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STATE OF COLORADO

Bill Owens, Governor

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CORRESPONDENCE
CONTROL

Dedicated to protecting and improving the health and environment of the people of Colorado

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Colorado Department
of Public Health
and Environment

| DIST. | LTR | ENC |
|------------------|-----|-----|
| BERARDINI, J.H. | X | X |
| BOGNAR, E.S. | X | X |
| BROOKS, L. | X | X |
| BUTLER, L. | X | X |
| CARPENTER, M. | X | X |
| CROCKETT, G. A. | | |
| DECK, C. A. | X | X |
| DEGENHART, K. R. | | |
| DIETER, T. J. | | |
| FERRERA, D. W. | X | X |
| GIACOMINI, J. J. | | |
| LINDSAY, D. C. | X | X |
| LONG, J. W. | | |
| LYLE, J. L. | | |
| MARTINEZ, L. A. | X | X |
| NAGEL, R. E. | X | X |
| NESTA, S. | | |
| NORTH, K. | X | X |
| RODGERS, A. D. | | |
| SHELTON, D. C. | X | X |
| SPEARS, M. S. | X | X |
| PIZZUTO, V.M. | | |
| TOBIN, M. | X | X |
| TUOR, N. R. | X | X |
| WIEMELT, K. | | |
| WILLIAMS, J. L. | | |
| ZAHM, C. | X | X |

June 8, 2004

Mr. Joseph Legare
Assistant Manager for Environment and Stewardship
U.S. Department of Energy
Rocky Flats Field Office
10808 Highway 93, Unit A
Golden, Colorado 80403-8200

RE: Comments; Draft IM/IRA for IHSS Group 900-11 (903 Lip Area and Vicinity, the Windblown Area, and Surface Soil In Operable Unit 1 [881 Hillside]), April 26, 2004

Dear Mr. Legare:

The Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division (the Division) hereby submits comments on the subject document. The comments, attached, are in addition to our informal comments on the March 4, 2004 version as provided to the agencies prior to the 45-day public comment period.

Our earlier effort was under a limited time frame and intended as a "fatal-flaws" review. Review of the current version reflects a more detailed assessment and, as a result, further perspectives on the document. We note that your personnel responded quite satisfactorily to our initial comments and anticipate a similar result.

If you have any questions regarding the comments, please contact me at (303) 692-3367 or Harlen Ainscough at 303-692-3337.

Sincerely,

Steven H. Gunderson
RFCA Project Coordinator

| | | |
|---------------|---|---|
| COR. CONTROL | X | X |
| ADMIN. RECORD | X | X |
| PATS/130 | | |

Reviewed for Addressee
Corres. Control RFP

6/11/04
Date By

Attachment

cc: Mark Aguilar, EPA
Norma Castaneda, DOE
Lane Butler, KH

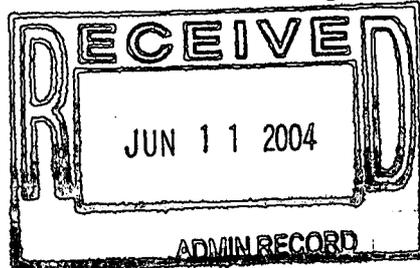
Mark Sattelberg, U.S.F&W
Dave Shelton, KH
Administrative Records Building T130G

Ref. Ltr. #

DOE ORDER #

5400.1

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BZ-A-000712

Colorado Department of Public Health and Environment

Hazardous Materials & Waste Management Division

Comments

DRAFT

Interim Measure/Interim Remedial Action
for

IHSS Group 900-11

(903 Lip Area and Vicinity, the Windblown Area, and Surface Soil in Operable Unit 1 [881 Hillside])

April 26, 2004

General Comments:

1. Only Exhibit G strives to delineate the proposed limit of excavation. The body of the document should include a precise map of the proposed limit. (Any variations would be noted in the closeout report.) The Division was informally provided with a map [Figure 2 Outer Lip Confirmation Samples (Portion of Scenario #1157) dated 4/19/04] that provides such detail.
2. Details of the confirmation-sampling plan are not evident and should be added to the document.
3. The SSRSs provided in Appendix B only consider the potential impact to surface water from subsurface constituents that exceed specific WRW thresholds. As such, constituent levels below the WRW at these, or other, sampling sites are ignored relative to the potential to exceed surface water standards. This indicates the need to consider such potential impacts if not before, then after, the completion of the accelerated action within the Groundwater IM/IRA .
4. **Specific Comments:**
5. **Executive Summary:** page ES-2, first paragraph - U235 is discussed in the same context, relative to the 3-foot depth factor, as Pu/Am. However, the second paragraph, begins by referring to the 0.5-foot factor that is also pertinent to the uranium isotopes. (This inappropriate comparison to the 3-foot factor is also evident in Appendix B, Screening Location # 1.)
6. page ES-2, first para. last sentence – The specifics of the confirmation plan are not provided in the document. However, the current practice is to determine whether the excavation is deep enough but not whether excavation is sufficient laterally. Appendix G, the geostatistical justification for the excavation extent, indicates that additional samples will become available to refine the effort. The Division does not understand how vertically aligned confirmation samples would support refinement since they are not collected from the surficial interval at the distal edge of the excavation. Please address how the intent expressed in Appendix G will be fulfilled.
7. **Table 2-1,** page 4 of 6, IHSS 105.1 and 105.2: Please note that the tanks that were closed in place will need to be below three feet of final grade, documented in the closeout report for Building 881, and shown on the final infrastructure map for RFETS.
8. **Table 2-6:** The Appendix B "Location 4" sampling data where collected from within Trench 7 of the East Trenches. The Division prefers that the information remain in the document for completeness and full disclosure, due to the geographic overlap of the sites, but it is necessary that T-7 be acknowledged in the table and also in Appendix B.
9. **Table 3-1:** Why is depleted uranium, also "released" in PAC SE-1602 not included.
10. **Table 4-4:** Please explain why the Wildlife Refuge Worker is shown under Worker Health rather than under Public Health. It is understood that the WRW reflects both acute and chronic risks; however, the WRW is the long-term measure of "public" health equivalency under CERCLA, thus WRW cleanup levels

were established. In contrast, Worker Health should include remediation workers who's protection is provided by OSHA regulations, DOE Orders, etc. Please address and revise as appropriate. This comment should also be considered for Table 4-5:

11. **Section 5.1.1.1:** In the third and fourth bullets, the confirmation sampling does not appear to support a refined kriging effort, per Appendix G, i.e. no additional lateral samples consistent with the previous surficial samples as included in the initial krigs. Please note the "uncertainty" issue discussed in the next to last paragraph of page 5-2 as it relates to the issue.
12. **Section 5.1.1.3.3:** It is apparent that the planned confirmation sampling effort does not include sidewall samples and is therefore inconsistent with the confirmation approach used at exceedances and removals in the industrial area. Please address.
13. **Section 5.1.1.3.4:** The phrase "contaminated by the pits" should be replaced with reference to the burning metals then burial as the cause.
14. **Section 5.1.1.3.7:** The statements in this section were invalidated when the 3 nCi/g was applied in Appendix B. Please revise.
15. **Section 5.1.6:** On the advise of council, delete to the end of the paragraph text which begins with the phrase "... which may include the final Corrective Action Decision/.... in RFCA Part 18." Reference to RCRA mechanisms is inappropriate for this CERCLA site. It also is completely unnecessary to refer to the fact that each Party reserves its rights under RFCA Part 18. That is already available under RFCA and this IM/IRA falls under RFCA.
16. **Section 5.1.6.3:** DOE's proposed changes to the paragraph are acceptable. However, it should read "transferred to the Secretary of the Interior."
17. **Appendix B:** Under Screen 1 of Screening Location 1, 3.0 feet should be replaced with 0.5 feet, the depth relevant to uranium isotopes.
18. **Screen 4, Surface Erosion** should refer to 0.5 not 3.0 feet.
19. **Groundwater Migration** The reference to Well 07391 being closest to Ryan's Pit implies that the U-235 exceedance is from a subsurface sample within Ryan's Pit, if so, this fact should be acknowledged in the "Location Code and Description" heading and in Table 2-4 of the document.
20. The seemingly immediate response to the Ryan's pit action is noted. The affects of that action appear to mask any contribution from the site unless, in fact, this was a Ryan's Pit sample. If not a Ryan's pit sample, then standalone empirical evidence relative to the site is not available to judge the potential for U-235 migration through groundwater. Given that consideration, a prediction of transport to surface water, based on the chemical and physical attributes of the isotope, along with other uranium isotopes that are present and capable of contributing a total uranium load, relative to the uranium surface water standard, is needed. (If not a Ryan's Pit sample, determination on whether this occurrence is a result of burial, and to what extent, would be the initial consideration.) In addition, consideration of at depth concentrations/activities of each constituent, even those below WRW values, need to be evaluated for potential impacts to surface water.
21. **Summary:** Please explain the relevance of a risk-based value, i.e. WRW, to the potential impact to surface water and potential exceedance of the uranium standard. The Division agrees that excavation to that depth, given the slightly elevated concentration, is unwarranted relative to direct impact from contaminated soil. Such probably holds relative to surface water protection; unfortunately, nothing provided in this SSRS demonstrates such conclusion. See Comment No. 21. Please address.
22. **Appendix B:** Screening Locations 2 & 3: After the "Location Code and Description" headings, change N. E. to N.W. for consistency with related figures and text.
23. Screening Location 4: Please see Comment No. 8.

24. Screening Location 5 & 6: Screen 4, Surface Water Concentrations: In Screening Location 1 through 4 this section is titled "Surface Erosion", why the inconsistency?
25. Screening Location 5: Groundwater Migration. Since elevated nickel concentrations are noted as being associated with elevated chromium as evidence of contamination from stainless steel, please determine if the wells under consideration exhibited elevated nickel levels. If not, by following the suggested chromium/nickel association, chromium in these wells would not be a result of stainless steel, but real. Please address.
26. Screening Location 6: Screen 4. The Division questions whether surface erosion should be a consideration for an SVOC. Please consider whether sun and wind would destroy the SVOC before an impact would occur in surface water.
27. In addition, since no empirical data exists, prediction based on the physical and chemical properties is needed. See Comment No. 26.
28. Appendix G, Section IV, last para., last sentence: The confirmation sampling approach currently being used, see Comments No. 6, does not provide for "boundary samples". Consequently, the potential to refine the kriging result, expressed in Section IV.B on page 5, does not appear to be supported. It is unacceptable to pledge, to the public, that the boundary will be refined if no performed.. Please address.