



September 17, 2004

Mr. Arthur G. Baggett, Jr., Chair
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812

Subject: Support for the Central Coast Regional Water Quality Control Board's Cleanup and Abatement Order No. R4-2004-0101 Requiring Action by Olin Corporation to Provide Interim and Permanent Replacement Water to Users of Perchlorate Impacted Wells [SWRCB/OCC File Number A-1654 and A-1654(a)]

Dear Mr. Baggett:

The Perchlorate Working Group (PWG) and the Perchlorate Community Advisory Group (PCAG) appreciate the opportunity to comment on Olin and Standard Fusee's recent petitions to the State Water Resources Control Board. The PCAG is a citizen group formed to provide community oversight to the Central Coast Regional Water Quality Control Board's administration of the Olin/Standard Fusee perchlorate case. The PWG is comprised of the local public agencies (the Cities of Morgan Hill and Gilroy, the County of Santa Clara, and the Santa Clara Valley Water District) that represent the area affected by the Olin/Standard Fusee perchlorate case. We have a shared interest in long-term alternative water supplies for the affected community. Olin and Standard Fusee are requesting a stay of the requirements of the Cleanup and Abatement Order that addresses alternative water supplies. For the reasons provided below, we urge the State Water Resources Control Board to uphold the requirements and compliance schedules in the Order while the appeal is being considered.

Perchlorate has severely impacted the communities of San Martin, Morgan Hill, and Gilroy (see attached map of impacted area). We share a common resource, the Llagas Groundwater Subbasin, upon which we are wholly dependent for our drinking water supply. We learned in 2003 that our water supply had been impacted with perchlorate released from the Olin/Standard Fusee site over the last 47 years. The presence of perchlorate in our groundwater took away our ability to rely upon our domestic and municipal water supply wells for safe drinking water. We have no alternative water supply, as our cities rely entirely upon groundwater and there is

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no central water distribution system serving private homes in the unincorporated community of San Martin.

To provide alternative water supply for the impacted community, bottled water was delivered to more than 1,500 families served by impacted or jeopardized private wells, initially by the Santa Clara Valley Water District, and subsequently by Olin. Perchlorate has also required the City of Morgan Hill and the Santa Clara Valley Water District to equip two of Morgan Hill's five impacted supply wells with ion exchange resin treatment units. Morgan Hill's perchlorate-impacted wells account for nearly 25% of the City's available water production capacity. Morgan Hill supplies water to more than 34,000 people. Two private water companies serving several hundred families and a primary school are also treating groundwater with ion exchange units. These systems were equipped by Olin Corporation. Similarly, the City of Gilroy has been forced to budget for treatment contingencies, including acquiring land upon which to operate future treatment systems. Gilroy's wells lie in the path of the 10-mile-long and growing perchlorate plume emanating from the Olin/Standard-Fusee site.

We are firm in our belief that the Central Coast Regional Water Quality Control Board's Order requiring Olin and Standard Fusee to provide alternative water supply to the impacted community is appropriately responsive to the pervasive and pernicious nature of the perchlorate problems facing San Martin, Morgan Hill, and Gilroy. The affected community was very appreciative of the Regional Board's action as it was responsive to their most important needs. Since the Department of Health Services Drinking Water Action Level was raised from 4 to 6 parts per billion (ppb) upon finalization of the Public Health Goal (PHG), Olin has sought to raise the threshold requirement for provision of alternative water supply. We understand that Olin's motivation to seek this revision stems from a framework of logic applying numeric and monetary considerations. However, their pursuit of relief from these requirements ignores certain realities of the nature of the problem.

Data collected by Olin and the Santa Clara Valley Water District have shown widely fluctuating levels of perchlorate in individual private wells sampled repeatedly over the past two years. Perchlorate concentrations in individual private wells have fluctuated from non-detect to above the current Action Level, and in the extreme case for one well supplying 25 families, from non-detect to 100 ppb. A monitoring well at the Olin site has fluctuated from 780 ppb to non-detect.

Olin's reliance upon private wells screened over multiple or long intervals has produced a highly variable data set. The high degree of variability of perchlorate levels in these wells greatly increases the uncertainty that well owners must account for when deciding whether their well water is safe to drink. In addition, as both the PWG and PCAG have stated before, Olin does not have an appropriate monitoring well network in place for the off-site portion of the 10-mile-long plume. The absence of a network of properly designed monitoring wells has prevented and continues to prevent reliable characterization of perchlorate distribution in groundwater.

Private well owners in the community have expressed many concerns that they believe should be considered as part of this appeal. These include the following:

A. Total exposure to perchlorate.

Adding to the uncertainty surrounding drinking water safety is the unknown nature of total exposure to perchlorate. We have now seen published data showing that perchlorate is found to concentrate in a wide variety of vegetables, fruits, and other crops, and that nearly all milk samples analyzed have had detectable levels of perchlorate. We are also learning that the iodide uptake inhibition is affected by several chemicals present in food and drinking water such as nitrate and thiocyanates which may have an additive effect on the thyroid, increasing the risk of adverse effects from perchlorate.

B. What is safe?

There does appear to be a pronounced divergence of opinion on the safe level for perchlorate in drinking water. In the State draft PHG there was reference to 2 ppb being deemed harmful to the embryo and infants. Subsequently, state agency scientists proclaimed that there are no risks below 6 ppb. These changes have left private well owners uncertain about the safety of their well water.

C. The changing health risk levels.

Private citizens are perplexed at the varying advisory levels for perchlorate issued over a relatively short period of time. In the span of 2½ years the Action Level was lowered from 18 ppb to 4 ppb and then raised to 6 ppb. Throughout the same 2½-year timeframe the United States Environmental Protection Agency has proposed a reference dose which yields a 1 ppb goal for perchlorate in drinking water. This leaves the private citizen confused and uncertain as to what is safe.

Olin's petition requests a stay of the requirements of the Cleanup and Abatement Order. We urge the State Water Resources Control Board to uphold the requirements and compliance schedules in the Order while the appeal is being considered. The Order requires Olin to proceed with implementing a permanent solution for those wells with the impacts above the Action Level, i.e., greater than 6 ppb. These provisions should be upheld regardless of the State Water Resources Control Board's deliberations.

Olin should nevertheless be required to fulfill their obligation to provide an alternative source of water to well owners with perchlorate impacts down to the 4 ppb state-certified laboratory reporting limit, due to the large degree of technical uncertainty. The well owner can be certain only that his well is contaminated, and cannot get assurance that the levels of perchlorate detected will remain below the Action Level.

We hereby call upon the State Water Resources Control Board to carefully weigh the unprecedented scale of groundwater contamination impacts to our community against Olin's

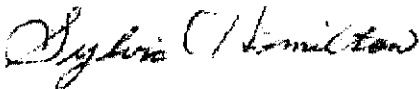
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request to not be required to provide an alternative water supply to impacted well owners. We are confident that you will give consideration to the extensive impacts suffered by our residents, businesses, and municipal water utilities, and that the State Water Resources Control Board will uphold the Cleanup and Abatement Order in its entirety.

Sincerely,



Stan Williams
Chief Executive Officer
Santa Clara Valley Water District



Sylvia Hamilton, President
Perchlorate Community Advisory Group

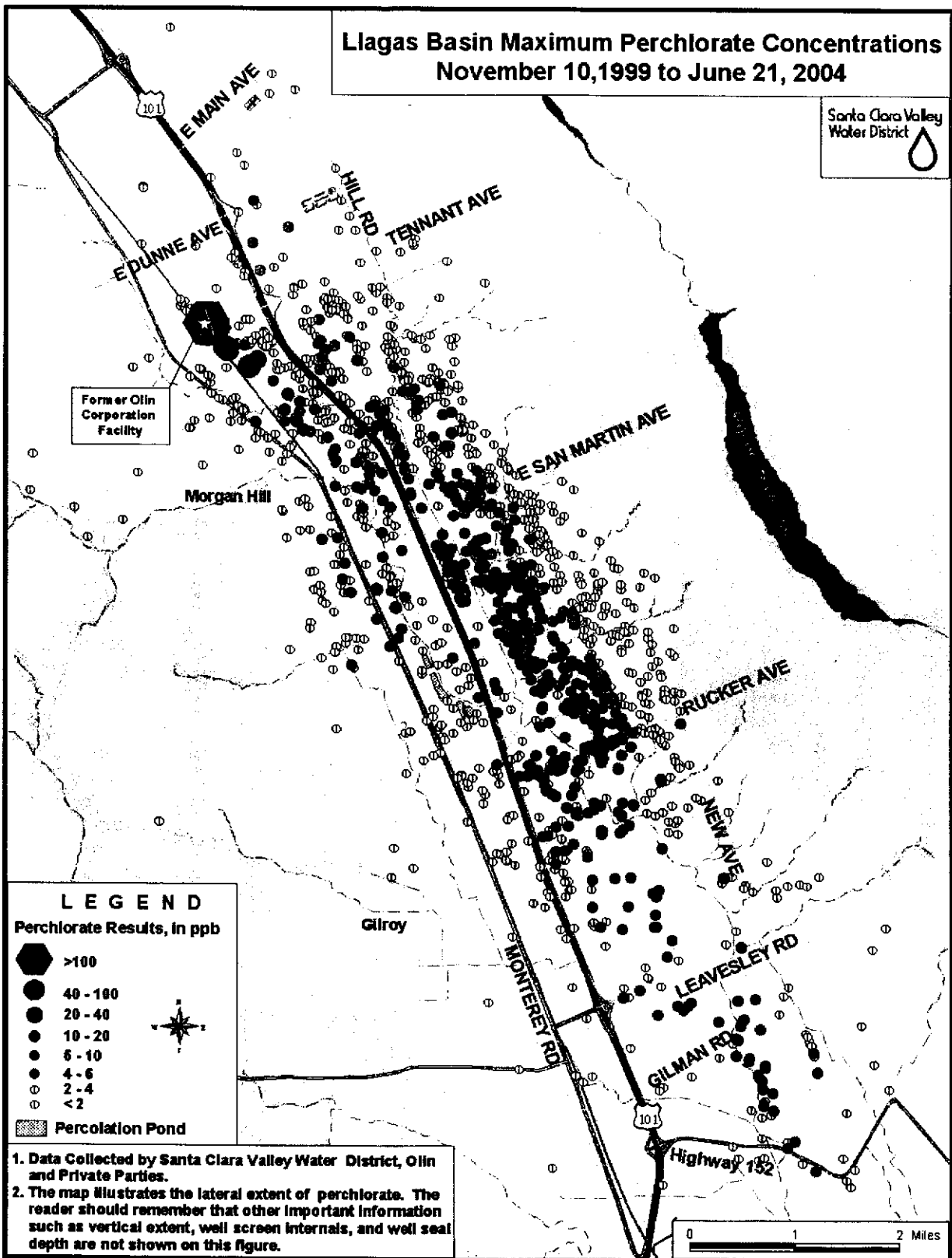
Attachment: Map of Perchlorate Occurrence in Morgan Hill, San Martin, and Gilroy

cc: Mr. Ed Tewes, City Manager, City of Morgan Hill
Mr. Jay Baksa, City Manager, City of Gilroy
Ms. Jane Decker, Assistant County Administrative Officer, County of Santa Clara
Mr. Roger Briggs, Executive Officer, Central Coast Regional Water Quality Control Board
~~Mr. David Athey~~, Central Coast Regional Water Quality Control Board
Perchlorate Community Advisory Group Members
Elected Officials Serving Perchlorate Impacted Areas
W. Wadlow, M. Richardson, B. Ahmadi, T. Hemmeter, T. Mohr

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Llagas Basin Maximum Perchlorate Concentrations November 10, 1999 to June 21, 2004

Santa Clara Valley
Water District 












Former Olin
Corporation
Facility

Morgan Hill

Gilroy

LEGEND
Perchlorate Results, in ppb

-  >100
-  40 - 100
-  20 - 40
-  10 - 20
-  6 - 10
-  4 - 6
-  2 - 4
-  < 2

 Percolation Pond

1. Data Collected by Santa Clara Valley Water District, Olin and Private Parties.
2. The map illustrates the lateral extent of perchlorate. The reader should remember that other important information such as vertical extent, well screen internals, and well seal depth are not shown on this figure.

0 1 2 Miles