



# California Regional Water Quality Control Board

## Santa Ana Region



Terry Tamminen  
Secretary for  
Environmental  
Protection

Internet Address: <http://www.swrcb.ca.gov/rwqcb8>  
3737 Main Street, Suite 500, Riverside, California 92501-3348  
Phone (951) 782-4130 - FAX (951) 781-6288

Arnold  
Schwarzenegger  
Governor

September 10, 2004

**CERTIFIED MAIL  
RETURN RECEIPT REQUESTED**

Mr. Thomas Blackman, Director of Remediation  
Lockheed Martin Corporation  
Corporate Energy, Environment, Safety & Health  
2550 North Hollywood Way, Suite 301  
Burbank, California 91505

### **DIRECTIVE TO CONDUCT A RECORDS INVESTIGATION AND SUBMIT A REPORT FOR ACTIVITIES CONDUCTED AT THE FORMER GRAND CENTRAL ROCKET SITE LOCATED AT SIERRA AND HIGHLAND AVENUES, CITY OF RIALTO, SAN BERNARDINO COUNTY, CALIFORNIA**

Dear Mr. Blackman:

Perchlorate has been detected in municipal water supply wells located downgradient of property located at Sierra and Highland Avenues, Rialto, that was leased by Grand Central Rocket Company, Inc. (a California Corporation) (Grand Central Rocket), to manufacture chemicals during the mid-1950's through the early 1960's. As described below, Grand Central Rocket is a suspected discharger of perchlorate.

This letter sets forth an order, pursuant to California Water Code Section 13267, that Lockheed Martin Corporation conduct an investigation of its records and provide a report with respect to the corporate successorship of Grand Central Rocket and to its operations in the vicinity of the above-referenced location. As required by Section 13267, this letter contains an explanation of the need for the report and cites evidence supporting the order.

#### Background

Perchlorate contamination was first detected in groundwater in the Rialto, Colton, and Chino Groundwater Subbasins in 1997. At that time, the California Department of Health Services (DHS) Action Level (AL) for perchlorate in drinking water was 18 parts per billion (ppb). Two wells in this area had perchlorate levels exceeding 18 ppb and were shut down. In January 2002, the DHS lowered the AL to 4 ppb. In response to the reduced AL for perchlorate, the local water purveyors restricted or eliminated the use of additional production wells with perchlorate concentrations that exceeded 4 ppb. Between 1997 and the present, various suspected perchlorate dischargers, including former and current occupants of the property formerly leased by Grand Central Rocket at Sierra and Highland Avenues, have been identified.

*California Environmental Protection Agency*



September 10, 2004

### Requirement for an Investigation

The Santa Ana Regional Water Quality Control Board (Regional Board) has directed me to issue individual letters under California Water Code Section 13267 to suspected perchlorate dischargers in the Rialto and Colton Groundwater Subbasins. Several letters similar to this one have already been issued over the last two years to other suspected dischargers, including San Bernardino County, the current owner of the former bunker property at Sierra and Highland Avenues.

### The Need for the Investigation

The Regional Board is charged with the protection of water quality in this region. We have been working actively with the water purveyors to identify the extent and address the impact of perchlorate contamination on water resources in the Rialto, Colton and Chino Groundwater Subbasins. The water purveyors whose wells have been contaminated with perchlorate could face a situation where they may not be able to provide an adequate water supply to their customers. It is urgent that the sources of the contamination be identified, and the magnitude of the perchlorate plume defined.

### Evidence Supporting the Need for the Investigation

Evidence indicates that Grand Central Aircraft Company was incorporated in 1946 and that in 1957 a partnership between Grand Central Aircraft Company and Charles E. Bartley was formed, which was named Grand Central Rocket. Evidence also indicates that Lockheed Aircraft Corporation acquired all of the shares of Grand Central Rocket by 1961, changing the name to Lockheed Propulsion Company, then merging with and becoming a division of Lockheed Aircraft Company. In 1977, Lockheed Aircraft Company changed its name to Lockheed Corporation and in 1995 Lockheed Corporation and Martin Marietta Corporation merged to form the existing Lockheed Martin Corporation. The foregoing facts indicate that Lockheed Martin Corporation is the successor to Grand Central Rocket and that Lockheed Martin Corporation is liable for the activities of Grand Central Rocket.

According to records obtained from other Rialto area business owners, Grand Central Rocket entered into a five-year lease with Schulz Trust for 5 bunkers located at Sierra and Highland Avenues in 1957 to be used by Grand Central Rocket to manufacture chemicals, some of which were classified as explosives. Records also indicate that Grand Central Rocket provided large quantities of ammonium perchlorate to West Coast Loading Corporation, a company that was also located in Rialto, near the Sierra and Highland Avenues bunker property, to be dried to a specific moisture content. This evidence indicates that Grand Central Rocket may have tested and/or stored perchlorate at the bunkers leased at Sierra and Highland Avenues.

Enclosed are the following documents:

1. 1957 Lease and Consent to Assignment Release to Grand Central Rocket by Schulz Trust of 5 bunkers located northeast of Sierra and Highland Avenues, Rialto, California, for the manufacture of chemicals.
2. Grand Central Rocket Purchase Orders to West Coast Loading Corporation for processing ammonium perchlorate and invoices from West Coast Loading Corporation to Grand Central Rocket indicating the processing charges.
3. 1994 Response of Lockheed Corporation to US Environmental Protection Agency Information Request including reference to Lockheed Aircraft Corporation's acquisition of shares of Grand Central Rocket.
4. 2004 Public Health Statement – Lockheed Propulsion Company: background and statements of issues pertaining to Lockheed Propulsion Company acquiring its Redlands site from Grand Central Rocket.
5. Lockheed Corporation-Internet web page stating Lockheed Corporation merged with Martin Marietta Corporation to form Lockheed Martin in 1995.
6. Well Location Map, showing perchlorate contamination in municipal water supply wells in the vicinity of Rialto, Colton and Fontana, California.

As the successor to Grand Central Rocket, Lockheed Martin Corporation bears legal liability under California law for discharges by Grand Central Rocket that may have adversely affected water quality in the Rialto area. This evidence supports the requirement for a records investigation as defined in Section 13267(b)(1) of the California Water Code.

#### Deadlines

By October 15, 2004, a report under penalty of perjury containing the following information shall be submitted to the Regional Board staff:

1. A detailed description of Grand Central Rocket's past operations at the former Rialto facility, including but not limited to its manufacturing process, use, handling, and/or storage of perchlorate or perchlorate-containing materials and the approximate quantities of such materials; the operations, processes and activities involving perchlorate and perchlorate-containing materials, including testing and waste disposal practices of off-spec or defective materials, or other wastes; any known or suspected discharges of perchlorate; any accidents, explosions or fires that may have occurred; and all additional information that

Mr. Tom Blackman

-4-

September 10, 2004

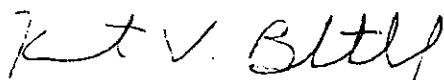
would be helpful in determining whether a discharge of perchlorate occurred from Grand Central Rocket's former Rialto operations.

2. All documents pertaining to and/or describing Grand Central Rocket's former operations in Rialto, including but not limited to leases and guarantee agreement, maps, plans, diagrams and photographs of the facility and its operations, records pertaining to perchlorate and perchlorate-containing materials, waste disposal records, operating procedures, environmental investigation and remediation reports, and employee lists.

**Failure to submit the required information by the specified deadline may subject you to administrative civil liability in the amount of up to \$1,000 per day, pursuant to Section 13268(a) and (b) of the California Water Code.**

If you have any questions regarding this letter, or if you would like to arrange a meeting or teleconference, please contact Debi Ney, Analyst, at (951) 782-3237, or you may call Robert L. Holub, Division Chief, at (951) 782-3298.

Sincerely,



for Gerard J. Thibeault  
Executive Officer  
Santa Ana Regional Water Quality Control Board

Enclosures:

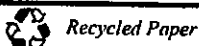
1. 1957 Lease and Consent to Assignment Release
2. Grand Central Rocket Purchase Orders
3. 1994 Response of Lockheed Corporation to US Environmental Protection Agency Information
4. 2004 Public Health Statement – Lockheed Propulsion Company
5. Lockheed Martin Web-page
6. Well Location Map

cc: Bob Simpson, Project Manager  
Lockheed Martin Corporation

Jorge Leon, Staff Counsel-OCC  
State Water Resources Control Board

Perchlorate Task Force Mailing List (attached)

*California Environmental Protection Agency*





# California Regional Water Quality Control Board

## Santa Ana Region



7

Winston H. Hickox  
Secretary for  
Environmental  
Protection

Internet Address: <http://www.swrcb.ca.gov/rwqcb8>  
3737 Main Street, Suite 500, Riverside, California 92501-3348  
Phone (909) 782-4130 - FAX (909) 781-6288

Gray Davis  
Governor

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at [www.swrcb.ca.gov/rwqcb8](http://www.swrcb.ca.gov/rwqcb8).*

June 26, 2003

Mr. Joseph Tamusaitis  
The Marquardt Company  
16555 Saticoy Street  
Van Nuys, CA 91406

Ferranti International, Inc.  
3725 Electronic Way  
Lancaster, PA 17604

### **DIRECTIVE TO CONDUCT A RECORDS INVESTIGATION AND SUBMIT A REPORT CONCERNING PERCHLORATE DISCHARGES IN THE RIALTO, COLTON AND CHINO GROUNDWATER SUBBASINS, SAN BERNARDINO COUNTY, CALIFORNIA**

Dear Mr. Tamusaitis:

Perchlorate has been detected in municipal water supply wells in the Rialto, Colton and Chino Groundwater Subbasins in Southern California. These water supply wells are located downgradient of The Marquardt Corporation's former missile research facility, which was located on North Alder Street in Rialto. The Marquardt Corporation (now known as The Marquardt Company and Ferranti International, Inc.) has a long history of involvement with rocket and missile propulsion and the use of perchlorate salts as oxidizers for these products.

As described below, Ferranti International, Inc., The Marquardt Corporation and The Marquardt Company (hereafter collectively, "Marquardt") are suspected dischargers of perchlorate. This letter sets forth an order, pursuant to California Water Code Section 13267, that you conduct an investigation of your records and provide a report with respect to Marquardt's operations in the above-referenced groundwater basins. As required by that provision, this letter contains an explanation of the need for the report and cites evidence supporting the requirement.

#### Background

Perchlorate contamination was first detected in groundwater in the Rialto, Colton and Chino Groundwater Subbasins in 1997. At that time, the California Department of Health Services (DHS) Action Level (AL) for perchlorate in drinking water was 18 parts

*California Environmental Protection Agency*



June 26, 2003

Mr. Joseph Tamusaitis

-2-

per billion (ppb). Two wells had perchlorate levels exceeding 18 ppb and were shut down. In January 2002, the DHS lowered the AL to 4 ppb. In response to the reduced AL for perchlorate, the local water purveyors in these groundwater basins restricted or eliminated the use of additional production wells with perchlorate concentrations that exceeded 4 ppb. (See Enclosure 1) Between 1997 and the present, various suspected perchlorate dischargers have been identified and ordered by the Regional Board to investigate.

#### The Need for the Investigation and Report

The Regional Board is charged with the protection of water quality in the Rialto, Colton and Chino Groundwater Subbasins. We have been working actively with the water purveyors for several years to identify the extent and address the impact of perchlorate contamination on water resources in these basins. The water purveyors whose wells have been contaminated with perchlorate now claim to face a state of emergency, and may not be able to provide an adequate water supply to their customers. It is urgent that the sources of the contamination be identified, and the magnitude of the perchlorate plume defined.

#### Evidence Supporting the Need for the Investigation and Report by Marquardt

The evidence indicates that The Marquardt Corporation operated a missile and rocket research and development facility in Rialto, California in and around 1965. The 1965 Luskey's City Directory for Rialto (Page 27) references The Marquardt Corporation having a missile and rocket research and development facility on North Alder Avenue (Enclosure 2). Subsequent to 1965, The Marquardt Corporation went through a number of corporate changes. On or about May 13, 1969, The Marquardt Corporation changed its name to "CCI Aerospace Corp." (Enclosure 3) On or about June 7, 1974, CCI changed its name to "The Marquardt Company" (Enclosure 4). In or about August 1983, ISC Electronics, Inc. purchased The Marquardt Company (Enclosure 5). In or about October 1987, ISC merged with Ferranti PLC to eventually form Ferranti International, Inc. (Enclosure 6). The Marquardt Company remains a subsidiary of Ferranti International, Inc. (Enclosure 7). Marquardt has a long history of involvement with rocket and missile propulsion, including the Lunar Orbiter program, Apollo program, and missile programs, such as the Bomarc interceptor missile, among others.

Perchlorate is known to be used as an ingredient of certain missile and rocket engines. Other sites involved with missile and rockets have had documented perchlorate discharges and contamination. (See, e.g., [www.geotracker.swrcb.ca.gov/perchlorate](http://www.geotracker.swrcb.ca.gov/perchlorate))

Based on the evidence, Marquardt is suspected of having discharged perchlorate waste that has adversely affected water quality. This evidence supports the requirement for an investigation, as defined in Section 13267(b)(1) of the California Water Code.

#### Required Report

By July 31, 2003, a report under penalty of perjury containing the following information shall be submitted to the Regional Board staff:

*California Environmental Protection Agency*



1. A detailed description of Marquardt's past and present operations in the Rialto, Colton and Chino Groundwater basins, including but not limited to, whether and when it used or handled perchlorate or perchlorate-containing materials and the approximate quantities of such materials; the operations, processes and activities involving perchlorate and perchlorate-containing materials, including testing and waste disposal practices; whether materials, off-spec or defective materials, or other wastes were burned or buried; any known or suspected discharges of perchlorate; any accidents, explosions or fires that may have occurred; and any other information that would be helpful in determining whether a discharge of perchlorate occurred from Marquardt's operations.
2. Any documents pertaining to and/or describing Marquardt's operations in Rialto, Colton and Chino Groundwater Subbasins, including but not limited to maps, plans, diagrams and photographs of the facility and its operations, records pertaining to perchlorate and perchlorate-containing materials, waste disposal records, operating procedures, environmental investigation and remediation reports, and employee lists.

Failure to submit the required information by the specified deadline will subject you to administrative civil liability in the amount of up to \$1,000 per day pursuant to Section 13268(a) and (b) of the California Water Code.

#### Recovery of Regional Board Expenses

California Water Code Section 13365 addresses the billing process for the Regional Board to recover reasonable expenses for overseeing investigation of illegal discharges, contaminated properties, and other unregulated releases that may adversely affect the State's waters. It is the Regional Board's intent to recover such costs for regulatory oversight work conducted in accordance with this order. A description of the Board's procedure for cost recovery for regulatory oversight of investigations and cleanups will be sent to you under separate cover.

#### Encouragement to Explore Alternative Resolutions and to Cooperate with Water Purveyors and Other Suspected Dischargers

Finally, please be aware that the Board has directed staff to explore alternative ways of solving the water supply problem in the Rialto, Colton and Chino Groundwater Subbasins. In addition, consistent with the Board's direction, we have issued and plan to continue to issue similar directives to a number of other suspected dischargers who have operated in the basins. Thus, there may be opportunities to cooperate with other entities to implement joint investigations or to propose solutions that would address the water supply problem. In fact, we believe it would be both scientifically effective and economically efficient for the suspected dischargers subject to these directives to jointly pursue the investigation and to explore water supply replacement options. Further, consistent with the Board's direction, we recommend that the joint efforts of the suspected dischargers consider both the characterization of the contamination and initiation of water supply replacement or treatment strategies. Board staff has

Mr. Joseph Tamusaitis

-4-

June 26, 2003

experience in managing similar joint investigations and cooperative solutions. If you are interested in discussing this, please contact us to arrange a meeting.

If you have any questions about this letter, please contact Ann Sturdivant, Chief of our Spills, Leaks, Investigations and Cleanups Section, at (909) 782-4904.

Sincerely,

*K. J. Thibeault*

for Gerard J. Thibeault  
Executive Officer

Enclosures:

1. Well Location Map, showing perchlorate contamination in municipal water supply wells.
2. Excerpt from Luskey's City Directory, 1965.
3. CCI Aerospace Corporation, Database printout, California Secretary of State records.
4. CCI Corporation, Database printout, California Secretary of State records.
5. *Marquardt Company v. United States*, 822 F. 2d 1573 (1987).
6. International Signal & Control-Ferranti PLC, Mergers & Acquisitions Database, IDD Information Services Inc., June 23, 1989.
7. The Marquardt Company, California Secretary of State, California Business Portal, June 6, 2003.
8. Mailing List.

cc (w/out enclosures):

Regional Board members

Jorge Leon, Office of Chief Counsel, SWRCB

Wayne Praskins, U.S. EPA, Region IX

Inland Empire Perchlorate Task Force members (mailing list attached)

AES/Data/SLIC/2001-03 Rialto perchlorate/13267 duchesneau/marquardt

*California Environmental Protection Agency*





Peter Fox  
City of Rialto  
Public Works Department  
P. o. Box 920  
Rialto, CA 92736

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

Jorge Leon  
California State Water Resources Control Board  
Legal Division  
1001 "I" Street, 22nd Floor  
Sacramento, CA 95814

Leon Long  
West Valley Water District  
P.O. Box 920  
Rialto, CA 92377-0920

Tim Mim Mack  
City of Rialto  
P. O. Box 920  
Rialto, CA 92376

Sarah Mueller  
U. S. EPA - Region 9  
75 Hawthorne Street  
San Francisco, CA 94105

Robert Owen  
City of Rialto  
P. O. Box 920  
Rialto, CA 92376

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

Patrick J. King  
Thirty-second Senatorial District TEST 1  
822 N. Euclid Ave., Suite A  
Ontario, CA 91762

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

Mike McGraw  
Fontana Water Company  
P.O. Box 987  
Fontana, CA 92335

Matt Mitguard  
U.S. EPA, Region IX (Region 9)  
75 Hawthorne Street  
San Francisco, CA 94105-3901

Karen A. O'Hare  
California State Water Resources Control Board  
Legal Division  
1001 "I" Street, 22nd Floor  
Sacramento, CA 95814

Dennis Parfitt  
California State Water Resources Control Board  
Division of Clean Water Programs  
1001 "I" Street, 22nd Floor  
Sacramento, CA 95814

California Department of Health Services  
464 W. Fourth St., Ste. 437  
San Bernardino, CA 92402

Anthony Araiza  
West Valley Water District  
P.O. Box 920  
Rialto, CA 92377-0920

Wendy Arano  
California Dept. of Toxic Substances Control  
Geology & Corrective Action Branch  
5796 Corporate Ave.  
Cypress, CA 90630

Ken Ayers  
County of San Bernardino  
Office of the District Attorney  
412 W. Hospitality Lane, Ste. 301  
San Bernardino, CA 92415-0023

Karen Baker  
California Dept. of Toxic Substances Control  
Geology & Corrective Action Branch  
5796 Corporate Ave.  
Cypress, CA 90630

Brad Baxter  
City of Rialto  
Public Works Department  
P. O. Box 920  
Rialto, CA 92736

Gerald J. Black  
Fontana Water Company  
P.O. Box 987  
Fontana, CA 92335

Mike Bledsoe  
California Integrated Waste Management  
P.O. Box 4025  
Sacramento, CA 95812-4025

Bob Borzelleri  
California Dept. of Toxic Substances Control  
P.O. Box 806  
Sacramento, CA 95812-0806

Christine Brown  
California Dept. of Toxic Substances Control  
Geology & Corrective Action Branch  
5796 Corporate Ave.  
Cypress, CA 90630

Jim Bryson  
Fontana Water Company  
P.O. Box 987  
Fontana, CA 92335

Jerry Eagans  
West Valley Water District  
P.O. Box 920  
Rialto, CA 92377-0920

Steven Elie  
Musick, Peeler & Garrett  
One Wilshire Blvd.  
Los Angeles, CA 90017-3383

Cindy Forbes  
California Department of Health Services  
Drinking Water Field Operations Branch  
1040 E. Herndon Ave., Ste. 205  
Fresno, CA 93720

Wayne Praskins  
U. S. EPA - Region 9  
75 Hawthorne Street  
San Francisco, CA 94105

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

Tom Soto  
PS Enterprises  
3350 Ocean Park Blvd., Ste. 205  
Santa Monica, CA 92405

Nell Soto  
Thirty-second Senatorial District  
The Honorable Senator Nell Soto  
State Capital, Room 4074  
Sacramento, CA 95814

Lynn Takaichi  
Kennedy/Jenks Consultants, Inc.  
1000 Hill Rd., Suite 200  
Ventura, CA 93003

Gene Tanaka, Esq.  
Best, Best & Kreiger  
3750 University Ave., Mission Square  
Riverside, CA 92501

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

Susan M. Trager  
Law Offices of Susan M. Trager  
19712 MacArthur Blvd., Ste. 120  
Irvine, CA 92612

Mike Whitehead  
Fontana Water Company  
P.O. Box 987  
Fontana, CA 92335

Michael Wochnick  
California Integrated Waste Management  
P.O. Box 4025  
Sacramento, CA 95812-4025

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

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

Aaron Yue  
California Dept. of Toxic Substances Control  
Geology & Corrective Action Branch  
5796 Corporate Ave.  
Cypress, CA 90630



# California Regional Water Quality Control Board

## Santa Ana Region



Winston H. Hickox  
Secretary for  
Environmental  
Protection

Internet Address: <http://www.swrcb.ca.gov/rwqcb8>  
3737 Main Street, Suite 500, Riverside, California 92501-3348  
Phone (909) 782-4130 - FAX (909) 781-6288

Gray Davis  
Governor

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at [www.swrcb.ca.gov/rwqcb8](http://www.swrcb.ca.gov/rwqcb8).*

October 7, 2002

Mr. James Souza, President  
Pyro Spectaculars by Souza  
P.O. Box 2329  
Rialto, CA 92377

### **DIRECTIVE TO SUBMIT A WORK PLAN AND CONDUCT PERCHLORATE INVESTIGATION IN THE VICINITY OF THE PYRO SPECTACULARS FACILITY, 3196 NORTH LOCUST AVENUE, CITY OF RIALTO, SAN BERNARDINO COUNTY, CALIFORNIA**

Dear Mr. Souza:

As you are probably aware, perchlorate has been detected in municipal water supply wells in the Rialto, Colton and Chino Groundwater Subbasins. These water supply wells are located downgradient of the Pyro Spectaculars by Souza (hereinafter Pyro Spectaculars) facility. Information that local businesses provided to us in response to subpoenas indicates that Pyro Spectaculars and several other pyrotechnic companies have used and stored products containing perchlorate salts at the Rialto facilities that are currently occupied by Pyro Spectaculars. Pyro Spectaculars also used several bunkers in North Rialto to store fireworks and chemicals. This letter sets forth a requirement under California Water Code Section 13267 that Pyro Spectaculars conduct an investigation to define the lateral and vertical extent of perchlorate in soil and groundwater in the vicinity of the Pyro Spectaculars facility and the former bunker area in North Rialto. As required by that provision, this letter contains an explanation of the need for the investigation, and cites evidence supporting the requirement.

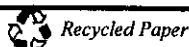
#### Background

Perchlorate contamination was first detected in groundwater in the Rialto, Colton and Chino Subbasins in 1997. At that time, the California Department of Health Services (DHS) Action Level (AL) for perchlorate in drinking water was 18 parts per billion (ppb). Two wells had perchlorate levels exceeding 18 ppb and were shut down. In January 2002, the DHS lowered the AL to 4 ppb. In response to the reduced AL for perchlorate, the local water purveyors in the Rialto, Colton and Chino Groundwater Subbasins restricted or eliminated the use of additional production wells with perchlorate concentrations that exceeded 4 ppb. Between 1997 and the present, various suspected perchlorate dischargers, including Pyro Spectaculars, have been identified.

#### Requirement for an Investigation

The Regional Board has directed staff to issue individual letters under California Water Code Section 13267 to suspected perchlorate dischargers. The Board also expressed a strong desire

*California Environmental Protection Agency*



that suspected perchlorate dischargers work with the local water purveyors to provide a supply of replacement water during the loss or limited use of their production wells.

### The Need for the Investigation

The Santa Ana Regional Water Quality Control Board is charged with the protection of water quality in this Region. We have been working actively with the water purveyors for several years to identify the extent and address the impact of perchlorate contamination on water resources in the Rialto, Colton and Chino Groundwater Subbasins. The water purveyors whose wells have been contaminated with perchlorate now face a state of emergency, and may not be able to provide an adequate water supply to their customers. It is urgent that the sources of the contamination be identified, and the magnitude of the perchlorate plume defined.

### Evidence Supporting the Need for the Investigation

Enclosed as attachments are the following documents:

1. Attachment 1 – Well Location Map, showing perchlorate contamination in municipal water supply wells.
2. Attachment 2 – Phase I Environmental Site Assessment – Current Property Use, May 11, 2001, including photos of Pyro Spectaculars' storage bunker at 3196 North Locust Avenue, and a Plot Plan, showing existing waste disposal pit (document obtained from APE – West in response to subpoena).
3. Attachment 3 – Minutes from a November 12, 1987 meeting held by the Rialto Fire Department, in which the owners, contents, and usage of the former storage bunkers that were located North Rialto are described (document obtained from American Promotional Events, Inc., - West in response to subpoena).
4. Attachment 4 – Plot Plan showing the former configuration of the storage bunkers, and list of tenants and lessors using the bunkers.
5. Attachment 5 – Excerpt from "Pyro Spectaculars by Souza" internet site, indicating the Souza family history of fireworks storage, handling, and manufacturing at the Rialto facility.
6. Attachment 6 – Business records documenting the use and disposal of perchlorate by Pyro Spectaculars (and its corporate divisions).

The evidence indicates that from the early 1970s to 1979, the Souza family handled, stored, and manufactured fireworks at the Rialto site in partnership with California Fireworks Display Company (a fireworks manufacturer). Since 1979, Pyro Spectaculars has handled and stored fireworks, containing perchlorate salts, at the Rialto site. An unlined waste disposal pit is shown on the site plot plan dated May 2001 (see Attachment 2). In addition, City of Rialto records indicate that on-site disposal systems have been used at the site since it was first occupied for industrial use. Disposal of waste in unlined pits and septic systems may also have occurred during site occupancy by corporate predecessors related to Pyro Spectaculars. Pyro Spectaculars also used the former storage bunkers in North Rialto to store fireworks and chemicals. Perchlorate has been detected in groundwater downgradient of the Pyro Spectaculars facility and the former bunker area. Based on the evidence, Pyro Spectaculars is suspected of having discharged perchlorate waste that has adversely affected water quality. This evidence supports the requirement for an investigation, as defined in Section 13267(b)(1) of the California Water Code.



Deadlines

1. A work plan for soil and groundwater investigation for perchlorate in the vicinity of the Pyro Spectaculars facility and the former storage bunkers must be submitted to Board staff by November 7, 2002. The work plan will be subject to my approval.
2. The investigation must commence within 30 days of approval.
3. All analytical results, groundwater measurements, and field information are to be submitted by fax to Board staff within 24 hours of being generated, throughout all stages of work, and during all phases of the investigation. The office fax number to be used for your data transmittals is (909) 781-6288.
4. The final report for this soil and groundwater investigation, including (at a minimum) the borehole logs, well construction details, groundwater elevation data, and soil and groundwater analytical results, must be submitted to Board staff within 30 days of completing the field work.

**Failure to submit the required information by the specified deadline may subject you to administrative civil liability in the amount of up to \$1,000 per day pursuant to Section 13268(a) and (b) of the California Water Code.**

Finally, please be aware that the Board has directed staff to explore alternative ways of solving the water supply problem in the Rialto, Colton and Chino Groundwater Subbasins. In addition, consistent with the Board's direction, we will be issuing similar directives to a number of other suspected dischargers who have operated in the North Rialto area. Thus, there may be opportunities to cooperate with other entities to implement joint investigations or to propose solutions that would address the water supply problem. In fact, we believe it would be both scientifically effective and economically efficient for the suspected dischargers subject to these directives to jointly pursue the investigation and to explore water supply replacement options. Further, consistent with the Board's direction, we recommend that the joint efforts of the suspected dischargers consider both the characterization of the plume and initiation of water supply replacement or treatment strategies. Board staff has experience in managing similar joint investigations and cooperative solutions and we are available to discuss these further with you. If you are interested in discussing alternative options for complying with this directive, please contact us to arrange a meeting.

If you have any questions about this letter, please contact Kamron Saremi at (909) 782-4303, or you may call Ann Sturdivant, Chief of our Spills, Leaks, Investigations and Cleanups Section, at (909) 782-4904.

Sincerely,

Gerard J. Thibeault  
Executive Officer



Attachments:

1. Well Location Map, showing perchlorate contamination in municipal water supply wells.
2. Phase I Environmental Site Assessment – Current Property Use, May 11, 2001, including photos of Pyro Spectaculars' storage bunker at 3196 North Locust Avenue, and a Plot Plan, showing existing waste disposal pit (document obtained from APE – West in response to subpoena).
3. Minutes from a November 12, 1987 meeting held by the Rialto Fire Department, in which the owners, contents, and usage of the former storage bunkers that were located North Rialto are described (document obtained from American Promotional Events, Inc., - West in response to subpoena).
4. Plot Plan showing the former configuration of the storage bunkers, and list of tenants and lessors using the bunkers.
5. Excerpt from "Pyro Spectaculars by Souza" internet site, indicating the Souza family history of fireworks storage, handling, and manufacturing at the Rialto facility.
6. Business records documenting the use and disposal of perchlorate by Pyro Spectaculars (and its corporate divisions).
7. Mailing List.

cc w/out attachments:

Regional Board

Jorge Leon, Office of Chief Counsel, SWRCB

Phillip Blum, DTSC, Glendale Office

Inland Empire Perchlorate Regulatory Task Force (mailing list attached)

Chris Conley, Aerojet – a subsidiary of GenCorp, Sacramento, California

Ken Miller, County of San Bernardino Department of Public Works

Katharine Wagner - Downey Brand Seymour & Rohwer, LLP, representing American Promotional Events – West, Inc.

Peter Duchesneau - Manatt, Phelps & Philips, representing Goodrich Corporation

Charles Whisonant, representing Denova Environmental

Allen Curlee, Office of the District Counsel, U.S. Army Corps of Engineers, Sacramento

AES/Data/SLIC/Rialto perchlorate 01-02/13267/pyrospectaculars





# California Regional Water Quality Control Board

## Santa Ana Region



**Winston H. Hickox**  
Secretary for  
Environmental  
Protection

Internet Address: <http://www.swrcb.ca.gov/rwqcb8>  
3737 Main Street, Suite 500, Riverside, California 92501-3348  
Phone (909) 782-4130 - FAX (909) 781-6288

**Gray Davis**  
Governor

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at [www.swrcb.ca.gov/rwqcb8](http://www.swrcb.ca.gov/rwqcb8).*

April 28, 2003

Rebecca Raftery  
Jenner & Block  
One IBM Plaza  
Chicago, IL 60611

### **DIRECTIVE TO CONDUCT A RECORDS INVESTIGATION ON THE USE OF THE FORMER GENERAL DYNAMICS STORAGE MAGAZINES, 2824 NORTH LOCUST, CITY OF RIALTO, SAN BERNARDINO COUNTY, CALIFORNIA**

Dear Ms. Raftery:

As our staff informed you by telephone, perchlorate has been detected in municipal water supply wells in the Rialto, Colton and Chino Groundwater Subbasins in Southern California. These water supply wells are located downgradient of the storage magazines that were used by General Dynamics (and later by Hughes Missile Company and Raytheon Corporation) from 1984 until 1994. Information that the Raytheon Company and local businesses provided to us in response to subpoenas and Investigation Orders indicates that in 1984, General Dynamics Corporation entered into a Facility Construction Agreement with Broco, Inc., for the construction of six storage magazines and appurtenances in North Rialto. General Dynamics also entered into a ten-year lease agreement with Broco, Inc., for the use of the six magazines and appurtenances for storage of explosives and raw materials, containing perchlorate salts. Records indicate that General Dynamics tested explosive devices in North Rialto, in the vicinity of the storage magazines and former storage bunkers.

From the 1960s through the 1990s, the General Dynamics Company designed, manufactured, assembled, and tested missile systems and other weapons systems at various Southern California facilities, under contract with the U.S. Department of Defense. General Dynamics utilized the storage magazines in Rialto during the period from 1984 to 1994, under the signatures of Mr. Alan Von Sydow, Ms. Eva Saylor and Mr. Don Miller, General Dynamics Air Defense Systems Division and General Dynamics Pomona Division.

This letter sets forth a requirement under California Water Code Section 13267 that General Dynamics conduct an investigation of its records of historical operations at the storage magazines in North Rialto, and the use of the magazines in support of the research, development, manufacturing, assembly, and testing activities of the General Dynamics Company, including but not limited to the Pomona Division, Air Defense Systems Division, and Valley Systems facilities. As required by that provision, this letter contains an explanation of the need for the investigation, and cites evidence supporting the requirement.

*California Environmental Protection Agency*





### Background

Perchlorate contamination was first detected in groundwater in the Rialto, Colton and Chino Groundwater Subbasins in 1997. At that time, the California Department of Health Services (DHS) Action Level (AL) for perchlorate in drinking water was 18 parts per billion (ppb). Two wells had perchlorate levels exceeding 18 ppb and were shut down. In January 2002, the DHS lowered the AL to 4 ppb. In response to the reduced AL for perchlorate, the local water purveyors in the Rialto, Colton and Chino Groundwater Subbasins restricted or eliminated the use of additional production wells with perchlorate concentrations that exceeded 4 ppb. Between 1997 and the present, various suspected perchlorate dischargers, including General Dynamics, have been identified.

### Requirement for an Investigation

The Regional Board has directed staff to issue individual letters under California Water Code Section 13267 to suspected perchlorate dischargers. The Board also expressed a strong desire that suspected perchlorate dischargers work with the local water purveyors to provide a supply of replacement water during the loss or limited use of their production wells.

### The Need for the Investigation

The Santa Ana Regional Water Quality Control Board is charged with the protection of water quality in this Region. We have been working actively with the water purveyors for several years to identify the extent and address the impact of perchlorate contamination on water resources in the Rialto, Colton and Chino Groundwater Subbasins. The water purveyors whose wells have been contaminated with perchlorate now face a state of emergency, and may not be able to provide an adequate water supply to their customers. It is urgent that the sources of the contamination be identified, and the magnitude of the perchlorate plume defined.

### Evidence Supporting the Need for the Investigation

Enclosed are the following documents:

1. Enclosure 1 – Well Location Map, showing perchlorate contamination in municipal water supply wells.
2. Enclosure 2 – Facility Construction Agreement for the storage magazines constructed for General Dynamics.
3. Enclosure 3 – Lease Agreement and Termination of Lease for use of the storage magazines by General Dynamics.
4. Enclosure 4 – Log record of on-site explosives testing for General Dynamics.
5. Enclosure 5 – Copies of Hazardous Material Handler Permits for 1992 & 1993; Renewal Applications and Invoices; January 17, 1991 San Bernardino County EHS Hazardous Waste Generator Inspection Report; MSDS pages for chemicals in the storage magazines.
6. Enclosure 6 – EPA Hazardous Waste Permit Application for Broco, Inc., with map showing open burn/open detonation site (believed to have been used by General Dynamics).
7. Enclosure 7 – Excerpts from Broco Inc. site report (1990, by Radian Corporation) with references to General Dynamics on-site facility and map of General Dynamics' storage magazines.
8. Enclosure 8 – Description of General Dynamics (later Hughes and Raytheon) business and products history (from internet web site <http://www.Janes.com>).

*California Environmental Protection Agency*



The evidence indicates that from the early 1980s to 1994, General Dynamics stored, tested, and possibly assembled explosives and chemicals at the Rialto site. Evidence also indicates that General Dynamics may have used Broco Inc.'s Open Burn/Detonation Pit to test and dispose of explosive materials and/or ordnance. Perchlorate has been detected in groundwater downgradient of the storage magazines that were occupied by General Dynamics. Based on the evidence, General Dynamics is suspected of having discharged perchlorate waste that has adversely affected water quality. This evidence supports the requirement for an investigation, as defined in Section 13267(b)(1) of the California Water Code.

#### Deadlines

A detailed description of General Dynamics' historical activities at the storage magazines must be submitted to Board staff by June 25, 2003. Your submittal must include an assessment of General Dynamics' use of the magazines in support of the research, development, manufacturing, assembly, and testing activities of the General Dynamics Company, including but not limited to the Pomona Division, Air Defense Systems Division, and Valley Systems facilities.

**Failure to submit the required information by the specified deadline will subject you to administrative civil liability in the amount of up to \$1,000 per day pursuant to Section 13268(a) and (b) of the California Water Code.**

Finally, please be aware that the Board has directed staff to explore alternative ways of solving the water supply problem in the Rialto, Colton and Chino Groundwater Subbasins. In addition, consistent with the Board's direction, we will be issuing similar directives to a number of other suspected dischargers who have operated in the North Rialto area. Thus, there may be opportunities to cooperate with other entities to implement joint investigations or to propose solutions that would address the water supply problem. In fact, we believe it would be both scientifically effective and economically efficient for the suspected dischargers subject to these directives to jointly pursue the investigation and to explore water supply replacement options. Further, consistent with the Board's direction, we recommend that the joint efforts of the suspected dischargers consider both the characterization of the plume and initiation of water supply replacement or treatment strategies. Board staff has experience in managing similar joint investigations and cooperative solutions and we are available to discuss these further with you. If you are interested in discussing such joint efforts, please contact us to arrange a meeting.

California Water Code Section 13365 addresses the billing process for the Regional Board to recover reasonable expenses for overseeing investigation of illegal discharges, contaminated properties, and other unregulated releases that may adversely affect the State's waters. It is the Regional Board's intent to recover such costs for regulatory oversight work conducted in accordance with this order. A description of the Board's procedure for cost recovery for regulatory oversight of investigations and cleanups will be sent to you under separate cover.



If you have any questions about this letter, please contact Kamron Saremi at (909) 782-4303, or you may call Ann Sturdivant, Chief of our Spills, Leaks, Investigations and Cleanups Section, at (909) 782-4904.

Sincerely,



Gerard J. Thibeault  
Executive Officer

Enclosures:

1. Well Location Map, showing perchlorate contamination in municipal water supply wells.
2. Facility Construction Agreement for the storage magazines constructed for General Dynamics.
3. Lease Agreement and Termination of Lease for use of the storage magazines by General Dynamics.
4. Log record of on-site explosives testing for General Dynamics.
5. Copies of Hazardous Material Handler Permits for 1992 & 1993; Renewal Applications and Invoices; January 17, 1991 San Bernardino County EHS Hazardous Waste Generator Inspection Report; MSDS pages for chemicals in the storage magazines.
6. EPA Hazardous Waste Permit Application for Broco, Inc., with map showing open burn/open detonation site (believed to have been used by General Dynamics).
7. Excerpts from Broco Inc. site report (1990, by Radian Corporation) with references to General Dynamics on-site facility and map of General Dynamics' storage magazines.
8. Description of General Dynamics (later Hughes and Raytheon) business and products history (from internet web site <http://www.Janes.com>).
9. Mailing List.

cc w/enclosures:

David Savner, Senior Legal Officer, General Dynamics Corporation

cc w/out enclosures:

Regional Board members

Jorge Leon, Office of Chief Counsel, SWRCB

Wayne Praskins, U.S. EPA, Region IX

Inland Empire Perchlorate Task Force members (mailing list attached)

AES/Data/SLIC/Rialto perchlorate 01-03/13267/General Dynamics



**Gene Tanaka, Esq.**  
**Best, Best & Kreiger**  
**3750 University Ave., Mission Square**  
**Riverside, CA 92501**

**California Department of Health Services**  
**464 W. Fourth St., Ste. 437**  
**San Bernardino, CA 92402**

**Cindy Forbes**  
**California Department of Health Services**  
**Drinking Water Field Operations Branch**  
**1040 E. Herndon Ave., Ste. 205**  
**Fresno, CA 93720**

**Bob Borzelleri**  
**California Dept. of Toxic Substances Control**  
**P.O. Box 806**  
**Sacramento, CA 95812-0806**

**Wendy Arano**  
**California Dept. of Toxic Substances Control**  
**Geology & Corrective Action Branch**  
**5796 Corporate Ave.**  
**Cypress, CA 90630**

**Karen Baker**  
**California Dept. of Toxic Substances Control**  
**Geology & Corrective Action Branch**  
**5796 Corporate Ave.**  
**Cypress, CA 90630**

**Christine Brown**  
**California Dept. of Toxic Substances Control**  
**Geology & Corrective Action Branch**  
**5796 Corporate Ave.**  
**Cypress, CA 90630**

**Aaron Yue**  
**California Dept. of Toxic Substances Control**  
**Geology & Corrective Action Branch**  
**5796 Corporate Ave.**  
**Cypress, CA 90630**

**Michael Wochnick**  
**California Integrated Waste Management**  
**P.O. Box 4025**  
**Sacramento, CA 95812-4025**

**Mike Bledsoe**  
**California Integrated Waste Management**  
**P.O. Box 4025**  
**Sacramento, CA 95812-4025**

**Gary Tavetian**  
**California Office of the Attorney General**  
**300 S. Spring St., Ste. 500 N.**  
**Los Angeles, CA 90013-1204**

**Dennis Parfitt**  
**California State Water Resources Control Board**  
**Division of Clean Water Programs**  
**1001 "I" Street, 22nd Floor**  
**Sacramento, CA 95814**

**Jorge Leon**  
**California State Water Resources Control Board**  
**Legal Division**  
**1001 "I" Street, 22nd Floor**  
**Sacramento, CA 95814**

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

**Peter Fox**  
City of Rialto  
Public Works Department  
P. o. Box 920  
Rialto, CA 92736

**Robert Owen**  
City of Rialto  
P. O. Box 920  
Rialto, CA 92736

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

**Mike McGraw**  
Fontana Water Company  
P.O. Box 987  
Fontana, CA 92335

**Jim Bryson**  
Fontana Water Company  
P.O. Box 987  
Fontana, CA 92335

**Lynn Takaichi**  
Kennedy/Jenks Consultants, Inc.  
1000 Hill Rd., Suite 200  
Ventura, CA 93003

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

**Tim Mim Mack**  
City of Rialto  
P. O. Box 920  
Rialto, CA 92376

**Brad Baxter**  
City of Rialto  
Public Works Department  
P. O. Box 920  
Rialto, CA 92736

**Ken Ayers**  
County of San Bernardino  
Office of the District Attorney  
412 W. Hospitality Lane, Ste. 301  
San Bernardino, CA 92415-0023

**Gerald J. Black**  
Fontana Water Company  
P.O. Box 987  
Fontana, CA 92335

**Mike Whitehead**  
Fontana Water Company  
P.O. Box 987  
Fontana, CA 92335

**Susan M. Trager**  
Law Offices of Susan M. Trager  
19712 MacArthur Blvd., Ste. 120  
Irvine, CA 92612

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

**Steven Elie**  
**Musick, Peeler & Garrett**  
**One Wilshire Blvd.**  
**Los Angeles, CA 90017-3383**

**Tom Soto**  
**PS Enterprises**  
**3350 Ocean Park Blvd., Ste. 205**  
**Santa Monica, CA 92405**

**Kamron Saremi**  
**RWQCB #8**  
**3737 Main St., Ste. 500**  
**Riverside, CA 92501**

**Gerard Thibeault**  
**RWQCB #8**  
**3737 Main St., Ste. 500**  
**Riverside, CA 92501**

**Ann Sturdivant**  
**RWQCB #8**  
**3737 Main St., Ste. 500**  
**Riverside, CA 92501**

**Kurt Berchtold**  
**RWQCB #8**  
**3737 Main St., Ste. 500**  
**Riverside, CA 92501**

**Debi Ney**  
**RWQCB #8**  
**3737 Main St., Ste. 500**  
**Riverside, CA 92501**

**Bob Holub**  
**RWQCB #8**  
**3737 Main St., Ste. 500**  
**Riverside, CA 92501**

**Tim Ryan**  
**San Gabriel Valley Water Company**  
**Fontana Water Company**  
**11142 E. Garvey Ave.**  
**El Monte, CA 91732**

**Robert Young**  
**San Gabriel Valley Water Company**  
**Fontana Water Company**  
**11142 E. Garvey Ave.**  
**El Monte, CA 91732**

**Patrick J. King**  
**Thirty-second Senatorial District**  
**822 N. Euclid Ave., Suite A**  
**Ontario, CA 91762**

**Nell Soto**  
**Thirty-second Senatorial District**  
**The Honorable Senator Nell Soto**  
**State Capital, Room 4074**  
**Sacramento, CA 95814**

**Sarah Mueller**  
**U. S. EPA - Region 9**  
**75 Hawthorne Street**  
**San Francisco, CA 94105**

**Wayne Praskins**  
**U. S. EPA - Region 9**  
**75 Hawthorne Street**  
**San Francisco, CA 94105**

**Matt Mitguard**  
**U.S. EPA, Region IX (Region 9)**  
**75 Hawthorne Street**  
**San Francisco, CA 94105-3901**

**Leon Long**  
**West Valley Water District**  
**P.O. Box 920**  
**Rialto, CA 92377-0920**

**Anthony Araiza**  
**West Valley Water District**  
**P.O. Box 920**  
**Rialto, CA 92377-0920**

**Jerry Eagans**  
**West Valley Water District**  
**P.O. Box 920**  
**Rialto, CA 92377-0920**



# California Regional Water Quality Control Board

## Santa Ana Region



**Winston H. Hickox**  
Secretary for  
Environmental  
Protection

Internet Address: <http://www.swrcb.ca.gov/rwqcb8>  
3737 Main Street, Suite 500, Riverside, California 92501-3348  
Phone (909) 782-4130 - FAX (909) 781-6288

**Gray Davis**  
Governor

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at [www.swrcb.ca.gov/rwqcb8](http://www.swrcb.ca.gov/rwqcb8).*

December 19, 2002

Mr. Ken Tierney, Director  
Environmental Health and Safety  
Raytheon Company  
141 Spring Street  
Lexington, MA 02421

### **DIRECTIVE TO CONDUCT A RECORDS INVESTIGATION ON THE USE OF FORMER STORAGE BUNKER, 2824 NORTH LOCUST, CITY OF RIALTO, SAN BERNARDINO COUNTY, CALIFORNIA**

Dear Mr. Tierney:

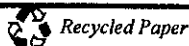
As our staff has informed you by telephone, perchlorate has been detected in municipal water supply wells in the Rialto, Colton and Chino Groundwater Subbasins in Southern California. These water supply wells are located downgradient of the former storage bunker that was used by General Dynamics Air Systems Division, later known as Hughes Missile Systems Company (now Raytheon Company), from 1991 (and possibly earlier) until 1994. In 1998 the Hughes Missile Systems Company (formerly General Dynamics Air Systems Division) was taken over by Raytheon Company. Information that local businesses provided to us in response to subpoenas indicates that the General Dynamics Air Systems Division/Hughes Missile Systems Company (now Raytheon) and several other defense contractors, pyrotechnic companies, and other businesses, used and stored products containing perchlorate salts in the former bunkers.

This letter sets forth a requirement under California Water Code Section 13267 that Raytheon (formerly General Dynamics Air Systems Division and Hughes Missile Systems Company) conduct an investigation of its records of historical operations at the former bunker area in North Rialto. As required by that provision, this letter contains an explanation of the need for the investigation, and cites evidence supporting the requirement.

#### Background

Perchlorate contamination was first detected in groundwater in the Rialto, Colton and Chino Groundwater Subbasins in 1997. At that time, the California Department of Health Services (DHS) Action Level (AL) for perchlorate in drinking water was 18 parts per billion (ppb). Two wells had perchlorate levels exceeding 18 ppb and were shut down. In January 2002, the DHS lowered the AL to 4 ppb. In response to the reduced AL for perchlorate, the local water purveyors in the Rialto, Colton and Chino Groundwater Subbasins restricted or eliminated the use of additional production wells with perchlorate concentrations that exceeded 4 ppb. Between 1997 and the present, various suspected perchlorate dischargers, including General Dynamics, have been identified.

*California Environmental Protection Agency*





### Requirement for an Investigation

The Regional Board has directed staff to issue individual letters under California Water Code Section 13267 to suspected perchlorate dischargers. The Board also expressed a strong desire that suspected perchlorate dischargers work with the local water purveyors to provide a supply of replacement water during the loss or limited use of their production wells.

### The Need for the Investigation

The Santa Ana Regional Water Quality Control Board is charged with the protection of water quality in this Region. We have been working actively with the water purveyors for several years to identify the extent and address the impact of perchlorate contamination on water resources in the Rialto, Colton and Chino Groundwater Subbasins. The water purveyors whose wells have been contaminated with perchlorate now face a state of emergency, and may not be able to provide an adequate water supply to their customers. It is urgent that the sources of the contamination be identified, and the magnitude of the perchlorate plume defined.

### Evidence Supporting the Need for the Investigation

Enclosed are the following documents:

1. Enclosure 1 – Well Location Map, showing perchlorate contamination in municipal water supply wells.
2. Enclosure 2 – Permit records indicating use of at least one bunker by General Dynamics Air Systems Division and Hughes Missile Systems Company (now Raytheon Company).
3. Enclosure 4 – Plot Plan showing the former configuration of the storage bunkers, and list of tenants and lessors using the bunkers.

The evidence indicates that during the 1990s, General Dynamics Air Systems Division and Hughes Missile Systems Company (now Raytheon Company) stored material at the Rialto site. Perchlorate has been detected in groundwater downgradient of the former bunker occupied by General Dynamics Air Systems Division and Hughes Missile Systems Company (now Raytheon Company). Based on the evidence, Raytheon Company is suspected of having discharged perchlorate waste that has adversely affected water quality. This evidence supports the requirement for an investigation, as defined in Section 13267(b)(1) of the California Water Code.

### Deadlines

A detailed description of historical activities by General Dynamics Air Systems Division and Hughes Missile Systems Company (now Raytheon Company) at the former bunker site in North Rialto must be submitted to Board staff by January 31, 2003.

**Failure to submit the required information by the specified deadline will subject you to administrative civil liability in the amount of up to \$1,000 per day pursuant to Section 13268(a) and (b) of the California Water Code.**

Finally, please be aware that the Board has directed staff to explore alternative ways of solving the water supply problem in the Rialto, Colton and Chino Groundwater Subbasins. In addition, consistent with the Board's direction, we will be issuing similar directives to a number of other suspected dischargers who have operated in the North Rialto area. Thus, there may be



opportunities to cooperate with other entities to implement joint investigations or to propose solutions that would address the water supply problem. In fact, we believe it would be both scientifically effective and economically efficient for the suspected dischargers subject to these directives to jointly pursue the investigation and to explore water supply replacement options. Further, consistent with the Board's direction, we recommend that the joint efforts of the suspected dischargers consider both the characterization of the plume and initiation of water supply replacement or treatment strategies. Board staff has experience in managing similar joint investigations and cooperative solutions and we are available to discuss these further with you. If you are interested in discussing such joint efforts, please contact us to arrange a meeting.

If you have any questions about this letter, please contact Kamron Saremi at (909) 782-4303, or you may call Ann Sturdivant, Chief of our Spills, Leaks, Investigations and Cleanups Section, at (909) 782-4904.

Sincerely,

Gerard J. Thibeault  
Executive Officer

Enclosures:

1. Well Location Map, showing perchlorate contamination in municipal water supply wells.
2. Permit records indicating use of at least one bunker by General Dynamics Air Systems Division and Hughes Missile Systems Company (now Raytheon Company)
3. Plot Plan showing the former configuration of the storage bunkers, and list of tenants and lessors using the bunkers.
4. Mailing List.

cc w/out enclosures:

Regional Board

Jorge Leon, Office of Chief Counsel, SWRCB

Aaron Yue, DTSC, Cypress Office

Inland Empire Perchlorate Regulatory Task Force (mailing list attached)

Scott Goulart, Aerojet - a subsidiary of GenCorp, Sacramento, California

Ken Miller, County of San Bernardino Department of Public Works

Dan Coyle - Downey Brand Seymour & Rohwer, LLP, representing American  
Promotional Events, Inc. - West

Peter Duchesneau - Manatt, Phelps & Philips, representing Goodrich Corporation

Charles Whisonant, representing Denova Environmental

Allen Curlee, Office of the District Counsel, U.S. Army Corps of Engineers, Sacramento

Robert Wyatt - Allen, Matkins, Leck, Gamble & Mallory, LLP, representing Emhart/Black and  
Decker

Jim Good - Gresham, Savage, Nolan & Tilden, LLP, representing Pyro Spectaculars, Inc.

George Zambelli - Zambelli Fireworks Manufacturing Company

AES/Data/SLIC/Rialto perchlorate 01-02/13267/Raytheon

*California Environmental Protection Agency*



Recycled Paper

ALS/BCC



# California Regional Water Quality Control Board Santa Ana Region



**Winston H. Hickox**  
Secretary for  
Environmental  
Protection

Internet Address: <http://www.swrcb.ca.gov/rwqcb8>  
3737 Main Street, Suite 500, Riverside, California 92501-3348  
Phone (909) 782-4130 - FAX (909) 781-6288

**Gray Davis**  
Governor

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at [www.swrcb.ca.gov/rwqcb8](http://www.swrcb.ca.gov/rwqcb8).*

July 18, 2003

Mr. Thomas O. Peters  
15709 Birchwood Street  
La Mirada, California 90638

## **DIRECTIVE TO SUBMIT A WORK PLAN AND CONDUCT A PERCHLORATE INVESTIGATION IN THE VICINITY OF 2298 WEST STONEHURST, CITY OF RIALTO, SAN BERNARDINO COUNTY, CALIFORNIA**

Dear Mr. Peters:

Perchlorate has been detected in municipal water supply wells in the Rialto, Colton, and Chino Groundwater Subbasins in Southern California. These water supply wells are located downgradient of the Astro Pyrotechnic facility (formerly Trojan Fireworks Company). According to records from the San Bernardino County Tax Assessor's office, you are and have been the owner of the property located at 2298 West Stonehurst, Rialto, California, since the mid-1970s.

Information provided by local businesses in response to subpoenas issued by this agency indicates that: (1) You were the legal owner of Trojan Fireworks Company in 1987; (2) Trojan Fireworks Company was located at 2298 West Stonehurst; (3) Trojan Fireworks Company generated wastes from the manufacture of fireworks; (4) upon the closure of Trojan Fireworks Company you leased and continue to lease 2298 West Stonehurst to Astro Pyrotechnics; and (5) you are aware that Astro Pyrotechnics is in the pyrotechnics business and uses the property to manufacture, handle, test, burn and store fireworks. Further, the laboratory results from the analyses of soil samples that were collected from several locations on your property as part of a Preliminary Environmental Assessment performed in February and March 2003 indicate that perchlorate is present in concentrations as high as 55,000 parts per billion in the soil at the site.

This letter sets forth a requirement under California Water Code Section 13267 that you conduct an investigation to define the lateral and vertical extent of perchlorate in soil and groundwater in the vicinity of 2298 West Stonehurst Avenue, Rialto, California. As required by that provision, this letter contains an explanation of the need for the investigation, and cites evidence supporting the requirement.

*California Environmental Protection Agency*



July 18, 2003

**Background**

Perchlorate contamination was first detected in groundwater in the Rialto, Colton and Chino Groundwater Subbasins in 1997. At that time, the California Department of Health Services (DHS) Action Level (AL) for perchlorate in drinking water was 18 parts per billion (ppb). Two wells had perchlorate levels exceeding 18 ppb and were shut down. In January 2002, the DHS lowered the AL to 4 ppb. In response to the reduced AL for perchlorate, the local water purveyors in the Rialto and Colton Groundwater Subbasins restricted or eliminated the use of additional production wells with perchlorate concentrations that exceeded 4 ppb. Between 1997 and the present, various suspected perchlorate dischargers, including former and current occupants of your property at 2298 West Stonehurst, have been identified.

**Requirement for an Investigation**

The Regional Board has directed staff to issue individual letters under California Water Code Section 13267 to suspected perchlorate dischargers in the Rialto and Colton Groundwater Subbasins. Several letters similar to this one have already been issued over the last several months to other suspected dischargers and to the owners of affected properties. The Board also expressed a strong desire that suspected perchlorate dischargers work with the local water purveyors to provide a supply of replacement water during the loss or limited use of their production wells.

**The Need for the Investigation**

The Santa Ana Regional Water Quality Control Board is charged with the protection of water quality in this Region. We have been working actively with the water surveyors for several years to identify the extent and address the impact of perchlorate contamination on water resources in the Rialto, Colton and Chino Groundwater Subbasins. The water purveyors whose wells have been contaminated with perchlorate now face a state of emergency, and may not be able to provide an adequate water supply to their customers. It is urgent that the sources of the contamination be identified, and the magnitude of the perchlorate plume defined.

**Evidence Supporting the Need for the Investigation**

Enclosed are the following documents:

1. Well Location Map, showing perchlorate contamination in municipal water supply wells in the vicinity of Rialto, Colton and Fontana, California.
2. Property Ownership Records for 2298 West Stonehurst: Parcel 1133-071-005, Parcel 1133-071-006, and Parcel 1133-071-007 (obtained from San Bernardino Tax Assessor's Internet Site).
3. Hazardous Waste Generator and Hazardous Waste Handler Permits and County of San Bernardino Hazardous Waste Generator Inspection Reports (listing Ammonium Perchlorate) issued to Astro Pyrotechnics. Hazardous

*California Environmental Protection Agency*



July 18, 2003

Waste Manifests (listing Potassium Perchlorate), an Application and Permit to Burn issued by Fire Protection Agency and South Coast Air Quality Management District to Astro Pyrotechnics, and a Plot Plan identifying the facility.

4. Hazardous Waste Generator Permits for Trojan Fireworks Company, one of which identifies the legal owner as Thomas O. Peters. County of San Bernardino Hazardous Waste Generator Survey identifying Trojan Fireworks Company. Application for Conditional Development from Trojan Fireworks Company to the City of Rialto for the purpose of manufacture of commercial fireworks. Newspaper article about a fireworks explosion at the Trojan Fireworks Company facility.
5. Excerpts, including positive results for perchlorate testing of soil, from "Preliminary Environmental Site Assessment and Limited Soil Sampling – 2298 West Stonehurst Drive, Rialto, California" (2003).

The evidence indicates that Astro Pyrotechnics manufactures, handles, tests, burns, and stores fireworks containing perchlorate salts at the property located at 2298 West Stonehurst, Rialto, California, as did its predecessor Trojan Fireworks Company. Disposal of perchlorate waste to concrete "pads" has been a common practice at the Astro Pyrotechnics site since 1997 or earlier. In addition, City of Rialto records indicate that on-site disposal systems (septic tanks) have been used at the site since it was first occupied for industrial use. Disposal of waste, including perchlorate salts, into septic systems is suspected to have occurred during occupancy of the Stonehurst Avenue property by Astro Pyrotechnics, Trojan Fireworks and other parties since the mid-1970s. Soil analytical results indicate perchlorate is present in the soil at Astro Pyrotechnics. Groundwater analytical results indicate that perchlorate concentrations exceed the AL in municipal water supply wells that are located downgradient of the Astro Pyrotechnics facility.

Based on the evidence, Astro Pyrotechnics and its predecessors are suspected of having discharged perchlorate on the property. As the owner of the real property at 2298 Stonehurst, and of the now defunct Trojan Fireworks Company, you bear legal liability under California law for the discharges that have adversely affected water quality. This evidence supports the requirement for an investigation as defined in Section 13267(b)(1) of the California Water Code.

#### Deadlines

1. A work plan for a soil and groundwater investigation for perchlorate in the vicinity of the property at 2298 West Stonehurst, Rialto must be submitted to Board staff no later than August 29, 2003. The proposed tasks and scope of work shall be coordinated with the investigation activities that are already in progress by the

*California Environmental Protection Agency*



Recycled Paper

July 18, 2003

current tenants of 2298 West Stonehurst, Astro Pyrotechnics. The work plan must include a detailed time schedule for the tasks to be conducted. The work plan and time schedule will be subject to my approval.

2. The investigation must commence within 30 days of my approval of the work plan.
3. All analytical results, groundwater measurements, and field information are to be submitted by fax to Board staff within 24 hours of being generated, throughout all stages of work, and during all phases of the investigation. The office fax number to be used for your data transmittals is (909) 781-6288.
4. The final report for the soil and groundwater investigation, including (at a minimum) the borehole logs, well construction details, groundwater elevation data, and soil and groundwater analytical results, must be submitted to Board staff within 30 days of completing the field work.

**Failure to submit the required information by the specified deadline may subject you to administrative civil liability in the amount of up to \$1,000 per day, pursuant to Section 13268(a) and (b) of the California Water Code.**

Finally, please be aware that the Board has directed staff to explore alternative ways of solving the water supply problem in the Rialto, Colton and Chino Groundwater Subbasins. In addition, consistent with the Board's direction, we have issued and will continue to issue similar directives to a number of other suspected dischargers who have operated in the North Rialto area. Thus, there may be opportunities to cooperate with other entities to implement joint investigations or to propose solutions that would address the water supply problem. In fact, we believe it would be both scientifically effective and economically efficient for the suspected dischargers subject to these directives to jointly pursue the investigation and to explore water supply replacement options. Further, consistent with the Board's direction, we recommend that the joint efforts of the suspected dischargers consider both the characterization of the plume and initiation of water supply replacement or treatment strategies. Board staff has experience managing similar joint investigations and cooperative solutions and we are available to discuss these further with you. If you are interested in discussing alternative options for complying with this directive, please contact us to arrange a meeting or teleconference.

#### Recovery of Regional Board Expenses

California Water Code Section 13365 addresses the billing process for the Regional Board to recover reasonable expenses for overseeing investigation of illegal discharges, contaminated properties, and other unregulated releases that may adversely affect the State's waters. It is the Regional Board's intent to recover such costs for regulatory oversight work conducted in accordance with this order. A description of the Board's

*California Environmental Protection Agency*



July 18, 2003

procedure for cost recovery for regulatory oversight of investigations and cleanups will be sent to you under separate cover.

If you have any questions about this letter, or if you would like to arrange a meeting or teleconference, please contact Ann Sturdivant, Chief of our Spills, Leaks, Investigations and Cleanups Section, at (909) 782-4904.

Sincerely,

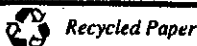


for Gerard J. Thibeault  
Executive Officer

Enclosures:

1. Well Location Map, showing perchlorate contamination in municipal water supply wells in the vicinity of Rialto, Colton and Fontana, California.
2. Property Ownership Records for 2298 West Stonehurst: Parcel 1133-071-005, Parcel 1133-071-006, and Parcel 1133-071-007 (obtained from San Bernardino Tax Assessor's Internet Site).
3. Hazardous Waste Generator and Hazardous Waste Handler Permits and County of San Bernardino Hazardous Waste Generator Inspection Reports (listing Ammonium Perchlorate) issued to Astro-Pyrotechnics. Hazardous Waste Manifests (listing Potassium Perchlorate), an Application and Permit to Burn issued by Fire Protection Agency and South Coast Air Quality Management District to Astro-Pyrotechnic, and a Plot Plan identifying the facility.
4. Hazardous Waste Generator Permits for Trojan Fireworks Company one of which lists the legal owner as Thomas O. Peters. County of San Bernardino Hazardous Waste Generator Survey identifying Trojan Fireworks Company. Application for Conditional Development from Trojan Fireworks Company to the City of Rialto for the purpose of manufacture of commercial fireworks. Newspaper article about a fireworks explosion at the Trojan Fireworks Company facility.
5. Excerpts from "Preliminary Environmental Site Assessment and Limited soil Sampling - 2298 West Stonehurst Drive, Rialto, California" (2003)
6. Mailing List

*California Environmental Protection Agency*



Mr. Thomas O. Peters

-6-

July 18, 2003

**cc w/out enclosures:**

**Regional Board members  
Jorge Leon, Office of Chief Counsel, SWRCB  
Norman S. Berliner, Esq.  
James E. Good, Gresham, Savage, Nolan & Tilden, LLP  
Gary Brown, Pyro Spectaculars/Astro Pyrotechnics  
Inland Empire Perchlorate Regulatory Task Force members (see mailing list)**

**AES/Data/SLIC/2001-03 Rialto perchlorate/13267/Thomas O. Peters**

***California Environmental Protection Agency***



*Recycled Paper*



Peter Fox  
City of Rialto  
Public Works Department  
P. o. Box 920  
Rialto, CA 92736

Tim Mim Mack  
City of Rialto  
P. O. Box 920  
Rialto, CA 92376

Brad Baxter  
City of Rialto  
Public Works Department  
P. O. Box 920  
Rialto, CA 92736

Robert Owen  
City of Rialto  
P. O. Box 920  
Rialto, CA 92376

Ken Ayers  
County of San Bernardino  
Office of the District Attorney  
412 W. Hospitality Lane, Ste. 301  
San Bernardino, CA 92415-0023

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

Mike McGraw  
Fontana Water Company  
P.O. Box 987  
Fontana, CA 92335

Gerald J. Black  
Fontana Water Company  
P.O. Box 987  
Fontana, CA 92335

Mike Whitehead  
Fontana Water Company  
P.O. Box 987  
Fontana, CA 92335

Jim Bryson  
Fontana Water Company  
P.O. Box 987  
Fontana, CA 92335

Lynn Takaichi  
Kennedy/Jenks Consultants, Inc.  
1000 Hill Rd., Suite 200  
Ventura, CA 93003

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

Susan M. Trager  
Law Offices of Susan M. Trager  
19712 MacArthur Blvd., Ste. 120  
Irvine, CA 92612

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

Steven Elie  
Musick, Peeler & Garrett  
One Wilshire Blvd.  
Los Angeles, CA 90017-3383

Tom Soto  
PS Enterprises  
3350 Ocean Park Blvd., Ste. 205  
Santa Monica, CA 92405

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

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

Senator Nell Soto  
P.O.Box 942848  
State Capitol, Room 4074  
Sacramento, CA 94248

Patrick J. King  
Thirty-second Senatorial District  
822 N. Euclid Ave., Suite A  
Ontario, CA 91762

Sarah Mueller  
U. S. EPA - Region 9  
75 Hawthorne Street  
San Francisco, CA 94105

Wayne Praskins  
U. S. EPA - Region 9  
75 Hawthorne Street  
San Francisco, CA 94105

Matt Mitguard  
U.S. EPA, Region IX (Region 9)  
75 Hawthorne Street  
San Francisco, CA 94105-3901

Leon Long  
West Valley Water District  
P.O. Box 920  
Rialto, CA 92377-0920

Anthony Araiza  
West Valley Water District  
P.O. Box 920  
Rialto, CA 92377-0920

Jerry Eagans  
West Valley Water District  
P.O. Box 920  
Rialto, CA 92377-0920

Gene Tanaka, Esq.  
Best, Best & Kreiger  
3750 University Ave., Mission Square,  
Riverside, CA 92501

Gary Brown  
Cal/EPA  
3737 Main Street  
Riverside, CA 92501

California Department of Health Services  
464 W. Fourth St., Ste. 437  
San Bernardino, CA 92402

Cindy Forbes  
California Department of Health Services  
Drinking Water Field Operations Branch  
1040 E. Herndon Ave., Ste. 205  
Fresno, CA 93720

Bob Borzelleri  
California Dept. of Toxic Substances Control  
P.O. Box 806  
Sacramento, CA 95812-0806

Wendy Arano  
California Dept. of Toxic Substances Control  
Geology & Corrective Action Branch  
5796 Corporate Ave.  
Cypress, CA 90630

Christine Brown  
California Dept. of Toxic Substances Control  
Geology & Corrective Action Branch  
5796 Corporate Ave.  
Cypress, CA 90630

Karen Baker  
California Dept. of Toxic Substances Control  
Geology & Corrective Action Branch  
5796 Corporate Ave.  
Cypress, CA 90630

Aaron Yue  
California Dept. of Toxic Substances Control  
Geology & Corrective Action Branch  
5796 Corporate Ave.  
Cypress, CA 90630

Michael Wochnick  
California Integrated Waste Management  
P.O. Box 4025  
Sacramento, CA 95812-4025

Mike Bledsoe  
California Integrated Waste Management  
P.O. Box 4025  
Sacramento, CA 95812-4025

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

Jorge Leon  
California State Water Resources Control Board  
Legal Division  
1001 "I" Street, 22nd Floor  
Sacramento, CA 95814

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



## **ENCLOSURE 2**



# California Regional Water Quality Control Board

## Santa Ana Region



Gray Davis  
Governor

Winston H. Hickox  
Secretary for  
Environmental  
Protection

Internet Address: <http://www.swrcb.ca.gov/rwqcb8>  
3737 Main Street, Suite 500, Riverside, California 92501-3348  
Phone (909) 782-4130 - FAX (909) 781-6288

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at [www.swrcb.ca.gov/rwqcb8](http://www.swrcb.ca.gov/rwqcb8).*

June 13, 2003

Mr. Wong Chung Ming  
Tung Chun Company  
Tung Chun Commercial Centre, 6/F  
438-444, Shanghai Street  
Mongkok, Kowloon, Hong Kong

### **DIRECTIVE TO SUBMIT A WORK PLAN AND CONDUCT A PERCHLORATE INVESTIGATION IN THE VICINITY OF 3196 NORTH LOCUST AVENUE, CITY OF RIALTO, SAN BERNARDINO COUNTY, CALIFORNIA**

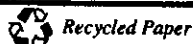
Dear Mr. Ming:

Perchlorate has been detected in municipal water supply wells in the Rialto and Colton Groundwater Subbasins located in the State of California, United States. These water supply wells are located downgradient of the American Promotional Events, Inc. – West, (hereinafter APE – West) facility. According to the San Bernardino County Tax Assessor's office and a lease between your company and APE – West, you are and have been the owner of the property located at 3196 Locust Avenue, Rialto, California, since 1988.

Information provided by local businesses in response to subpoenas issued by this agency indicates that: (1) you leased the 3196 Locust Avenue property to Pyrodyne American Corporation on September 30, 1989, and have amended and extended that lease to Pyrodyne's successors, American West Marketing, Inc., followed by American Promotional Events, Inc.; and (2) you are aware that the current lessors and tenants of the property (APE – West and Pyro Spectaculars by Souza) are in the pyrotechnics business and use the property to manufacture, handle, test, burn and store fireworks.

This letter sets forth a requirement under California Water Code Section 13267 that you conduct an investigation to define the lateral and vertical extent of perchlorate in soil and groundwater in the vicinity of 3196 North Locust Avenue, Rialto, California. As required by that provision, this letter contains an explanation of the need for the investigation, and cites evidence supporting the requirement.

*California Environmental Protection Agency*



### Background

Perchlorate contamination was first detected in groundwater in the Rialto and Colton Subbasins in 1997. At that time, the California Department of Health Services (DHS) Action Level (AL) for perchlorate in drinking water was 18 parts per billion (ppb). Two wells had perchlorate levels exceeding 18 ppb and were shut down. In January 2002, the DHS lowered the AL to 4 ppb. In response to the reduced AL for perchlorate, the local water purveyors in the Rialto and Colton Groundwater Subbasins restricted or eliminated the use of additional production wells with perchlorate concentrations that exceeded 4 ppb. Between 1997 and the present, various suspected perchlorate dischargers, including former and current occupants of your property at 3196 North Locust Avenue, have been identified.

### Requirement for an Investigation

The Regional Board has directed staff to issue individual letters under California Water Code Section 13267 to suspected perchlorate dischargers in the Rialto and Colton Groundwater Subbasins. Several letters similar to this one have already been issued over the last several months to other suspected dischargers and to the owners of affected properties. The Board also expressed a strong desire that suspected perchlorate dischargers work with the local water purveyors to provide a supply of replacement water during the loss or limited use of their production wells.

### The Need for the Investigation

The Santa Ana Regional Water Quality Control Board is charged with the protection of water quality in this Region. We have been working actively with the water surveyors for several years to identify the extent and address the impact of perchlorate contamination on water resources in the Colton and Rialto Groundwater Subbasins. The water purveyors whose wells have been contaminated with perchlorate now face a state of emergency, and may not be able to provide an adequate water supply to their customers. It is urgent that the sources of the contamination be identified, and the magnitude of the perchlorate plume defined.

### Evidence Supporting the Need for the Investigation

Enclosed are the following documents:

1. Well Location Map, showing perchlorate contamination in municipal water supply wells in the vicinity of Rialto, Colton and Fontana, California.
2. Lease Agreement between Mr. Wong Chung Ming and Pyrodyne American Corporation, and extensions and amendments to lease (doc nos. APE 000356-000378, obtained from APE - West pursuant to subpoena).

3. Property Ownership Records for Parcel 0239-192-17-0000 and Parcel 0239-192-18-000 (obtained from San Bernardino Tax Assessor's Internet Site).
4. City of Rialto and County of San Bernardino Records of Storage and Disposal of Fireworks, 3196 North Locust Avenue, Rialto, California (documents obtained from APE – West pursuant to subpoena).
5. Plot Plan of APE – West and surrounding property, showing waste disposal pit, and excerpts from Environmental Assessment Report, dated May 2001 (documents obtained from APE – West pursuant to subpoena).

The evidence indicates that Pyrodyne and its successors manufactured, handled, tested, burned and stored fireworks containing perchlorate salts at the property located at 3196 North Locust Avenue, Rialto, California. In addition, City of Rialto records indicate that on-site disposal systems have been used at the site since it was first occupied for industrial use. Disposal of perchlorate waste in unlined pits and septic systems is suspected to have occurred during occupancy of the Locust Avenue property by Pyrodyne and other parties. Groundwater analytical results indicate that perchlorate concentrations exceed the AL in municipal water supply wells that are located downgradient of the former Pyrodyne facility. Based on the evidence, Pyrodyne, APE – West and Pyro Spectaculars are suspected of having discharged perchlorate on the property. As the owner of the affected land, you bear legal liability under California law for the discharges that have adversely affected water quality. This evidence supports the requirement for an investigation as defined in Section 13267(b)(1) of the California Water Code.

#### Deadlines

1. A work plan for a soil and groundwater investigation for perchlorate in the vicinity of the property at 3196 Locust Avenue must be submitted to Board staff no later than August 13, 2003. The proposed tasks and scope of work shall be coordinated with the investigation activities that are already in progress by the tenants of 3196 Locust Ave., APE – West and Pyro Spectaculars by Souza. The work plan must include a detailed time schedule for the tasks to be conducted. The work plan and time schedule will be subject to my approval.
2. The investigation must commence within 30 days of my approval of the work plan.
3. All analytical results, groundwater measurements, and field information are to be submitted by fax to Board staff within 24 hours of being generated, throughout all stages of work, and during all phases of the investigation. The office fax number to be used for your data transmittals is (909) 781-6288.
4. The final report for the soil and groundwater investigation, including (at a minimum) the borehole logs, well construction details, groundwater elevation data, and soil and

*California Environmental Protection Agency*



Recycled Paper



groundwater analytical results, must be submitted to Board staff within 30 days of completing the field work.

**Failure to submit the required information by the specified deadline may subject you to administrative civil liability in the amount of up to \$1,000 per day, pursuant to Section 13268(a) and (b) of the California Water Code.**

The Board has directed staff to explore alternative ways of solving the water supply problem in the Rialto and Colton Groundwater Subbasins. In addition, consistent with the Board's direction, we will be issuing similar directives to a number of other suspected dischargers who have operated in the North Rialto area. Thus, there may be opportunities to cooperate with other entities to implement joint investigations or to propose solutions that would address the water supply problem. In fact, we believe it would be both scientifically effective and economically efficient for the suspected dischargers subject to these directives to jointly pursue the investigation and to explore water supply replacement options. Further, consistent with the Board's direction, we recommend that the joint efforts of the suspected dischargers consider both the characterization of the plume and initiation of water supply replacement or treatment strategies. Board staff has experience managing similar joint investigations and cooperative solutions and we are available to discuss these further with you. If you are interested in discussing alternative options for complying with this directive, please contact us to arrange a meeting or teleconference.

California Water Code Section 13365 addresses the billing process for the Regional Board to recover reasonable expenses for overseeing investigation of illegal discharges, contaminated properties, and other unregulated releases that may adversely affect the State's waters. It is the Regional Board's intent to recover such costs for regulatory oversight work conducted in accordance with this order. A description of the Board's procedure for cost recovery for regulatory oversight of investigations and cleanups will be sent to you under separate cover.

Please provide us with the name, address, and telephone number of your attorney. If you have any questions about this letter, or if you would like to arrange a meeting or teleconference, please contact Ann Sturdivant, Chief of our Spills, Leaks, Investigations and Cleanups Section, at (909) 782-4904.

Sincerely,



for Gerard J. Thibeault  
Executive Officer

**Enclosures:**

1. Well Location Map, showing perchlorate contamination in municipal water supply wells in Rialto, Colton and Fontana, California.
2. Lease Agreement between Mr. Wong Chung Ming and Pyrodyne American Corporation, and extensions and amendments to the lease.
3. Property Ownership Records for Parcel 0239-192-17-0000 and Parcel 0239-192-17-000 from San Bernardino Tax Assessor's Internet Site.
4. City of Rialto and County of San Bernardino Records of Storage and Disposal of Fireworks, 3196 North Locust Avenue, Rialto, California (documents obtained from APE – West pursuant to subpoena).
5. Plot Plan of APE – West and surrounding property showing waste disposal pit, and excerpts from Environmental Site Assessment (dated May 2001).
6. Mailing List.

**cc w/enclosures:**

Victor Kwan, 1001 De la Fuente, Monterey Park, CA 91754

**cc w/out enclosures:**

Regional Board members

Jorge Leon, Office of Chief Counsel, SWRCB

Katharine E. Wagner, Downey Brand Seymour & Rohwer, LLP

James E. Good, Gresham, Savage, Nolan & Tilden, LLP

Inland Empire Perchlorate Regulatory Task Force members (see mailing list)

AES/Data/SLIC/2001-03 Rialto perchlorate/13267/Wong Chung Ming

AES A



# California Regional Water Quality Control Board Santa Ana Region



Winston H. Hickox  
Secretary for  
Environmental  
Protection

Internet Address: <http://www.swrcb.ca.gov/rwqcb8>  
3737 Main Street, Suite 500, Riverside, California 92501-3348  
Phone (909) 782-4130 - FAX (909) 781-6288

Gray Davis  
Governor

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at [www.swrcb.ca.gov/rwqcb8](http://www.swrcb.ca.gov/rwqcb8).*

June 26, 2003

Mr. William McCardle  
W. A. Murphy, Inc.  
4144 N Arden Dr.  
El Monte, CA 91731

## **DIRECTIVE TO CONDUCT A RECORDS INVESTIGATION AND SUBMIT A REPORT CONCERNING PERCHLORATE DISCHARGES IN THE RIALTO, COLTON AND CHINO GROUNDWATER BASINS, SAN BERNARDINO COUNTY, CALIFORNIA**

Dear Mr. McCardle:

Perchlorate has been detected in municipal water supply wells in the Rialto, Colton and Chino Groundwater Subbasins in Southern California. These water supply wells are located downgradient of the former bunker used by W. A. Murphy, Inc., Explosives Distributors, in North Rialto. Evidence indicates that W. A. Murphy, Inc., utilized the storage bunker to store explosive materials and propellant, which likely contained perchlorate salts.

As described below, W. A. Murphy is a suspected discharger of perchlorate. This letter sets forth a requirement under California Water Code Section 13267 that W. A. Murphy, Inc., conduct an investigation of its records of historical operations at the Rialto site. As required by that provision, this letter contains an explanation of the need for the investigation, and cites evidence supporting the requirement.

### Background

Perchlorate contamination was first detected in groundwater in the Rialto, Colton and Chino Groundwater Subbasins in 1997. At that time, the California Department of Health Services (DHS) Action Level (AL) for perchlorate in drinking water was 18 parts per billion (ppb). Two wells had perchlorate levels exceeding 18 ppb and were shut down. In January 2002, the DHS lowered the AL to 4 ppb. In response to the reduced AL for perchlorate, the local water purveyors in the Rialto, Colton and Chino Groundwater Subbasins restricted or eliminated the use of additional production wells with perchlorate concentrations that exceeded 4 ppb (Enclosure 1). Between 1997 and

*California Environmental Protection Agency*



the present, various suspected perchlorate dischargers, including W. A. Murphy, Inc., have been identified.

#### Requirement for an Investigation

The Regional Board has directed staff to issue individual letters under California Water Code Section 13267 to suspected perchlorate dischargers. The Board also expressed a strong desire that suspected perchlorate dischargers work with the local water purveyors to provide a supply of replacement water during the loss or limited use of their production wells.

#### The Need for the Investigation

The Santa Ana Regional Water Quality Control Board is charged with the protection of water quality in this Region. We have been working actively with the water purveyors for several years to identify the extent and address the impact of perchlorate contamination on water resources in the Rialto, Colton and Chino Groundwater Subbasins. The water purveyors whose wells have been contaminated with perchlorate now face a state of emergency, and may not be able to provide an adequate water supply to their customers. It is urgent that the sources of the contamination be identified, and the magnitude of the perchlorate plume defined.

#### Evidence Supporting the Need for the Investigation and Report

W.A. Murphy, Inc. operated in Rialto, California, from approximately the late 1980's to 1993. Historical telephone directories, Hazardous Materials Business Plans, and other evidence indicates that W. A. Murphy, Inc. distributed explosives and propellants and that W. A. Murphy, Inc. used an explosives storage bunker or magazine identified as "B3" located in Rialto, California (Enclosures 2 through 6).

Perchlorate is known to be used as an ingredient in certain explosives and propellants. Other sites involved with explosives and propellants have had documented perchlorate discharges and contamination (*e.g.*, [www.geotracker.swrcb.ca.gov/perchlorate](http://www.geotracker.swrcb.ca.gov/perchlorate)). Samples obtained by the County of San Bernardino have revealed that groundwater in the vicinity of the former explosive storage bunkers in Rialto is contaminated with perchlorate.

Based on the evidence, W. A. Murphy, Inc. is suspected of having discharged perchlorate waste that has adversely affected water quality. This evidence supports the requirement for an investigation, as defined in Section 13267(b)(1) of the California Water Code.

#### Deadlines

By July 31, 2003, a report containing the following information shall be submitted to the Regional Board staff:

1. A detailed description of W.A. Murphy's past and present operations in the Rialto, Colton and Chino Groundwater Subbasins, including but not limited to, whether and

when it used or handled perchlorate or perchlorate-containing materials and the approximate quantities of such materials; the operations, processes and activities involving perchlorate and perchlorate-containing materials, including testing and waste disposal practices; whether materials, off-spec or defective materials, or other wastes were burned or buried; any known or suspected discharges of perchlorate; any accidents, explosions or fires that may have occurred; and any other information that would be helpful in determining whether a discharge of perchlorate occurred from W.A. Murphy's operations.

2. Any documents pertaining to and/or describing W.A. Murphy's operations in the Rialto, Colton and Chino Groundwater Subbasins, including but not limited to maps, plans, diagrams and photographs of the facility and its operations, records pertaining to perchlorate and perchlorate-containing materials, waste disposal records, operating procedures, environmental investigation and remediation reports, and employee lists.

**Failure to submit the required information by the specified deadline will subject you to administrative civil liability in the amount of up to \$1,000 per day pursuant to Section 13268(a) and (b) of the California Water Code.**

Finally, please be aware that the Board has directed staff to explore alternative ways of solving the water supply problem in the Rialto, Colton and Chino Groundwater Subbasins. In addition, consistent with the Board's direction, we have issued and will continue to issue similar directives to a number of other suspected dischargers who have operated in the Rialto, Colton and Chino Subbasins. Thus, there may be opportunities to cooperate with other entities to implement joint investigations or to propose solutions that would address the water supply problem. In fact, we believe it would be both scientifically effective and economically efficient for the suspected dischargers subject to these directives to jointly pursue the investigation and to explore water supply replacement options. Further, consistent with the Board's direction, we recommend that the joint efforts of the suspected dischargers consider both the characterization of the contamination and initiation of water supply replacement or treatment strategies. Board staff has experience in managing similar joint investigations and cooperative solutions. If you are interested in discussing such joint efforts, please contact us to arrange a meeting.

#### Recovery of Regional Board Expenses

California Water Code Section 13365 addresses the billing process for the Regional Board to recover reasonable expenses for overseeing investigation of illegal discharges, contaminated properties, and other unregulated releases that may adversely affect the State's waters. It is the Regional Board's intent to recover such costs for regulatory oversight work conducted in accordance with this order. A description of the Board's procedure for cost recovery for regulatory oversight of investigations and cleanups will be sent to you under separate cover.

If you have any questions about this letter, please contact Kamron Saremi at (909)


*California Environmental Protection Agency*



June 26, 2003

782-4303, or you may call Ann Sturdivant, Chief of our Spills, Leaks, Investigations and Cleanups Section, at (909) 782-4904.

Sincerely,



for Gerard J. Thibeault  
Executive Officer

Enclosures:

1. Well Location Map, showing reported perchlorate contamination in municipal water supply wells and the Rialto-Colton and Chino groundwater basins.
2. Excerpts from 1988 Pacific Bell Telephone Directory.
3. Excerpt from W. A. Murphy, Inc. Rialto Business Plan, Magazine B3, February 25, 1991.
4. County of San Bernardino, Department of Environmental Health Services, Hazardous Waste Generator Inspection Reports, January 14, 1991 and September 7, 1994.
5. Diagram of explosive storage bunkers in Rialto, California.
6. Diagram of explosive storage bunkers in Rialto, California.
7. Mailing List.

cc (w/out enclosures):

Regional Board members

Jorge Leon, Office of Chief Counsel, SWRCB

Wayne Praskins, U.S. EPA, Region IX

Inland Empire Perchlorate Task Force members (mailing list attached)



California Department of Health Services  
464 W. Fourth St., Ste. 437  
San Bernardino, CA 92402

Anthony Araiza  
West Valley Water District  
P.O. Box 920  
Rialto, CA 92377-0920

Wendy Arano  
California Dept. of Toxic Substances Control  
Geology & Corrective Action Branch  
5796 Corporate Ave.  
Cypress, CA 90630

Ken Ayers  
County of San Bernardino  
Office of the District Attorney  
412 W. Hospitality Lane, Ste. 301  
San Bernardino, CA 92415-0023

Karen Baker  
California Dept. of Toxic Substances Control  
Geology & Corrective Action Branch  
5796 Corporate Ave.  
Cypress, CA 90630

Brad Baxter  
City of Rialto  
Public Works Department  
P. O. Box 920  
Rialto, CA 92736

Gerald J. Black  
Fontana Water Company  
P.O. Box 987  
Fontana, CA 92335

Mike Bledsoe  
California Integrated Waste Management  
P.O. Box 4025  
Sacramento, CA 95812-4025

Bob Borzelleri  
California Dept. of Toxic Substances Control  
P.O. Box 806  
Sacramento, CA 95812-0806

Christine Brown  
California Dept. of Toxic Substances Control  
Geology & Corrective Action Branch  
5796 Corporate Ave.  
Cypress, CA 90630

Jim Bryson  
Fontana Water Company  
P.O. Box 987  
Fontana, CA 92335

Jerry Eagans  
West Valley Water District  
P.O. Box 920  
Rialto, CA 92377-0920

Steven Elie  
Musick, Peeler & Garrett  
One Wilshire Blvd.  
Los Angeles, CA 90017-3383

Cindy Forbes  
California Department of Health Services  
Drinking Water Field Operations Branch  
1040 E. Herndon Ave., Ste. 205  
Fresno, CA 93720

Peter Fox  
City of Rialto  
Public Works Department  
P. o. Box 920  
Rialto, CA 92736

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

Jorge Leon  
California State Water Resources Control Board  
Legal Division  
1001 "I" Street, 22nd Floor  
Sacramento, CA 95814

Leon Long  
West Valley Water District  
P.O. Box 920  
Rialto, CA 92377-0920

Tim Mim Mack  
City of Rialto  
P. O. Box 920  
Rialto, CA 92376

Sarah Mueller  
U. S. EPA - Region 9  
75 Hawthorne Street  
San Francisco, CA 94105

Robert Owen  
City of Rialto  
P. O. Box 920  
Rialto, CA 92376

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

Patrick J. King  
Thirty-second Senatorial District TEST 1  
822 N. Euclid Ave., Suite A  
Ontario, CA 91762

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

Mike McGraw  
Fontana Water Company  
P.O. Box 987  
Fontana, CA 92335

Matt Mitguard  
U.S. EPA, Region IX (Region 9)  
75 Hawthorne Street  
San Francisco, CA 94105-3901

Karen A. O'Hare  
California State Water Resources Control Board  
Legal Division  
1001 "I" Street, 22nd Floor  
Sacramento, CA 95814

Dennis Parfitt  
California State Water Resources Control Board  
Division of Clean Water Programs  
1001 "I" Street, 22nd Floor  
Sacramento, CA 95814



Wayne Praskins  
U. S. EPA - Region 9  
75 Hawthorne Street  
San Francisco, CA 94105

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

Tom Soto  
PS Enterprises  
3350 Ocean Park Blvd., Ste. 205  
Santa Monica, CA 92405

Nell Soto  
Thirty-second Senatorial District  
The Honorable Senator Neil Soto  
State Capital, Room 4074  
Sacramento, CA 95814

Lynn Takaichi  
Kennedy/Jenks Consultants, Inc.  
1000 Hill Rd., Suite 200  
Ventura, CA 93003

Gene Tanaka, Esq.  
Best, Best & Kreiger  
3750 University Ave., Mission Square  
Riverside, CA 92501

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

Susan M. Trager  
Law Offices of Susan M. Trager  
19712 MacArthur Blvd., Ste. 120  
Irvine, CA 92612

Mike Whitehead  
Fontana Water Company  
P.O. Box 987  
Fontana, CA 92335

Michael Wochnick  
California Integrated Waste Management  
P.O. Box 4025  
Sacramento, CA 95812-4025

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

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

Aaron Yue  
California Dept. of Toxic Substances Control  
Geology & Corrective Action Branch  
5796 Corporate Ave.  
Cypress, CA 90630



# California Regional Water Quality Control Board

## Santa Ana Region



Winston H. Hickox  
Secretary for  
Environmental  
Protection

Internet Address: <http://www.swrcb.ca.gov/rwqcb8>  
3737 Main Street, Suite 500, Riverside, California 92501-3348  
Phone (909) 782-4130 - FAX (909) 781-6288

Gray Davis  
Governor

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at [www.swrcb.ca.gov/rwqcb8](http://www.swrcb.ca.gov/rwqcb8).*

October 21, 2003

**CERTIFIED MAIL  
RETURN RECEIPT REQUESTED**

Mr. Eric G. Lardiere  
Whittaker Corporation  
1955 N. Surveyor Avenue  
Simi Valley, CA 93063

### **DIRECTIVE TO SUBMIT A WORK PLAN AND CONDUCT A PERCHLORATE INVESTIGATION IN THE VICINITY OF 2298 WEST STONEHURST, CITY OF RIALTO, SAN BERNARDINO COUNTY, CALIFORNIA**

Dear Mr. Lardiere:

Thank you for your response to my June 26, 2003 Directive to Conduct a Records Investigation and Submit a Report Concerning Perchlorate Discharges (Directive) in the Rialto, Colton and Chino Groundwater Basins, San Bernardino County. The Directive was issued to Meggitt-USA, Inc., and Whittaker Corporation (Whittaker). Your response states that Whittaker is an indirect, wholly owned subsidiary of Meggitt-USA, Inc., and therefore Meggitt-USA is a separate corporation with no affiliation to the former facility in Rialto. You have requested that all of our communication regarding the former Amex/Whittaker facility at 2298 West Stonehurst, Rialto, be addressed to Whittaker.

Your letter states that Whittaker owned a majority share of Tasker Industries, Inc., (Tasker) prior to Tasker merging into Whittaker in October of 1972; that Tasker acquired Amex Products, Inc., (Amex) including real properties located at 2298 West Stonehurst, Rialto, in 1969; and that Tasker operated Amex until approximately April of 1971. However, a Union Bank Escrow Department document provided to Board staff by the current owner of the property indicates that Whittaker continued to own the property until its sale to Robert Kennard in 1974. Your response also states that you have conducted a search of Whittaker records for information and documents responsive to my Directive. You have provided copies of certain Whittaker telephone directories; Amex products listings; descriptions of Amex facilities, machinery and equipment; and one Tasker employee list. According to your response, you have not located any additional records at this time.

According to the 1969 Amex Products, Inc., Product Information and Pricing document, provided with your response, Amex was in the business of manufacturing flares and ordnance; leased at least one of the former bunker buildings located on property

*California Environmental Protection Agency*



October 21, 2003

adjacent to the Stonehurst address; operated a chemical laboratory; utilized two buildings (located west of the former bunker) for powder mixing; and operated a test range located on 15 acres northwest of the Amex plant, that included a permanent test stand.

Our research indicates that it is common practice to use perchlorate salts as oxidizers in the manufacturing of flares and ordnance. More specifically, the Contemporary Trade Formula Chart identifies the use of 15%-73% perchlorate in certain Amex products (see Enclosure 5). In addition, Whittaker is known to have used perchlorate in its manufacturing of flares and ordnance at other facilities, such as the former Santa Clarita military flare and munitions facility and facilities outside of California. Based on the evidence, Whittaker's subsidiary, Amex, is suspected of having discharged perchlorate waste that has adversely affected water quality.

This letter sets forth a requirement under California Water Code Section 13267 that Whittaker conduct an investigation to define the lateral and vertical extent of perchlorate in soil and groundwater in the vicinity of 2298 West Stonehurst, Rialto, including the bunker and test range areas. As required by that provision, this letter contains an explanation of the need for the investigation, and cites evidence supporting the requirement.

#### Background

Perchlorate contamination was first detected in groundwater in the Rialto, Colton, and Chino Groundwater Subbasins in 1997. At that time, the California Department of Health Services (DHS) Action Level (AL) for perchlorate in drinking water was 18 parts per billion (ppb). Two wells had perchlorate levels exceeding 18 ppb and were shut down. In January 2002, the DHS lowered the AL to 4 ppb. In response to the reduced AL for perchlorate, the local water purveyors in the Rialto, Colton and Chino Groundwater Subbasins restricted or eliminated the use of additional production wells with perchlorate concentrations that exceeded 4 ppb. Between 1997 and the present, various suspected perchlorate dischargers, including former and current occupants of your property on Stonehurst, have been identified.

#### Requirement for an Investigation

The Regional Board has directed staff to issue individual letters under California Water Code Section 13267 to suspected perchlorate dischargers in the Rialto and Colton Groundwater Subbasins. Several letters similar to this one have already been issued over the last several months to other suspected dischargers and to the owners of affected properties. The Board also expressed a strong desire that suspected perchlorate dischargers work with the local water purveyors to provide a supply of replacement water during the loss or limited use of their production wells.

*California Environmental Protection Agency*



Recycled Paper

October 21, 2003.

The Need for the Investigation

The Santa Ana Regional Water Quality Control Board is charged with the protection of water quality in this Region. We have been working actively with the water purveyors for several years to identify the extent and address the impact of perchlorate contamination on water resources in the Rialto, Colton and Chino Groundwater Subbasins. The water purveyors whose wells have been contaminated with perchlorate now face a state of emergency, and may not be able to provide an adequate water supply to their customers. It is urgent that the sources of the contamination be identified, and the magnitude of the perchlorate plume defined.

Evidence Supporting the Need for the Investigation

Enclosed are the following documents:

1. Well Location Map, showing perchlorate contamination in municipal water supply wells in the vicinity of Rialto, Colton and Fontana, California.
2. Amex Products List including emergency signal flare kits, underwater illumination flares, mortar system, and chaff dispersing rocket heads.
3. Amex Facilities – Description of Buildings, machinery, and equipment.
4. Union Bank Escrow Instructions and Assessor's Map for the sale of Parcel NW 1/3 Section 28, Township 1 North, Range 5 West, located adjacent to West Stonehurst Drive, Rialto to Robert Kennard from Whittaker Corporation dated April 24, 1974.
5. Contemporary Trade Formula Chart identifying certain Amex products and their likely percentage of perchlorate.
6. City of Santa Clarita - Whittaker-Bermite Property Clean-Up Information Sheet and article from Todd Engineers: Whittaker Perchlorate Contamination in Santa Clarita Valley.
7. California Department of Toxic Substances Control-Profile Report of Whittaker-Bermite Facility in Saugus, CA.
8. U.S. EPA Federal Register Notice of Deletion of Whittaker Corporation Superfund Site in Minnesota from Federal Registry.

*California Environmental Protection Agency*



October 21, 2003

The evidence indicates that Amex (subsidiary of Whittaker) manufactured, stored, handled, tested, and burned flares, underwater flares, and ordnance, likely containing perchlorate salts, at the property located at 2298 West Stonehurst, Rialto, California. As a previous owner/occupant of the property, you bear legal liability under California law for discharges that have adversely affected water quality. This evidence supports the requirement for an investigation as defined in Section 13267(b)(1) of the California Water Code.

#### Deadlines

1. A work plan for a soil and groundwater investigation for perchlorate in the vicinity of the former Whittaker property at 2298 West Stonehurst, Rialto must be submitted to Board staff no later than December 16, 2003. The work plan must include a detailed time schedule for the tasks to be conducted. The work plan and time schedule will be subject to my approval.
2. The investigation must commence within 30 days of my approval of the work plan.
3. All analytical results, groundwater measurements, and field information are to be submitted by fax to Board staff within 24 hours of being generated, throughout all stages of work, and during all phases of the investigation. The office fax number to be used for your data transmittals is (909) 781-6288.
4. The final report for the soil and groundwater investigation, including (at a minimum) the borehole logs, well construction details, groundwater elevation data, and soil and groundwater analytical results, must be submitted to Board staff within 30 days of completing the field work.

**Failure to submit the required information by the specified deadline may subject you to administrative civil liability in the amount of up to \$1,000 per day, pursuant to Section 13268(a) and (b) of the California Water Code.**

Finally, please be aware that the Board has directed staff to explore alternative ways of solving the water supply problem in the Rialto, Colton and Chino Groundwater Subbasins. In addition, consistent with the Board's direction, we have issued and will continue to issue similar directives to a number of other suspected dischargers who have operated in the North Rialto area. Thus, there may be opportunities to cooperate with other entities to implement joint investigations or to propose solutions that would address the water supply problem. In fact, we believe it would be both scientifically effective and economically efficient for the suspected dischargers subject to these directives to jointly pursue the investigation and to explore water supply replacement options. Further, consistent with the Board's direction, we recommend that the joint efforts of the suspected dischargers consider both the characterization of the plume and

Mr. Eric G. Lardiere.

-5-

October 21, 2003

initiation of water supply replacement or treatment strategies. Board staff has experience managing similar joint investigations and cooperative solutions and we are available to discuss these further with you. If you are interested in discussing alternative options for complying with this directive, please contact us to arrange a meeting or teleconference.

#### Recovery of Regional Board Expenses

California Water Code Section 13365 addresses the billing process for the Regional Board to recover reasonable expenses for overseeing investigation of illegal discharges, contaminated properties, and other unregulated releases that may adversely affect the State's waters. It is the Regional Board's intent to recover such costs for regulatory oversight work conducted in accordance with this order. A description of the Board's procedure for cost recovery for regulatory oversight of investigations and cleanups will be sent to you under separate cover.

If you have any questions about this letter, or if you would like to arrange a meeting or teleconference, please contact Kamron Saremi, Project Engineer, at (909) 782-4303, or you may call Ann Sturdivant, Chief of our Spills, Leaks, Investigations and Cleanups Section, at (909) 782-4904.

Sincerely,



Gerard J. Thibeault  
Executive Officer

cc w/out enclosures:

Regional Board members  
Jorge Leon, Office of Chief Counsel, SWRCB  
Inland Empire Perchlorate Regulatory Task Force (see mailing list)

*California Environmental Protection Agency*



October 21, 2003

**Enclosures:**

1. Well Location Map, showing perchlorate contamination in municipal water supply wells in the vicinity of Rialto, Colton and Fontana, California.
2. Amex Products List including emergency signal flare kits, underwater illumination flares, mortar system, and chaff dispersing rocket heads.
3. Amex Facilities – Description of Buildings, machinery, and equipment.
4. Union Bank Escrow Instructions and Assessor's Map for the sale of Parcel NW 1/3 Section 28, Township 1 North, Range 5 West, located adjacent to West Stonehurst Drive, Rialto to Robert Kennard from Whittaker Corporation, dated April 24, 1974.
5. Contemporary Trade Formula Chart identifying certain Amex products and their likely percentage of perchlorate.
6. City of Santa Clarita - Whittaker-Bermite Property Clean-Up Information Sheet and article from Todd Engineers: Whittaker Perchlorate Contamination in Santa Clarita Valley.
7. California Department of Toxic Substances Control-Profile Report of Whittaker-Bermite Facility in Saugus, CA.
8. U.S. EPA Federal Register Notice of Deletion of Whittaker Corporation Superfund Site in Minnesota from Federal Registry.
9. Mailing List.

DON/Data/SLIC/Rialto perchlorate/13267/Whittaker2

*California Environmental Protection Agency*





# California Regional Water Quality Control Board

## Santa Ana Region



A  
AES

Winston H. Hickox  
Secretary for  
Environmental  
Protection

Internet Address: <http://www.swrcb.ca.gov/rwqcb8>  
3737 Main Street, Suite 500, Riverside, California 92501-3348  
Phone (909) 782-4130 - FAX (909) 781-6288

Gray Davis  
Governor

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at [www.swrcb.ca.gov/rwqcb8](http://www.swrcb.ca.gov/rwqcb8).*

June 26, 2003

Mr. Eric G. Lardiere  
Whittaker Corporation  
1955 N Surveryor Avenue  
Simi Valley, Ca 93063

Mr. Eric G. Lardiere  
Meggitt-USA Inc.  
1955 N Surveryor Avenue  
Simi Valley, Ca 93063

### **DIRECTIVE TO CONDUCT A RECORDS INVESTIGATION AND SUBMIT A REPORT CONCERNING PERCHLORATE DISCHARGES IN THE RIALTO, COLTON AND CHINO GROUNDWATER BASINS, SAN BERNARDINO COUNTY, CALIFORNIA**

Dear Mr. Lardiere:

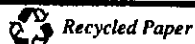
Perchlorate has been detected in municipal water supply wells in the Rialto, Colton and Chino Groundwater Subbasins in Southern California. These water supply wells are located downgradient of the former Whittaker Corporation facility. The facility was used to design, test and fabricate military and commercial pyrotechnic and explosive devices, which are likely to have contained perchlorate. Meggitt-USA Inc., Whittaker Corporation and their subsidiaries and predecessors, including but not limited to American Explosives Company, AMEX Products, Inc., Tasker Industries, and Whittaker Corporation (collectively Meggitt), are suspected dischargers of perchlorate.

This letter sets forth a requirement under California Water Code Section 13267 that Meggitt conduct an investigation of its records of historical operations at the Rialto site. As required by that provision, this letter contains an explanation of the need for the investigation, and cites evidence supporting the requirement.

#### Background

Perchlorate contamination was first detected in groundwater in the Rialto, Colton and Chino Groundwater Subbasins in 1997. At that time, the California Department of Health Services (DHS) Action Level (AL) for perchlorate in drinking water was 18 parts per billion (ppb). Two wells had perchlorate levels exceeding 18 ppb and were shut

*California Environmental Protection Agency*





down. In January 2002, the DHS lowered the AL to 4 ppb. In response to the reduced AL for perchlorate, the local water purveyors in the Rialto, Colton and Chino Groundwater Subbasins restricted or eliminated the use of additional production wells with perchlorate concentrations that exceeded 4 ppb (Enclosure 1). Between 1997 and the present, various suspected perchlorate dischargers, including Meggitt, have been identified.

#### Requirement for an Investigation

The Regional Board has directed staff to issue individual letters under California Water Code Section 13267 to suspected perchlorate dischargers. The Board also expressed a strong desire that suspected perchlorate dischargers work with the local water purveyors to provide a supply of replacement water during the loss or limited use of their production wells.

#### The Need for the Investigation

The Santa Ana Regional Water Quality Control Board is charged with the protection of water quality in this Region. We have been working actively with the water purveyors for several years to identify the extent and address the impact of perchlorate contamination on water resources in the Rialto, Colton and Chino Groundwater Subbasins. The water purveyors whose wells have been contaminated with perchlorate now face a state of emergency, and may not be able to provide an adequate water supply to their customers. It is urgent that the sources of the contamination be identified, and the magnitude of the perchlorate plume defined.

#### Evidence Supporting the Need for the Investigation and Report

Evidence indicates that American Explosives Company ("AEC") and AMEX Products operated a facility in Rialto, California from the late 1960's through approximately 1973. A City of Rialto Building Permit Application indicates that AEC operated a facility in the Rialto in the late 1960's (Enclosure 2). Other evidence indicates that AEC utilized an explosives storage bunker in Rialto (Enclosure 3). On or about September 2, 1969, AEC changed its name to AMEX Products, Inc. (Enclosure 4). Thereafter, AMEX Products became a division of Tasker Industries (Enclosure 5).

The Pacific Telephone and Telegraph Company directory for 1970 (page 129) contains a listing for AMEX Products Division of Tasker Industries, which indicated that AMEX Products had a plant and general office located at 2298 W. Stonehurst and a test range on Alder (Enclosure 5). These addresses, while listed as being in Fontana, are believed to be in what is presently Rialto. This directory listing further indicates that AMEX Products designed, tested and fabricated military and commercial pyrotechnic and explosive devices. Other historical evidence also indicates that AMEX and AEC produced explosives in Rialto (Enclosure 6).

On or about October 29, 1972, Tasker Industries merged into Whittaker Corporation (Enclosure 7). Records indicate that Whittaker Corporation thereafter owned the Rialto

facility until it sold the facility in or about 1974 (Enclosure 8). On or about July 14, 1999, Meggitt PLC acquired Whittaker Corporation (Enclosure 9).

Perchlorate is used in explosives and pyrotechnics. Records indicate that perchlorate and perchlorate containing materials were burned, detonated and otherwise disposed of at Broco. Other sites involved with the manufacture of explosives and the testing, burning and disposal of perchlorate-containing materials and wastes have had documented perchlorate discharges and contamination (e.g., [www.geotracker.swrcb.ca.gov/perchlorate](http://www.geotracker.swrcb.ca.gov/perchlorate)). An investigation by the County of San Bernardino in the vicinity of Broco's former Rialto operations and storage bunkers has revealed perchlorate contamination in the groundwater.

Based on the evidence, Meggitt is suspected of having discharged perchlorate waste that has adversely affected water quality. This evidence supports the requirement for an investigation, as defined in Section 13267(b)(1) of the California Water Code.

#### Deadlines

By July 31, 2003, a report containing the following information shall be submitted to the Regional Board staff:

1. A detailed description of Meggitt's past and present operations in the Rialto, Colton and Chino Groundwater Subbasins, including but not limited to, whether and when it used or handled perchlorate or perchlorate-containing materials and the approximate quantities of such materials; the operations, processes and activities involving perchlorate and perchlorate-containing materials, including testing and waste disposal practices; whether materials, off-spec or defective materials, or other wastes were burned or buried; any known or suspected discharges of perchlorate; any accidents, explosions or fires that may have occurred; and any other information that would be helpful in determining whether a discharge of perchlorate occurred from Meggitt's operations.
2. Any documents pertaining to and/or describing Meggitt's operations in Rialto, Colton and Chino Groundwater Subbasins, including but not limited to maps, plans, diagrams and photographs of the facility and its operations, records pertaining to perchlorate and perchlorate-containing materials, waste disposal records, operating procedures, environmental investigation and remediation reports, and employee lists.

**Failure to submit the required information by the specified deadline will subject you to administrative civil liability in the amount of up to \$1,000 per day pursuant to Section 13268(a) and (b) of the California Water Code.**

Finally, please be aware that the Board has directed staff to explore alternative ways of solving the water supply problem in the Rialto, Colton and Chino Groundwater Subbasins. In addition, consistent with the Board's direction, we have issued and will continue to issue similar directives to a number of other suspected dischargers who have operated in the Rialto, Colton and Chino Subbasins. Thus, there may be opportunities to cooperate with other entities to implement joint investigations or to

June 26, 2003

propose solutions that would address the water supply problem. In fact, we believe it would be both scientifically effective and economically efficient for the suspected dischargers subject to these directives to jointly pursue the investigation and to explore water supply replacement options. Further, consistent with the Board's direction, we recommend that the joint efforts of the suspected dischargers consider both the characterization of the contamination and initiation of water supply replacement or treatment strategies. Board staff has experience in managing similar joint investigations and cooperative solutions. If you are interested in discussing such joint efforts, please contact us to arrange a meeting.

Recovery of Regional Board Expenses

California Water Code Section 13365 addresses the billing process for the Regional Board to recover reasonable expenses for overseeing investigation of illegal discharges, contaminated properties, and other unregulated releases that may adversely affect the State's waters. It is the Regional Board's intent to recover such costs for regulatory oversight work conducted in accordance with this order. A description of the Board's procedure for cost recovery for regulatory oversight of investigations and cleanups will be sent to you under separate cover.

If you have any questions about this letter, please contact Kamron Saremi at (909) 782-4303 or you may call Ann Sturdivant, Chief of our Spills, Leaks, Investigations and Cleanups Section, at (909) 782-4904.

Sincerely,



for Gerard J. Thibeault  
Executive Officer

Enclosures:

1. Well Location Map, showing perchlorate contamination in municipal water supply wells.
2. American Explosives, Application for Building Permit, Department of Building and Safety, City of Rialto.
3. Diagram of explosive storage bunkers, Rialto, California.
4. Corporate Records & Business Registrations, Westlaw, June 28, 2002.
5. Excerpt from Pacific Telephone and Telegraph Company Directory, 1970.
6. Letter from O.D. Peters, Trojan Fireworks Co., to City of Rialto Planning Commission, January 9, 1973.
7. Tasker Industries, California Secretary of State, corporate records, March 5, 2003.
8. Escrow Instructions, Union Bank, April 24, 1974.
9. Press Release, Meggitt PLC, July 14, 1999; Schedule 14D-1, Securities and Exchange Commission.
10. Mailing List

*California Environmental Protection Agency*



Recycled Paper

Mr. Eric G. Lardiere

- 5 -

June 26, 2003

cc (w/out enclosures):

Regional Board members

Jorge Leon, Office of Chief Counsel, SWRCB

Wayne Praskins, U.S. EPA, Region IX

Inland Empire Perchlorate Task Force members (mailing list attached)

***California Environmental Protection Agency***



Recycled Paper

California Department of Health Services  
464 W. Fourth St., Ste. 437  
San Bernardino, CA 92402

Anthony Araiza  
West Valley Water District  
P.O. Box 920  
Rialto, CA 92377-0920

Wendy Arano  
California Dept. of Toxic Substances Control  
Geology & Corrective Action Branch  
5796 Corporate Ave.  
Cypress, CA 90630

Ken Ayers  
County of San Bernardino  
Office of the District Attorney  
412 W. Hospitality Lane, Ste. 301  
San Bernardino, CA 92415-0023

Karen Baker  
California Dept. of Toxic Substances Control  
Geology & Corrective Action Branch  
5796 Corporate Ave.  
Cypress, CA 90630

Brad Baxter  
City of Rialto  
Public Works Department  
P. O. Box 920  
Rialto, CA 92736

Gerald J. Black  
Fontana Water Company  
P.O. Box 987  
Fontana, CA 92335

Mike Bledsoe  
California Integrated Waste Management  
P.O. Box 4025  
Sacramento, CA 95812-4025

Bob Borzelleri  
California Dept. of Toxic Substances Control  
P.O. Box 806  
Sacramento, CA 95812-0806

Christine Brown  
California Dept. of Toxic Substances Control  
Geology & Corrective Action Branch  
5796 Corporate Ave.  
Cypress, CA 90630

Jim Bryson  
Fontana Water Company  
P.O. Box 987  
Fontana, CA 92335

Jerry Eagans  
West Valley Water District  
P.O. Box 920  
Rialto, CA 92377-0920

Steven Elie  
Musick, Peeler & Garrett  
One Wilshire Blvd.  
Los Angeles, CA 90017-3383

Cindy Forbes  
California Department of Health Services  
Drinking Water Field Operations Branch  
1040 E. Herndon Ave., Ste. 205  
Fresno, CA 93720

Peter Fox  
City of Rialto  
Public Works Department  
P. o. Box 920  
Rialto, CA 92736

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

Jorge Leon  
California State Water Resources Control Board  
Legal Division  
1001 "I" Street, 22nd Floor  
Sacramento, CA 95814

Leon Long  
West Valley Water District  
P.O. Box 920  
Rialto, CA 92377-0920

Tim Mim Mack  
City of Rialto  
P. O. Box 920  
Rialto, CA 92376

Sarah Mueller  
U. S. EPA - Region 9  
75 Hawthorne Street  
San Francisco, CA 94105

Robert Owen  
City of Rialto  
P. O. Box 920  
Rialto, CA 92376

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

Patrick J. King  
Thirty-second Senatorial District TEST 1  
822 N. Euclid Ave., Suite A  
Ontario, CA 91762

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

Mike McGraw  
Fontana Water Company  
P.O. Box 987  
Fontana, CA 92335

Matt Mitguard  
U.S. EPA, Region IX (Region 9)  
75 Hawthorne Street  
San Francisco, CA 94105-3901

Karen A. O'Hare  
California State Water Resources Control Board  
Legal Division  
1001 "I" Street, 22nd Floor  
Sacramento, CA 95814

Dennis Parfitt  
California State Water Resources Control Board  
Division of Clean Water Programs  
1001 "I" Street, 22nd Floor  
Sacramento, CA 95814

Wayne Praskins  
U. S. EPA - Region 9  
75 Hawthorne Street  
San Francisco, CA 94105

Tom Soto  
PS Enterprises  
3350 Ocean Park Blvd., Ste. 205  
Santa Monica, CA 92405

Lynn Takaichi  
Kennedy/Jenks Consultants, Inc.  
1000 Hill Rd., Suite 200  
Ventura, CA 93003

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

Mike Whitehead  
Fontana Water Company  
P.O. Box 987  
Fontana, CA 92335

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

Aaron Yue  
California Dept. of Toxic Substances Control  
Geology & Corrective Action Branch  
5796 Corporate Ave.  
Cypress, CA 90630

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

Nell Soto  
Thirty-second Senatorial District  
The Honorable Senator Nell Soto  
State Capital, Room 4074  
Sacramento, CA 95814

Gene Tanaka, Esq.  
Best, Best & Kreiger  
3750 University Ave., Mission Square  
Riverside, CA 92501

Susan M. Trager  
Law Offices of Susan M. Trager  
19712 MacArthur Blvd., Ste. 120  
Irvine, CA 92612

Michael Wochnick  
California Integrated Waste Management  
P.O. Box 4025  
Sacramento, CA 95812-4025

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



# California Regional Water Quality Control Board

## Santa Ana Region



Winston H. Hickox  
Secretary for  
Environmental  
Protection

Internet Address: <http://www.swrcb.ca.gov/rwqcb8>  
3737 Main Street, Suite 500, Riverside, California 92501-3348  
Phone (909) 782-4130 - FAX (909) 781-6288

Gray Davis  
Governor

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at [www.swrcb.ca.gov/rwqcb8](http://www.swrcb.ca.gov/rwqcb8).*

December 16, 2002

Mr. George Zambelli Sr., President  
Zambelli Fireworks Manufacturing Company  
Aka Zambelli Fireworks Internationale  
27 East Maitland Lane  
New Castle, PA 61605

### **DIRECTIVE TO SUBMIT A WORK PLAN AND CONDUCT A SOIL AND GROUNDWATER INVESTIGATION IN THE VICINITY OF THE FORMER ZAMBELLI FIREWORKS STORAGE BUNKER, 2170 WEST STONEHURST, CITY OF RIALTO, SAN BERNARDINO COUNTY, CALIFORNIA**

Dear Mr. Zambelli:

As our staff has informed you by telephone, perchlorate has been detected in municipal water supply wells in the Rialto, Colton and Chino Groundwater Subbasins. These water supply wells are located downgradient of the former storage bunker that was used by Zambelli Fireworks Manufacturing, also known as Zambelli Fireworks Internationale (hereinafter Zambelli) from 1982 (and possibly earlier) until 1991. Information that local businesses provided to us in response to subpoenas indicates that Zambelli and several other pyrotechnic companies used and stored products containing perchlorate salts in the former bunkers. This letter sets forth a requirement under California Water Code Section 13267 that Zambelli conduct an investigation to define the lateral and vertical extent of contaminants, principally perchlorate, in soil and groundwater in the vicinity of the former bunker area in North Rialto. As required by that provision, this letter contains an explanation of the need for the investigation, and cites evidence supporting the requirement.

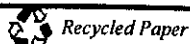
#### Background

Perchlorate contamination was first detected in groundwater in the Rialto, Colton and Chino Subbasins in 1997. At that time, the California Department of Health Services (DHS) Action Level (AL) for perchlorate in drinking water was 18 parts per billion (ppb). Two wells had perchlorate levels exceeding 18 ppb and were shut down. In January 2002, the DHS lowered the AL to 4 ppb. In response to the reduced AL for perchlorate, the local water purveyors in the Rialto, Colton and Chino Groundwater Subbasins restricted or eliminated the use of additional production wells with perchlorate concentrations that exceeded 4 ppb. Between 1997 and the present, various suspected perchlorate dischargers, including Zambelli, have been identified.

#### Requirement for an Investigation

The Regional Board has directed staff to issue individual letters under California Water Code Section 13267 to suspected perchlorate dischargers. The Board also expressed a strong desire

*California Environmental Protection Agency*





that suspected perchlorate dischargers work with the local water purveyors to provide a supply of replacement water during the loss or limited use of their production wells.

### The Need for the Investigation

The Santa Ana Regional Water Quality Control Board is charged with the protection of water quality in this Region. We have been working actively with the water purveyors for several years to identify the extent and address the impact of perchlorate contamination on water resources in the Rialto, Colton and Chino Groundwater Subbasins. The water purveyors whose wells have been contaminated with perchlorate now face a state of emergency, and may not be able to provide an adequate water supply to their customers. It is urgent that the sources of the contamination be identified, and the magnitude of the perchlorate plume defined.

### Evidence Supporting the Need for the Investigation

Enclosed are the following documents:

1. Enclosure 1 – Well Location Map, showing perchlorate contamination in municipal water supply wells.
2. Enclosure 2 – Minutes from a November 12, 1987 meeting held by the Rialto Fire Department, in which the owners, contents, and usage of the former storage bunkers that were located North Rialto are described (document obtained from American Promotional Events, Inc. - West in response to subpoena).
3. Enclosure 3 – Notification letters and permitting requirements from the City of Rialto Fire Department to Zambelli Fireworks Manufacturing Co., dated June 28 and October 21, 1988.
4. Enclosure 4 – Plot Plan showing the former configuration of the storage bunkers, and list of tenants and lessors using the bunkers.

The evidence indicates that from the early 1980s to 1991, the Zambelli family handled, stored, or manufactured fireworks at the Rialto site. In addition, City of Rialto records indicate that on-site disposal systems have been used at the site since it was first occupied for industrial use. Perchlorate has been detected in groundwater downgradient of the former bunker occupied by Zambelli. Based on the evidence, Zambelli is suspected of having discharged perchlorate waste that has adversely affected water quality. This evidence supports the requirement for an investigation, as defined in Section 13267(b)(1) of the California Water Code.

### Deadlines

1. A detailed description of Zambelli's historical activities at the former bunker site, and a work plan for soil and groundwater investigation for perchlorate in the vicinity of the former storage bunker used by Zambelli, must be submitted to Board staff by January 31, 2003. A proposed time schedule for completion of each task in the investigation must be included in the work plan. The work plan will be subject to my approval.
2. The investigation must commence within 30 days of approval.
3. All analytical results, groundwater measurements, and field information are to be submitted by fax to Board staff within 24 hours of being generated, throughout all stages of work, and during all phases of the investigation. The office fax number to be used for your data transmittals is (909) 781-6288.

4. The final report for this soil and groundwater investigation, including (at a minimum) the borehole logs, well construction details, groundwater elevation data, and soil and groundwater analytical results, must be submitted to Board staff within 30 days of completing the field work.

**Failure to submit the required information by the specified deadline will subject you to administrative civil liability in the amount of up to \$1,000 per day pursuant to Section 13268(a) and (b) of the California Water Code.**

Finally, please be aware that the Board has directed staff to explore alternative ways of solving the water supply problem in the Rialto, Colton and Chino Groundwater Subbasins. In addition, consistent with the Board's direction, we will be issuing similar directives to a number of other suspected dischargers who have operated in the North Rialto area. Thus, there may be opportunities to cooperate with other entities to implement joint investigations or to propose solutions that would address the water supply problem. In fact, we believe it would be both scientifically effective and economically efficient for the suspected dischargers subject to these directives to jointly pursue the investigation and to explore water supply replacement options. Further, consistent with the Board's direction, we recommend that the joint efforts of the suspected dischargers consider both the characterization of the plume and initiation of water supply replacement or treatment strategies. Board staff has experience in managing similar joint investigations and cooperative solutions and we are available to discuss these further with you. If you are interested in discussing alternative options for complying with this directive, please contact us to arrange a meeting.

If you have any questions about this letter, please contact Kamron Saremi at (909) 782-4303, or you may call Ann Sturdivant, Chief of our Spills, Leaks, Investigations and Cleanups Section, at (909) 782-4904.

Sincerely,

Gerard J. Thibeault  
Executive Officer

Enclosures:

1. Well Location Map, showing perchlorate contamination in municipal water supply wells.
2. Minutes from a November 12, 1987 meeting held by the Rialto Fire Department, in which the owners, contents, and usage of the former storage bunkers that were located North Rialto are described (document obtained from American Promotional Events, Inc. - West in response to subpoena).
3. Notification letters and permitting requirements from the City of Rialto Fire Department to Zambelli Fireworks Manufacturing Co., dated June 28 and October 21, 1988.
4. Plot Plan showing the former configuration of the storage bunkers, and list of tenants and lessors using the bunkers.
5. Mailing List.



cc w/out enclosures:

Regional Board

Jorge Leon, Office of Chief Counsel, SWRCB

Aaron Yue, DTSC, Cypress Office

Inland Empire Perchlorate Regulatory Task Force (mailing list attached)

Scott Goulart, Aerojet - a subsidiary of GenCorp, Sacramento, California

Ken Miller, County of San Bernardino Department of Public Works

Dan Coyle - Downey Brand Seymour & Rohwer, LLP, representing American  
Promotional Events, Inc. - West

Peter Duchesneau - Manatt, Phelps & Phillips, representing Goodrich Corporation

Charles Whisonant, representing Denova Environmental

Allen Curlee, Office of the District Counsel, U.S. Army Corps of Engineers, Sacramento

Robert Wyatt - Allen, Matkins, Leck, Gamble & Mallory, LLP, representing Emhart/Black and  
Decker

Jim Good - Gresham, Savage, Nolan & Tilden, LLP, representing Pyro Spectaculars, Inc.

AES/Data/SLIC/Rialto perchlorate 01-02/13267/zambelli

