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VIA: E-MAIL and US MAIL

January 10, 2006

Mr. Hector Hernandez
California Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place, Suite 101
San Luis Obispo, California 93401

**Subject: Progress Report #41
Field Activities December 1 through 31, 2005
Morgan Hill, California**

Dear Mr. Hernandez:

Pursuant to the November 18, 2002, Regional Water Quality Control Board (RWQCB) letter, this report summarizes Olin's progress related to investigation and remediation activities associated with the Cleanup and Abatement Orders (CAOs) and Monitoring and Reporting Programs (MPRs) associated with the Olin/Standard Fusee site located at 425 Tennant Avenue, Morgan Hill, California. The following is a summary of activities from December 1 through 31, 2005.

CAO R3-2004-0101 – Replacement Water Provisions and Ion Exchange System Installation

Replacement Water:

Olin continues to provide bottled drinking water to well owners and tenants in accordance with RWQCB CAO No. R4-2004-0101, as revised by the State Water Resources Control Board in its Order No. WQO 2005-0007. Pursuant to this revised CAO, Olin's September 2005 request to discontinue bottled water to 78 wells is pending before the Water Board. On December 14, 2005, the RWQCB issued Resolution R3-2006-0014 confirming that Olin's request met the CAO requirements to cease bottled water. Olin's request will be considered before the Central Coast Water Board on February 10, 2006. Quarterly sampling of domestic wells is proceeding as directed and is further described under MRP 2001-161

Ion Exchange (IX) System Installation:

Based on the revised CAO (WQ 2005-0007) and current perchlorate data as of Third Quarter 2005, 34 wells are candidates for alternative water supply as described in the Revised Alternative Water Supply Implementation Work Plan (MACTEC 9/05). As of December 31, 2005 Olin has or is implementing IX systems on 18 wells of these wells. There are 9 IX units installed and operating as designed, installation is in progress at 3 wells, final IX design is pending for 2 systems, evaluations continue at 2 wells and access remains pending at 2 wells.

**Item No. 20 Attachment 1
Perchlorate Cleanup Sites
Feb. 9-10, 2006 Meeting**

CAO R3-2005-0014 – Llagas Subbasin Characterization and Remediation

Llagas Subbasin Monitoring Plan:

The Monitoring Plan submitted April 9, 2005 was granted partial approval on June 16, 2005. As part of the partial approval, the RWQCB effectively split the CAO required Monitoring Well Installation and Characterization Work Plan into separate documents (see paragraphs below). The additional information requested in the Regional Board's letter was submitted via e-mail to the RWQCB on June 17th, 2005. To further address the RWQCB's information request, Olin prepared a report titled *Preliminary Groundwater Flow Assessment for the City of Gilroy* and participated in a meeting with representatives of the City of Gilroy. During December, Olin representatives continued evaluating and discussing with the City of Gilroy possible options for retrofitting of sentry wells. Full RWQCB approval of the Llagas Subbasin Monitoring Plan remains pending.

Monitoring Well Installation and Characterization Work Plan:

The Llagas Subbasin Monitoring Well Installation Work Plan was submitted on July 5, 2005 and subsequently approved by the RWQCB on August 3, 2005. Implementation of the monitoring work plan continued in December including the completion of drilling activities, development of monitoring wells, and well surveying. All monitoring well installation activities were concluded on December 30, 2005. Pursuant to the work plan, Olin will submit the Llagas Subbasin Monitoring Well Installation Report by January 30, 2006.

The Llagas Subbasin Characterization Work Plan was submitted on August 12, 2005. The RWQCB provided comments on the Llagas Subbasin Characterization Work Plan in a letter dated September 23, 2005. On October 24, 2005, Olin submitted a Revised Llagas Subbasin Characterization Work Plan (Revised Work Plan). On December 20, 2005 the RWQCB provided conditional approval of the Revised Work Plan, but requested certain detailed information to be submitted by either January 11, 2006 or March 30, 2006. Due to the compressed schedule and numerous document submittal dates scheduled for January 2006, a request for extension of the January 11 due date was initiated and subsequently granted. The revised due date is February 3, 2006.

While full RWQCB approval of the Revised Work Plan remains pending, in an effort to collect meaningful characterization data for the first annual Llagas Subbasin Characterization Report (due in March 2006), during December 2005 Olin initiated several tasks described in the Revised Work Plan. In December, Olin initiated the South of Site Assessment consisting of CPT investigation and acquisition of multiple groundwater samples from 29 locations. Additional single screen wells were installed at MW-16 and installation of single-screen and multi-port wells is proceeding approximately 200 feet east of MW-16. In addition, an analysis of wells for the Shallow Aquifer Evaluation continues, as is the evaluation of the Gilroy Area/Sentry wells and Southern Extent.

MRP 2001-161 Reporting – On-site and Off-site Well Sampling Activities

In an effort to consolidate multiple documents that comprise the on-Site and off-Site monitoring requirements, in November 2005 the RWQCB issued a revised and combined MRP 2001-161 (Consolidated MRP) and subsequently rescinded MRP 2003-168. On December 20, 2005, Olin and RWQCB representatives met to discuss the Consolidated MRP in an effort obtain clarification and eliminate inconsistencies in the Consolidated MRP. Olin is continuing to perform monitoring pursuant to our understanding that the

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RWQCB's intent is consolidations of MRP 2003-0168 and MRP 2001-161 (August 31, 2005 revision).

On-site Well Sampling Activities:

The monthly on-site monitoring program was conducted during December 2005. The water-level measurements included 20 monitoring wells, and 26 nested BarCad® wells at 8 locations. The results will be included in the Fourth Quarter 2005 monitoring report to be submitted to the RWQCB by January 30, 2006.

Off-site Well Sampling:

The collection of off-site samples continued for the Fourth Quarter 2005 monitoring event. Between December 1 through 31, 2005, groundwater samples were collected from 65 wells. The results will be included in the Fourth Quarter 2005 monitoring report to be submitted to the RWQCB by January 30, 2006.

MRP 2003-168 Reporting – Groundwater Containment & Treatment System Activities

Groundwater Containment System Operations:

Full-time treatment system operations continued in December 2005. During December, the system extracted and removed perchlorate from over 3.7 million gallons of groundwater. To date, perchlorate has been removed from nearly 89 million gallons of water. Data from the treatment system operations will be presented in the Fourth Quarter 2005 Containment, Treatment, and In Situ Bioremediation Report and submitted to the RWQCB by January 30, 2006.

Soil In Situ Bioremediation (ISB) System Operations:

The ISB system operations continued in December 2005. Lysimeter and moisture sensor data were collected in mid December and early January. To date, nearly 3 million gallons of GWTS effluent, amended with citric acid, have been applied to the ISB infiltration unit. Soil remediation monitoring of the in situ bioremediation system will be presented in the Fourth Quarter 2005 Containment, Treatment, and In Situ Bioremediation Report and submitted to the RWQCB by January 30, 2006.

On-Site Recharge System:

Components of the on-site recharge system were documented in the 90% Engineering Design Report submitted to the RWQCB on December 19, 2005 for review and approval. As part of the recharge system, three injection wells were installed December 18 - 22, 2005. Development and testing of the injection wells is tentatively scheduled for mid-January followed by installation of the conveyance piping and well head works.

West San Martin Water Works Ion Exchange Systems

The West San Martin Water Works ion exchange systems installed on the County and Colony wells were operational during December. At the County well, perchlorate was removed from an estimated 4.6 million gallons of water during December. To date, perchlorate has been removed from approximately 170 million gallons of water. At the Colony well, perchlorate was removed from an estimated 1.4 million gallons of water during December. To date, perchlorate has been removed from approximately 57 million gallons of water. Since the August 2003 installation of the ion exchange systems, over 227

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million gallons of potable water have been provided to over 450 homes in the San Martin community,

San Martin County Water District Ion Exchange System

The San Martin County Water District ion exchange system was operational during December. At the Camping World well, perchlorate was removed from an estimated 2.3 million gallons of water during December. Since the February 2004 installation of the ion exchange systems, over 82 million gallons of potable water have been provided to over 250 homes in the San Martin community.

Northeast Groundwater Flow Assessment

Manual depth to groundwater measurements were collected at the single screen and CMT piezometers and download of transducer data were performed biweekly during December. On December 20, 2005 Olin met with RWQCB, SCVWD and the City of Morgan Hill representatives to present an evaluation and technical analysis of data that has been collected as part of the Northeast Flow Assessment.

Upcoming Reports

Due Date

- Monitoring and Reporting Program 2001-161:
 - 4th Quarter 2005 Offsite Groundwater Monitoring Report 1/30/06
 - 1st Quarter 2006 Offsite Groundwater Monitoring Report 4/30/06
 - 2nd Quarter 2006 Offsite Groundwater Monitoring Report 7/30/06
- Monitoring and Reporting Program 2003-168:
 - 4th Quarter 2005 Containment and Treatment Report 1/30/06
 - 1st Quarter 2006 Containment and Treatment Report 4/30/06
 - 2nd Quarter 2006 Containment and Treatment Report 7/30/06
- Monthly Progress Reports 10th of each month
- Northeast Groundwater Flow Assessment Updates:
 - Appendix of 4th Quarter 2005 Monitoring Report 1/30/06
 - Northeast Sampling Results (November 2005 Sampling) 1/31/06
 - Appendix of 1st Quarter 2006 Monitoring Report 4/30/06
- Llagas Subbasin Characterization and Remediation CAO:
 - Llagas Subbasin Monitoring Well Installation Report 1/30/06
 - Llagas Subbasin Cleanup Level Report 1/31/06
 - Dec. 20, 2005 Additional Information Request 2/3/06
 - Plume Migration Control Assessment Report 3/03/06
 - Llagas Subbasin Characterization Report 3/30/06
 - Llagas Subbasin Cleanup Feasibility Study Report 6/30/06

Olin will continue to provide monthly progress reports of field activities. If you have any questions or require further assistance, please call me.

Sincerely,
OLIN CORPORATION

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Richard W. McClure, P.G., REM
Environmental Remediation Group

cc (via e-mail):

Mr. Eric Gobler, Regional Board – Central Coast Region
Ms. Leslie Griffin, P.E., GeoSyntec
Ms. Sylvia Hamilton, PCAG Chair
Mr. Thomas Mohr, Santa Clara Valley Water District
Mr. Donald Smallbeck, MACTEC
Mr. Curt Richards, Olin