

# STATE OF COLORADO

Bill Owens, Governor  
Douglas H. Benevento, Executive Director

*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

December 23, 2004

Mr. Joseph Legare  
Director, Project Management Division  
U.S. Department of Energy  
Rocky Flats Field Office  
10808 Highway 93, Unit A  
Golden, Colorado 80403-8200

**RE: Approval, Draft Closeout Report for IHSS Group 600-4, IHSS 600-160 – Radioactive Site, Building 444 Parking Lot, December 2004**

Dear Mr. Legare:

The Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division (the Division) hereby grants approval for the subject report and, as a consequence, No Further Accelerated Action (NFAA) for IHSS Group 600-4. A comment resolution meeting, revision submitted electronically, and a subsequent telephone conversation were successful in resolving the Division's comments, attached.

The principle issues were:

- Acknowledgment that naturally occurring constituents may be appropriate for inclusion in non-radionuclide Sum of Ratios (SOR) calculations if "process knowledge" indicates potential releases to the environment.
- Clarification that historical location SS441294 exceeded an SOR of 1 and that remediation of affected soils were an accelerated action objective.
- Addition of data to Figure 6, and other clarifications, to demonstrate adequacy of the soil removal actions.
- Comparison of arsenic concentrations to background values to complete Screen 4 of the Subsurface Soil Risk Screen (SSRS).

We look forward to confirming that these, and minor additional changes, are reflected in the final document. If you have any questions regarding this correspondence, please contact me at (303) 692-3367 or Harlen Ainscough at 303-692-3337.

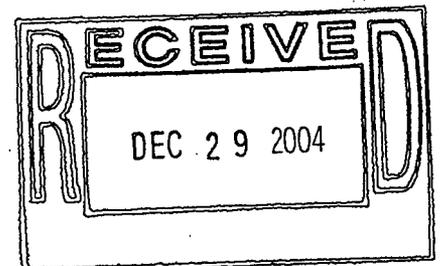
Sincerely,

Steven H. Gunderson  
RFCA Project Coordinator

Attachment

cc: Mark Aguilar, EPA  
Larry Kimmel, EPA  
Dave Shelton, KH  
Steve Nesta, K-H

Mark Sattelberg, U.S.F&W  
Norma Castaneda, DOE  
Karen Wiemelt, KH  
Administrative Records Building T130G



- ADMIN RECORD

Colorado Department of Public Health and Environment

Hazardous Materials & Waste Management Division

Comments

Draft Closeout Report

for

IHSS Group 600-4

IHSS 600-160 – Radioactive Site,  
Building 444 Parking Lot

December 2004

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**Specific Comments:**

1. **Section 2.1:** On page 3, second paragraph, third sentence, the sentence is incomplete. Perhaps "were" collected was intended.
2. **Section 2.3:** On page 49, the statement that certain constituents are "never included" in non-radionuclide SORT calculations is unacceptable. If any of the constituents were linked to an area through historical or process knowledge, inclusion in the SOR would be expected if considered to be "genuine contaminants" and actual "areas of concern." The Contact Record of February 2, 2004 regarding Non Radionological Sum of Ratios was intended to provide relief when a "lack of process knowledge" for such constituents exists. Please modify the text accordingly.
3. Additionally, historical location SS441294, while not specifically included in the accelerated action data of Table 6 does exceed an SOR of 1. Please acknowledge that fact in the narrative.
4. **Section 3.2:** It is unclear why the SS441294 location hot spot is excluded from the section. The data may be historic but the actions were both remedial and accelerated for the IHSS Group and a distinction does not appear warranted. See Section 3.3.
5. **Section 3.3:** On page 54, first paragraph, please correct "laterall."
6. **Figure 6:** The westerly confirmation sample (CB37-026) result for SS441294, relative to the excavation limit, warrants clarification. The result did not indicate an exceedance, but if the additional excavation was warranted by other data, why would an additional confirmation sample at the new westerly edge of the excavation not be required? If the westerly limit is based on additional results, show that data and justify adequacy relative to the 50 pCi/g limit.
7. **Table 11:** In an appropriate narrative section (Section 4.0), please explain the absence of confirmation sampling from 0.5 to 2.0 feet, i.e., sidewall versus center samples from over excavation.
8. **Section 6.0, Screen 4:** Please compare arsenic levels to background rather than WRW thresholds (both inferences). The WRWs, whether or not exceeded, continue to have no relationship to potential impacts to ground water.
9. In the last paragraph of page 58, please indicate whether the WRW AL exceedances were relative to the Tier I or Tier II ground water standards. The current language nearly suggests a comparison to soil WRW levels. (Section 7.2, and by extension Section 7.3, properly acknowledge residual contaminant levels above RLs or background as a consideration.)