

**Concerned Hinkley Residents**  
Hinkley, California 92347

22 February 2012

Harold J. Singer, Executive Officer  
California Regional Water Quality Control Board  
2501 Lake Tahoe Boulevard  
South Lake Tahoe, CA 96150

Dear Mr. Singer,

We, the people who live and/or work or own property in Hinkley, respectfully request the Water Board to conclude the 2007 Background Chromium Study by PG&E in accordance with the approved 2004 revised workplan. We want the range of naturally-occurring background chromium values in groundwater recalculated using just the wells, information, and statistics that had been approved by the Water Board. We also request that the Water Board adopt this range of background values for use in the investigation and cleanup of chromium in groundwater of the Hinkley Valley and for determining impacts to domestic, community, and agricultural wells. Further delay in concluding the study is detrimental to the Hinkley residents and the entire Hinkley Valley.

**Chromium Background Values for the Hinkley Valley**

The Hinkley residents shown on the enclosed lists request that the Lahontan Water Board revise the chromium background values in groundwater for the Hinkley Valley from those originally adopted in November 2008. This request is based upon the October 2011 peer review comments which criticized PG&E's 2007 Background Chromium Study.

Specifically, Hinkley residents respectfully request that the Water Board adopt non-detect levels as background values for hexavalent chromium (CrVI) and total chromium (CrT) based on depth-discrete water samples results in the 2007 Background Study. Or, that the Water Board recalculate background values using just the data obtained from the original wells approved in PG&E's 2004 revised workplan.

**History**

As the Water Board heard at its March 8, 2011, meeting in Barstow, Hinkley residents are concerned about the chromium background values that were adopted in November 2008. These values were 1.2 ppb average and 3.2 ppb maximum for hexavalent chromium (CrVI) and 1.5 ppb average and 3.2 ppb total chromium (CrT). The adopted values were from a background study conducted in 2006 by PG&E but significantly changed from the revised workplan approved by Board staff in 2004. After review, several residents suspected bias sample collection by PG&E during the 2006 field work and suggested that the Water Board revisit the background study.

During the summer of 2011, the Water Board contracted to have three outside parties provide peer review of the 2007 Background Study. As expected, the peer reviewers were critical of the Background Study, including the type and location of wells sampled, lab QA/QC practices, and statistical assumptions made. Based upon these comments, Hinkley residents have asked Board staff on numerous occasions what will be their recommendation to the Water Board. The answer we usually heard back was "we don't know."

**Significance of Background Values**

Hinkley residents are very concerned about the numbers representing the chromium background values in groundwater in the Hinkley Valley. Water Board staff have consistently told the public that background values will be used to set cleanup standards for PG&E's chromium plume. Yet, we all know that the background values are used in other applications, including those directly affecting Hinkley residents' daily lives.

As you know, the background values are used to draw the chromium plume boundaries in quarterly reports. PG&E uses these boundaries to decide who is offered bottled water and who isn't, beyond that listed in the Board's October 2011 cleanup and abatement order. PG&E also uses the plume boundaries and chromium values in domestic wells when deciding who to make offers of property purchase and the amount of purchase. Last, background values will be used in the near future for determining which residents will be offered whole house replacement water required in the Board's October 2011 cleanup and abatement order. Use of the chromium background values for the last three reasons listed is of more immediate concern to Hinkley residents than is the overall plume cleanup, which is projected to occur over many decades.

**Therefore, the need to set un-biased, revised chromium background values in the Hinkley Valley is one that residents prefer happen sooner rather than later.**

### **Residents' Recommendation**

Hinkley residents are recommending that the Water Board use only those portions of the 2007 Background Study that follow PG&E's September 2004 revised workplan. This means that only data obtained from depth-discrete samples and wells sampled during all four quarters in 2006 are valid. As you will recall, the 2004 revised workplan was prepared based on the comments of three University of California peer reviewers. PG&E's deviation in implementing the workplan was not subject to peer review.

The revised workplan stated that PG&E would collect depth-discrete samples from a total of five wells. Since depth-discrete water samples were collected from only two wells, the Water Board should focus on the results from such wells, 36-01 and BGS-24 (located in the upgradient and cross directions of the plume), in which the lab reported non-detect concentrations ( 0.2 ppb CrVI and 1.0 ppb CrT). There appears to be no evidence in the Background Study that PG&E tried to collect samples from three more wells. This makes Hinkley residents question whether PG&E just abandoned the effort when it became obvious that all depth-discrete samples might end up being non-detect—the true natural chromium background levels in the Hinkley groundwater.

If depth-discrete well sample results are ignored, the Water Board should then focus on just wells that were sampled in all four quarters during 2006. In this case, only data from the original 14 wells would be used for calculating background values and the data from the 34 added wells would be ignored. It is obvious that PG&E included the latter wells to artificially raise the chromium background values, especially since 23 of the 34 wells were from one specific location west of the chromium plume. Using the data obtained from just the original 14 wells, we recommend that the Water Board arrange for someone from academia to apply the appropriate statistical analyses mentioned in the peer review for calculating background values. If these results should show a 5 percent or greater change from the 2008 adopted background values, the new numbers should be adopted by the Water Board as revised background chromium values.

### **In Conclusion**

The results of the October 2011 peer review suggest that PG&E conducted a biased background study that yielded questionable data and statistical results. The unauthorized additions made by PG&E to the

2006 field work over that listed in the 2004 revised workplan were obviously done to promote biased background values greater than what was intended in the workplan approved by Water Board staff.

Given this history, PG&E and its easily-manipulated consultant, CH2MHill, cannot be trusted to conduct a supplemental background study. Furthermore, as one of the peer reviewers noted, extensive agricultural pumping in the Hinkley Valley and the length of time since chromium discharge (now over 50 years), makes it impossible to know what is background groundwater and what isn't. The Hinkley residents fear that PG&E will try to manipulate the Water Board with the suggestion that they will concoct another background study. This would be absurd as who in their right mind would actually believe the results of a new study conducted by PG&E? Most certainly not the Hinkley residents!

In conclusion, the only recourse that is fair to the Hinkley residents is to salvage as much of the 2007 Background Study as possible. This means using only data that was obtained from following the revised workplan approved by Board staff - and nothing else. This data would yield chromium background values which are more realistic and more likely to be accepted by the Hinkley residents. The apparent biases reflected in current background values from PG&E's flawed background study will never be accepted by the Hinkley residents. Using relevant data from the 2007 Background Study will provide revised background values that can be used in the *immediate* future as well as the long-term future.

Hinkley residents look forward to your decision on evaluating the adoption of revised chromium background values.

Sincerely,

Carmela Spasojevich, a Hinkley property owner  
On behalf of the Hinkley Residents (Please see attached petitions)

Enclosure: Signed Petitions Listing Hinkley Residents Supporting this Letter (2 pages)

To: The California Regional Water Quality Control Board, Lahontan Region

We, the people who live and/or work in Hinkley, respectfully request the Water Board to conclude the 2007 Background Chromium Study by PG&E, in accordance with the approved 2004 revised workplan. We want the range of naturally-occurring background chromium values in ground water re-calculated using just the wells, information, and statistics that had been approved. And we want the Water Board to adopt this range of background values for use in the investigation and cleanup of chromium in ground waters of the Hinkley Valley and for determining impacts to domestic, community, and agricultural wells. Further delay in concluding the study is detrimental to Hinkley.

Printed Name	Signature	I Live in Hinkley (check here)	I work in Hinkley (check here)
1. Karen Dodd	<i>Karen Dodd</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2. JAMES DODD	<i>James Dodd</i>	<input checked="" type="checkbox"/>	
3. Jackie Sones	<i>Jackie Sones</i>	<input checked="" type="checkbox"/>	
4. NAZ AWAD	<i>Naz Awad</i>	<input checked="" type="checkbox"/>	
5. Richard L'EVEALY	<i>Richard L'Evealy</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6. Patricia Dickmann	<i>Patricia Dickmann</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7. Elaine Kearney	<i>Elaine L. Kearney</i>	<input checked="" type="checkbox"/>	
8. Barbara Groveau	<i>Barbara Groveau</i>	<input checked="" type="checkbox"/>	
9. Greg Kearney	<i>Greg Kearney</i>	<input checked="" type="checkbox"/>	
10. PAUL GREENBERG	<i>Paul Greenberg</i>	<input checked="" type="checkbox"/>	
11. Sandra K. Wetherington	<i>Sandra K. Wetherington</i>	<input checked="" type="checkbox"/>	
12. ROGER SANDOZ	<i>Roger Sandoz</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
13. Joyce White	<i>Joyce White</i>	<input checked="" type="checkbox"/>	
14. YVONNE NETHERY	<i>Yvonne Nethery</i>	<input checked="" type="checkbox"/>	
15. HERBERT NETHERY	<i>Herbert Nethery</i>	<input checked="" type="checkbox"/>	
16. Scott Haislip	<i>Scott Haislip</i>	<input checked="" type="checkbox"/>	
17. SHARON Haislip	<i>Sharon Haislip</i>	<input checked="" type="checkbox"/>	
18. Daron Banks	<i>Daron Banks</i>	<input checked="" type="checkbox"/>	

To: The California Regional Water Quality Control Board, Lahontan Region

We, the people who live and/or work in Hinkley, respectfully request the Water Board to conclude the 2007 Background Chromium Study by PG&E, in accordance with the approved 2004 revised workplan. We want the range of naturally-occurring background chromium values in ground water re-calculated using just the wells, information, and statistics that had been approved. And we want the Water Board to adopt this range of background values for use in the investigation and cleanup of chromium in ground waters of the Hinkley Valley and for determining impacts to domestic, community, and agricultural wells. Further delay in concluding the study is detrimental to Hinkley.

Printed Name	Signature	I Live in Hinkley (check here)	I work in Hinkley (check here)
1. JAY POTTER	<i>J Potter</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2. McHENRY Cooke	<i>Matthew Cooke</i>	<input checked="" type="checkbox"/>	
3. Gina Romero	<i>Gina Romero</i>	<input checked="" type="checkbox"/>	
4. Gilbert Romero	<i>Gilbert Romero</i>	<input checked="" type="checkbox"/>	
5. Amber Dodd	<i>Amber Dodd</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6. IAN FRAZIER	<i>Ian Frazier</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7. Virginia A. Davis	<i>Virginia A. Davis</i>	<input checked="" type="checkbox"/>	
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			