

Rocky Flats Coalition of Local Governments

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Mr. Bob Davis
Kaiser-Hill
Rocky Flats Environmental Technology Site
10808 Highway 93, Unit B
Bldg T124A/70
Golden, CO 80403-8200

Dear Mr. Davis:

On behalf of the Board of Directors of the Rocky Flats Coalition of Local Governments, I am submitting the following comments on the *Draft Interim Measure/Interim Remedial Action (IM/IRA) for IHSS 114 and RCRA Closure of the RFETS Present Landfill*. The Coalition appreciates the opportunity to provide feedback on this proposed change in the remediation strategy for the Present Landfill, and I look forward to receiving your written reply.

This proposal to install a RCRA Subtitle C Guidance cover (proposed cover) represents a significant departure from the earlier proposal to install an evapo-transpiration cover (ET cover). The Coalition Board appreciates the numerous briefings the Site has given to the Coalition staff and Board in the past few months to explain the reasons behind this proposed change. It is clear from reading this draft IM/IRA that many of the concerns raised with Kaiser-Hill and DOE during the prior briefings were carefully considered, especially with regards to stewardship.

We believe that the long-term stewardship requirements for the proposed cover considered in this document give a good sense of post-closure requirements for protecting the Present Landfill and water quality. The use of “will” rather than “may” also shows positive steps toward clearly identifying the scope of stewardship necessary to implement the remedy. Likewise, Table 7, which gives a summary of the stewardship requirements, is a helpful and valuable addition to the document.

However, as we note below, this document must provide a clearer and more substantive basis for why the proposed cover is preferable to an ET cover. We also believe the document must be much more definitive in identifying the specific performance criteria for the cover which will indicate whether there are any performance problems that necessitate a corrective action.

Proposed Cover versus ET Cover

Despite the numerous conversations we have had with site personnel and the regulators, it is unclear the extent to which stewardship factored into the remedy selection process. The depth of such analysis in the Alternatives Analysis is lacking, and the document thus does not present a strong argument as to why the proposed cover is preferable to the ET cover over the long-term.

The Alternatives Analysis clearly states that the ET cover will have low long-term costs because it will require very little maintenance over the long term and will be inexpensive to repair. The proposed cover, in contrast, will cost much more over the long-term, as repairs will require “extensive excavation and complex repair procedures”. This assertion, which Kaiser-Hill also touted in 2002, matches research conducted by Dr. Steven Dwyer, a researcher at the Sandia National Laboratory, who concluded from his study that geosynthetic liners can desiccate and crack in arid environments. This issue is important because of the potential for desiccation and differential settling in the future, which could necessitate repairs to the cover.

Conversely, the IM/IRA states that building an ET cover presents a much higher short-term risk than the proposed cover due to the high volume of trucks required to import the soil to build an ET cover. The document thus concludes that the proposed cover is the best remedy for the Present Landfill based on the short-term risks, as the two covers are equal in terms of remedy effectiveness and estimated capital cost.

What is unclear from the document is whether an analysis was ever conducted that fully weighs the short-term risks of installing an ET cover versus the long-term cost and maintenance of the proposed cover. This type of analysis – the consideration of stewardship as a key component of the remedy selection process, and not simply after a remedy has been chosen – is one for which the Coalition has pushed time and time again. In the absence of such an analysis, the Board is struggling to understand the basis for why the proposed cover is preferable to the ET cover.

In addition to this overlying stewardship concern regarding the Alternatives Analysis, we also raise the following issues which go to the technical details of a long-term stewardship analysis. These issues include: monitoring of the landfill seep, groundwater monitoring, cover performance, regulatory compliance, and effects of weed control on surface water.

Monitoring of the Landfill Seep

Monitoring the landfill seep is obviously of great importance as it will be a key indicator of the effectiveness of the proposed cover. As we note below, two major uncertainties remain with the seep: the source of the seep and the effects of the cover on the seep. We believe the proposed monitoring of the seep should be more comprehensive and cover a longer timeframe, both of which will help address these uncertainties and reduce the potential for problems in the future.

The first uncertainty associated with the seep is that its source remains unclear. The 1996 IM/IRA for OU7 concluded that 40% of the seep was from ground water and the remaining 60% from infiltration. This determination is obviously in sharp contrast to the current assumption that 90% of the seep results from infiltration and 10% from groundwater. The source of the seep is important because the Present Landfill remedy must significantly reduce the amount of water that percolates into the Landfill waste. If most of the water in the waste is from infiltration, the

remedy as proposed should achieve this design goal. If a significant portion of the water in the waste is coming from groundwater, the remedy as proposed may not be sufficient.

In addition, we know that installing a cover will add a significant amount of weight to the Present Landfill, which could potentially change the hydraulic regime in the area. Such a change could affect the mobility of contaminants in the subsurface over time and thus the composition of the seep.

To address these two uncertainties, the Board recommends longer and more comprehensive sampling. The current language in the IM/IRA states that the RFCA parties will evaluate whether continued monitoring of the seep is required after four years, and that any monitoring beyond that time would *de facto* require the affirmative agreement of the RFCA parties. The Board believes this presumption in favor of stopping monitoring is flawed, since all parties would need to agree on the need to continue monitoring. One party could therefore unilaterally decide that monitoring should cease, thereby vesting too much authority in that party. The Board believes the IM/IRA should instead provide that monitoring of the seep should continue until such time that the RFCA parties agree that it is no longer necessary, addressing the above concern.

In addition, we recommend annual sampling for a comprehensive suite of analytes after installation of the cover until the effects of installing the cover are better understood. Given how slowly groundwater moves, we believe enough time must be allowed to accurately gauge whether any changes in the seep composition have occurred.

Groundwater Monitoring

The IM/IRA states that groundwater sampling will be conducted for two years after the cover is installed, after which the RFCA parties will determine whether any further groundwater monitoring is required. Please provide the basis for choosing two years as the time period for monitoring, rather than the 30 years that is generally required under RCRA.

Cover Performance

As with any remedial action, data quality objectives must be developed to know whether the remedy is performing as designed. An evaluation of the data indicates whether any corrective action is necessary. The Board believes that the IM/IRA should better identify specific performance criteria that indicate whether or not the cover is working.

Regulatory Compliance

Section 4.2 (Seep Alternatives) states that “The alternatives have been developed assuming that the passive seep interception and treatment system meets the RCRA WWTU exclusion and the substantive requirements of NPDES permit.” What are the potential repercussions if this assumption proves wrong? When will this assumption become a known?

Effects of Weed Control on Surface Water

Section 6.1.1 (Minimize the Need for Further Maintenance) states that "... vegetation and weed control measures will be employed...." What measures will be used? If herbicides are applied, what is the potential threat to the Landfill Pond and No Name Gulch? Will DOE sample for toxic constituents contained in the chemicals?

Thank you for the opportunity to comment on this document and for your continuing commitment to work with the Coalition on the safe and timely closure of Rocky Flats. If you have any questions about the Coalition's comments, please call me at (303) 412-1200.

Sincerely,

/s/

David M. Abelson
Executive Director

cc: Norma Castaneda, DOE
John Rampe, DOE
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Steve Gunderson, CDPHE
Gary Kleeman, EPA
Mark Aguilar, EPA
Rocky Flats Coalition of Local Governments
Rocky Flats Citizens Advisory Board