are specific to the requirements for use of ammonium perchlorate as an oxidizer in the manufacture of solid propellant materials. Grand Central Rocket Company was in the business of manufacturing solid rocket propellant for use in military weapons systems during 1957, concurrent with the date of the purchase orders and the WCLC invoices for the 43,250 pounds of ammonium perchlorate.
7. WCLC's records included "standard operating procedures" (SOPs) for processing potassium perchlorate for use in WCLC products. WCLC's SOPs for the drying of potassium perchlorate state that potassium perchlorate powder was moved from barrels to uncovered trays, and then screened to remove lumps. The open trays were then moved to an oven in a different building using a hand-truck. Sacks were then filled with potassium perchlorate and stored indoors after drying was complete.
8. WCLC documents and testimony from former WCLC employees establish a multi-step process for the manufacture of photoflash cartridges, including drying, screening, a second round of drying, weighing, mixing, and loading. Each of these steps involved the handling, processing and/or movement of potassium perchlorate in order to mix photoflash powder. The drying, screening, weighing, mixing, and loading all took place in different rooms. WCLC documents further reveal that approximately 4%, by weight, of the perchlorate used to make photoflash cartridges was expected to be lost during the manufacturing process. WCLC documents

show that WCLC used about 50,000 pounds of perchlorate for the manufacture of photoflash cartridges during the period from 1952 to 1957.

9. It is reasonable to conclude that some spillage would have occurred during the handling, drying, screening, weighing, mixing, loading, transporting, and storage of ammonium perchlorate and potassium perchlorate at WCLC. Also, given the very fine nature of the dried, screened perchlorate powder, it is reasonable to conclude that the process of transporting perchlorate from room to room and the physical movement of the perchlorate powder during the drying, screening, weighing, mixing, and loading processes would result in the mobilization of perchlorate powder into the air, and subsequent deposition onto floors, walls, ceilings, and other surfaces.
10. This conclusion is supported by numerous pages throughout the SOPs and the "standard non-operating procedures" for chemical handling at the WCLC facility, which include requirements for sweeping up spilled powder, wiping spillage with wet rags, and wet-mopping of spills and powder deposited on various surfaces during processing. These written procedures include specific instructions for cleaning up spills of chemicals from tabletops, floors and sink areas, and disposing of soiled rags, towels, filters and cups into "slop crocks" that were stored in the WCLC work rooms and magazines ("igloos" or "bunkers"). The site janitor's job included sweeping the buildings, burning of scrap and explosive materials, and disposal of trash and metal cans at WCLC's on-site dump.
11. It is reasonable to conclude that the extensive written procedures were developed because spillage and surface accumulation of chemical products, including perchlorate salts, was expected to occur, and routinely did occur, during processing of those products at the WCLC facility. Testimony and WCLC documents reveal that the spillage and/or accumulation of perchlorate salts on equipment, walls, floors, and ceilings led to at least one significant explosion. Testimony of former employees of WCLC that was provided during depositions that were conducted beginning in 2004, verifies that, in the buildings that were used by WCLC for weighing, screening, drying, mixing and loading perchlorate salts, the equipment, floors, walls, and ceilings were washed with rags and water-wet mops to remove chemical dust at least 4 times per shift, as specified in the SOPs.
12. Testimony of former WCLC employees also indicates that the mops used for cleaning the chemical residue were rinsed with water in buckets, and the contents of the buckets were dumped onto the bare ground outside of the buildings. Based on the use of perchlorate salts in these buildings, the

water that was routinely dumped on the ground would have contained perchlorate. Further testimony from WCLC employees indicates that the metal trays that were used by WCLC employees for the screening and drying of perchlorate were taken outdoors to be cleaned. The residual perchlorate salts that remained on the trays were rinsed from the trays onto the bare ground, using a faucet and water hose.

13. It is also reasonable to conclude, and former WCLC employees have testified, that during the period from 1952 to 1957, WCLC stored and disposed of chemical-soiled rags, cans, and other wastes at the site, as directed by WCLC's written procedures. This conclusion is based upon WCLC's records and the testimony of former WCLC employees, as well as staff's collective knowledge and experience in the oversight of investigation and cleanup activities at numerous industrial sites throughout the Santa Ana Region where chemicals, including perchlorate salts, were used during the 1950s and 1960s. Standard industrial practices at such facilities in the 1950s and 1960s typically resulted in some spillage and on-site disposal of chemical products. Testimony from former WCLC employees indicates that WCLC operated an on-site laundry, used for the washing of the soiled rags. Since the 160-acre site was not sewered, any disposal of chemicals to sinks, drains, and floor drains would have entered on-site septic systems and gone to groundwater. The laundry drain apparently discharged directly onto the bare ground.
14. According to WCLC's "Safety Regulations for Handling Azides, Styphnates, and Similar Explosives," (dated January 3, 1954 and approved by WCLC's Executive Vice-President and General Manager, Gerald D. Linke), the used sponges and cleaning rags, cleaning water and other waste liquids generated from operations, including mixing photoflash powder containing perchlorate, were to be "taken to the disposal pit south of the plant site and drained into the ground."
15. In addition to the explosives and incendiary devices that were manufactured and the large amounts of perchlorate salts that were stored and handled at the site, WCLC owned "igloos" on adjacent land located southwest of the 160-acre property. WCLC leased space in the igloos to other parties, and also reserved space in the igloos for shared use by WCLC, expressly for the storage of explosives. Many explosives are known to contain perchlorate salts, so it is reasonable to conclude that perchlorate salts were stored in the igloos by WCLC.
16. The following findings explain the corporate history of WCLC, and specifically describe the direct successorship from WCLC to Emhart Industries, Inc., and Black & Decker (U.S.), inc.:

- a. On July 1, 1957, American Hardware Corporation (AHC), a Connecticut corporation, acquired KLI and its subsidiaries, including WCLC. While numerous documents regarding corporate transfers and mergers involving these entities have been uncovered during the investigation of this matter, a June 1957 agreement between AHC and KLI has not been produced by Emhart Industries, Inc. That document may shed additional light on the precise nature of the acquisition of KLI by AHC. However, numerous other contemporaneous documents have been uncovered and assist in understanding the legal effect of the transaction.
- b. On July 3, 1957, WCLC was merged with KLI. According to a July 1, 1957 KLI Board of Directors resolution, quoted in KLI's Certificate of Ownership filed with the State of California, KLI assumed "all the liabilities and obligations" of WCLC, and "shall be liable therefor in the same manner as if it had itself incurred such liabilities and obligations." KLI remained under the control of AHC.
- c. On July 19, 1957, KLI sold the 160-acre Rialto property to B.F. Goodrich. KLI ceased its manufacturing activities in Rialto, but continued operating as a "division" of AHC, doing business in Anaheim, California, producing Kwikset's well-known product line of household door locks.
- d. On June 30, 1958, KLI was dissolved. AHC assumed the liabilities of KLI and WCLC, and continued producing the Kwikset product line at the former KLI Anaheim facility.
- e. IRS Form 7004, "Application for Automatic Extension of Time," was submitted to the IRS on behalf of KLI by C. K. Nelson, Assistant Treasurer, on September 15, 1958. This document contains KLI's stated reason for the requested extension: "**The corporation was merged with another corporation** as of June 30, 1958." (emphasis added).
- f. IRS Form 843, "Claim," dated November 28, 1961, was submitted on behalf of "KLI, Transferor" and "American Hardware Corporation, Transferor." In Schedule A, the following statement is contained in the second paragraph:

"Kwikset Locks, Incorporated was substantially a **wholly-owned subsidiary of American Hardware Corporation** as of January 1, 1958. On June 30, 1958, Kwikset Locks, Inc. was dissolved. **All the**

**assets and liabilities were transferred to the parent corporation,**  
and operations were continued as Kwikset Division of the American  
Hardware Corporation.” (emphasis added).

- g. AHC merged with Emhart Manufacturing Company, a Delaware Corporation, in April 1964. The surviving corporation in the merger was AHC, under a new corporate name, “Emhart Corporation,” as of June 30, 1964.
- h. Emhart Corporation became Emhart Industries, Inc., on May 4, 1976.
- i. Kwikset Corporation was incorporated in California in 1985 as a wholly-owned subsidiary of Emhart Industries, Inc., and was capitalized using the net assets of the Kwikset Division of Emhart Industries, Inc.
- j. Emhart Industries, Inc., was acquired by Black & Decker (U.S.), Inc., a subsidiary of the Black & Decker Corporation, in 1989.
- k. Emhart Industries, Inc., is in the process of winding up its business and affairs, having filed a Certificate of Dissolution in the State of Connecticut in 2002.
- l. AHC’s purchase of KLI was more than a mere stock purchase and assumption of known liabilities only, as Emhart has claimed. It constitutes a complete merger. The documents noted above in e. and f., contemporaneously prepared at or around the time of the 1957 AHC acquisition, demonstrate that KLI and AHC understood and believed the 1957 purchase of KLI to be a “merger,” with the result that AHC assumed all of KLI’s liabilities both known and unknown. In addition, a Kwikset Corporation publication, entitled “Kwikset A Black & Decker Company Employee Handbook,” contains the following quotation:

“In 1957, Kwikset Locks, Inc. merged with the American Hardware Corporation of New Britain, Connecticut and subsequently became known as the Kwikset Division.” Moreover, the Black & Decker website, as it appeared in 2002, indicated under “Company History” that KLI was merged into AHC. Notably, during the investigation of this matter in 2002, and shortly after this fact was pointed out to Kwikset’s and Emhart’s representatives, the website was changed to remove this statement.

- 16. Black & Decker (U.S.), Inc., by virtue of its status as parent corporation of Emhart and having received the stock of Emhart upon dissolution, is a legal successor to Emhart’s and WCLC’s liabilities under this order.

17. Emhart Industries, Inc., and Black & Decker (U.S.), Inc., are the corporate successors of WCLC and KLI, and are legally liable for discharges of pollutants caused by WCLC and KLI. WCLC and KLI, and their legal successors, have caused or permitted, or are causing or permitting, waste, i.e., perchlorate, to be discharged to waters of the state, and have created, or threaten to create, a condition of pollution or nuisance.
18. Perchlorate salts are highly soluble and dissociate in water to form perchlorate ions. There are currently no state or federal drinking water standards for perchlorate. However, the California Department of Health Services (DHS) has established a drinking water Action Level (AL) for perchlorate of 6 parts per billion (ppb). An AL is a temporary safe drinking water level that is based on limited studies that have been performed. Perchlorate is currently present in the Rialto, Riverside - B, and Chino North Groundwater Management Zones. The West Valley Water District, the Fontana Water Company, and the Cities of Rialto and Colton had limited or ceased the use of 20 municipal water supply wells that exceeded the AL for perchlorate (several of these wells have been put back into operation after having perchlorate treatment systems installed).
19. Municipal water supply wells in the Rialto, Riverside - B, and Chino North Groundwater Management Zones have been, or are likely to be, affected by the perchlorate pollution in these basins. Regional Board staff is currently attempting to identify all parties that may have discharged perchlorate in this area.
20. The beneficial uses of the Rialto, Riverside - B, and Chino North Groundwater Management Zones include:
  - A. Municipal and domestic supply,
  - B. Agricultural supply,
  - C. Industrial service supply, and
  - D. Industrial process supply.
21. California Water Code Section 13304 allows the Regional Board to recover reasonable expenses from responsible parties for overseeing cleanup and abatement activities. It is the Regional Board's intent to recover such costs for regulatory oversight work conducted in accordance with this order.
22. This enforcement action is being taken by a regulatory agency to enforce a water quality law. Such action is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section

- 21000, et seq.) in accordance with Section 15321, Article 19, Division 3, Title 14, California Code of Regulations.
23. A soil and groundwater investigation is necessary to define the vertical and lateral extent of the perchlorate that is discharging, has been discharged, or threatens to be discharged, from the former WCLC facility and from the former WCLC igloos (bunkers).
  24. It is appropriate to order Emhart Industries, Inc., and Black & Decker (U.S.), Inc., to clean up and abate the effects of the discharge of perchlorate from property that was formerly owned and controlled by their corporate predecessors, WCLC and KLI.
  25. The former 160-acre WCLC property now consists of numerous separate parcels, with multiple landowners. Since 1964, continuing through the present, various tenants involved in pyrotechnics have occupied portions of the site.
  26. Orders have been issued to former tenants or former owners of the 160-acre parcel and the adjacent property where WCLC's igloos (bunkers) were located. Additional orders may be issued, if Regional Board staff obtains additional information indicating that other specific tenants or owners have also discharged perchlorate that is present in the groundwater.

IT IS HEREBY ORDERED THAT, pursuant to Section 13304, Article 1, Chapter 5, Division 7, of the California Water Code, Emhart Industries, Inc., and Black & Decker (U.S.), Inc., shall cleanup and abate the effects of the discharges at the Rialto properties as follows:

1. Prepare and submit a work plan and time schedule to define the lateral and vertical extent of the perchlorate that is discharging, has been discharged, or threatens to be discharged, from the former WCLC facility and from the former WCLC igloos (bunkers). The work plan, subject to the approval of the Executive Officer, shall be implemented in accordance with a time schedule approved by the Executive Officer. The due date for this work plan and time schedule will be established by future action of the Regional Board.
2. Prepare and implement any additional work plans that the Executive Officer deems necessary to sufficiently characterize the lateral and vertical extent of perchlorate that is discharging, has been discharged, or threatens to be discharged, from the former WCLC facility and from the

former WCLC igloos (bunkers). The work plans, subject to the approval of the Executive Officer, shall be implemented in accordance with time schedules approved by the Executive Officer.

3. After the Executive Officer determines that the lateral and vertical extent of perchlorate that is discharging, has been discharged, or threatens to be discharged from the former WCLC facility and bunkers has been sufficiently defined, submit a detailed remedial action plan, including an implementation schedule, to cleanup or abate the effects of the perchlorate that is discharging, has been discharged, or threatens to be discharged, from the former WCLC facility and bunkers. The remedial action plan shall provide for replacement water service, which may include wellhead treatment, for any water supply wells determined by the Executive Officer, based on investigations conducted pursuant to Items 1 and 2, above, to be affected by the discharges. The remedial action plan and implementation schedule shall be submitted within 60 days of the Executive Officer's notification to Emhart Industries, Inc., and Black & Decker (U.S.), Inc., that the definition of the extent of perchlorate is sufficiently complete to initiate cleanup or abatement activities. The remedial action plan and schedule shall be subject to approval by the Executive Officer.
4. Implement the remedial action plan in 3. , above, as approved by the Executive Officer.

This Order is issued under the Executive Officer's delegated authority to issue a Cleanup and Abatement Order.

  
Gerard J. Thibeault  
Executive Officer

February 28, 2005

· Robert Thompson  
The Honorable Senator Nell Soto  
822 N. Euclid Ave., Suite A  
Ontario, CA 91762

· The Honorable Senator Nell Soto  
State Capital, Room 4078 P.O. Box 942848  
Sacramento, CA 94248-0001

· Anthony Araiza , Jerry Eagans & León Long  
West Valley Water District  
P.O. Box 920  
Rialto, CA 92377-0920

· Barry Groveman & Steve Elie  
Musick, Peeler & Garrett  
624 S. Grand Ave., Suite 2000  
Los Angeles, CA 90017-3383

· Christine Brown, Wendy Arano and Aaron Yue  
California Dept. of Toxic Substances Control  
5796 Corporate Ave.  
Cypress, CA 90630

· Danielle Sakai Gene Tanaka  
Best, Best & Kreiger  
3750 University Ave., Mission Square  
Riverside, CA 92501

· Eric Fraser  
City of Colton  
Public Utilities Department  
650 N. La Cadena Drive  
Colton, CA 92324-2897

· Glen Yabuno & Ken Ayers  
County of San Bernardino  
Specialized Prosecutions Unit  
412 W. Hospitality Lane, Ste. 301  
San Bernardino, CA 92415-0023

· Kathleen Kenealy & Gary Tavetian  
California Office of the Attorney General  
Deputy Attorney General  
300 S. Spring St., Ste. 500 N  
Los Angeles, CA 90013-1204

· Kevin P. Mayer  
U.S. EPA, Region IX (Region 9)  
75 Hawthorne Street, SFC-7-2  
San Francisco, CA 94105-3901

· Mike Bledsoe & Michael Wochnick  
California Integrated Waste Management Board  
P.O. Box 4025  
Sacramento, CA 95812-4025

· Mike Whitehead, Mike McGraw, Jim Bryson and  
Gerald J Black  
Fontana Water Company  
P.O. Box 987  
Fontana, CA 92335

· Peter Fox, Tim Mim Mack & Robert Owen  
City of Rialto  
Public Works Department  
150 S. Palm Avenue  
Rialto, CA 92376

· Sarah Mueller, Wayne Praskins & Matt Mitguard  
U.S. EPA - Region 9  
75 Hawthorne Street  
San Francisco, CA 94105

· Scott Sommer  
Miller, Starr, & Regalia  
1331 N. California Blvd., 5th Floor  
Walnut Creek, CA 94596

· Susan M. Trager & Francis D. Logan, Jr.  
Law Offices of Susan M. Trager  
19712 MacArthur Blvd., Ste. 120  
Irvine, CA 92612

· Tim Ryan & Robert Young  
San Gabriel Valley Water Company  
Fontana Water Company  
11142 E. Garvey Ave.  
El Monte, CA 91732

· Tom Soto  
PS Enterprises  
430 Colorado Ave, 4<sup>th</sup> Floor  
Santa Monica, CA 90401-3412

· William T. Hunt  
TRC Solutions  
21 Technology Drive  
Irvine, CA 92618

· Nicole Sweetland, Ph.D., R.G.  
Daniel B. Stephens & Associates, Inc.  
6020 Academy NE, Ste 100  
Albuquerque, NM 87109