

**From:** "David Fisher" <davidf@svswa.org>  
**To:** <dthomas@rb3.swrcb.ca.gov>  
**Date:** 12/21/2006 8:40:48 AM  
**Subject:** FW: Crazy Horse Draft WDRs

Hi Dean, here are some additional comments below from Jim on the Draft Crazy Horse WDR/MRP. My intent was to refine them for a professional and timely response; focusing on the changes in the point of compliance threshold. We would like to discuss the draft further before the February board approval meeting.

Thanks,  
David M. Fisher  
Landfill Field Engineer  
Salinas Valley Solid Waste Authority  
(831) 755-1300 phn. (831) 755-1322 fax.

---

**From:** JFinegan@Geosyntec.com [mailto:JFinegan@Geosyntec.com]  
**Sent:** Monday, December 11, 2006 12:10 PM  
**To:** David Fisher  
**Subject:** Crazy Horse WDRs

David

I have noted a few items in the Crazy Horse WDRs and M&RP that you and GLA may want to address, as follows:

#### WDRs

-p.3 what is "banbury" waste? When I looked it up on the internet, just came up with a town in the UK! --- (Jim, this an old term for rubber waste/solvents)

-p. 11 the total VOC concentrations indicated for perimeter gas samples are very low (max of 270 ppbv indicated); calculations for equivalent groundwater concentrations using mass transfer equations would likely indicate concentrations well below MCLs, suggesting VOC analysis of gas is not needed (see below)

-p. 15 "discharger shall not cause increase outside POC" - the definition of POC and waste management unit in the M&RP appears to include the whole property, so I think you can consider the property boundary the POC; however, these definitions and provisions are standard for WDRs and we already know that there are releases at Crazy Horse. As

Item No. 15 Attachment No. 4  
Feb. 9, 2007 Meeting  
Crazy Horse Landfill Revised WDR

long as SVSWA is actively evaluating and working on remediation of impacts, these provisions should not affect investigations in progress.

-there are a bunch of due dates throughout the WDRs: for aquifer testing (12/31/06), EFS for Module I (6/30/07), EFS for eastern area (4/30/07), CAP system refinements (8/31/07). These due dates don't appear to correspond to my current understanding of work being performed at the site. I think our plan for aquifer testing was to perform it later in the rebound test so as not to interfere with potential recovery in the extraction area. In addition, the rebound test is scheduled for one year, to end around 6/30/07, so an EFS for this plume would come out about two months later (8/31/07 rather than 6/30/07). Similarly, CAP system refinements would be based on recommendations made in this EFS/Rebound Test Summary Report, so those would occur after RWQCB approval of recommendations in the EFS - 8/31/07 would be too early, since that's when EFS would probably be submitted. Finally, I don't know if 4/30/07 corresponds to the eastern-area EMP schedule - this would require completion of the EMP, submittal of a report, and preparation and submittal of a following EFS in the next 4.5 months (from now). Seems unlikely. I would request advancement of all of these dates by at least 2 months, more in the case of aquifer testing (change that to April or May 2007 [discuss w/ John Hower]).

p. 20, #38 - I'm not sure what they mean by abandoning all "former onsite domestic wells." Are there some of the old residential-supply wells that were bought out by the landfill still present? The comment about potential vertical conduits is apropos - recall questions about several Purisima wells that should be evaluated.

-p. 25, #27 - What is this waste outside closed Module I and active fill areas? Is it the waste discovered by Geomatrix in southern area and/or waste in scale area?

#### M&RP

-I don't have a copy of the old M&RP, so don't know if iron, perchlorate, TPH-d, or antimony are in it as monitoring parameters - this one also leaves out magnesium, which has been analyzed at the site. I think a good case can be presented to not include the new ones - or you can analyze for them and hope that they don't show up for 3 consecutive events, which may be unlikely in the case of ubiquitous perchlorate and common field-contaminant TPH-d...

-various proposed changes to the monitoring program are likely: changing residential wells to semi-annual monitoring (looks like Githens accidentally listed as semi-annual); eliminate a bunch of wells in the middle of southern plume and elsewhere; stop condensate and leachate analyses, which are not included in here anyway.

-The perimeter probe annual VOC analysis of gas samples can likely be eliminated - concentrations of VOCs are very low and methane is rarely detected and never above 5%. You could propose triggers of  $\geq 5\%$  methane and/or a new release or significant changes to plumes for VOC analysis of gas. We already know that there are LFG impacts to groundwater, so

collecting more data on VOCs in soil-pore gas doesn't tell us anything; even increases in VOC concentrations in gas are not necessarily a warning of increased or changing groundwater conditions, since gas behavior is so transient and heterogeneous - the data serves no purpose at all. VOC analysis of gas should only be performed if there are changes to groundwater conditions and only to confirm that gas is the source of the change. The VOC analyses of flare input gas can be continued for the VOC mass removal calculations; otherwise, methane and other fixed field-measured gases suffice for monitoring, since methane is the primary concern for neighbors anyway.

Hope this helps - contact me to clarify anything here or to discuss further.

Jim Finegan, PhD, CHG

Senior Hydrogeologist

-----  
200 East Del Mar Blvd.

Suite 250

Pasadena, CA 91105

Phone: 626.449.0664

Fax: 626.449.0411

Mobile: 626.622.9520

[www.Geosyntec.com](http://www.Geosyntec.com)

This electronic mail message contains information that (a) is or may be LEGALLY PRIVILEGED, CONFIDENTIAL, PROPRIETARY IN NATURE, OR OTHERWISE PROTECTED BY LAW FROM DISCLOSURE, and (b) is intended only for the use of the Addressee(s) named herein. If you are not the intended recipient, an addressee, or the person responsible for delivering this to an addressee, you are hereby notified that reading, using, copying, or distributing any part of this message is strictly prohibited. If you have received this electronic mail message in error, please contact us immediately and take the steps necessary to delete the message completely from your computer system.

**CC:** "David Meza - SVSWA Engineering Manager" <davem@svswa.org>, <joseg@svswa.org>, "Jim Finegan, Ph.D - Geologic Associates" <jfinegan@geo-logic.com>, "John M. Hower" <jmhower@geo-logic.com>