



Geosafe Corporation

Advanced Vitrification
Solutions International

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NMWWMP - Hanford

MAY 01 1998

April 29, 1998

Mr. Phillip Staats
Washington State Dept. of Ecology
1315 West 4th Ave
Kennewick, WA 99336-6018

Kennewick

SENT BY FAX AND MAIL

COMMENTS ON THE PROPOSED CLEANUP PLANS FOR THE 100-NR-1 OPERABLE
UNIT AT HANFORD

Dear Mr. Staats:

Geosafe Corporation would like to submit the following comments regarding the 100-NR-1 public comment period which ends on April 29, 1998.

- A) 100-NR-1 TREATMENT, STORAGE, AND DISPOSAL UNITS CORRECTIVE MEASURES STUDY/CLOSURE PLAN, DOE/RL-96-39

Section 5.1.4.4

1. The in situ vitrification (ISV) discussion should include a brief discussion of past ISV work performed at Hanford. Performance information regarding ISV's treatment effectiveness for plutonium, strontium and cesium should also be discussed.
 2. The discussion on the presence of excessive moisture effecting ISV treatment cost is irrelevant and should be removed. This is true only if there is a substantial amount of groundwater moving into the treatment zone. Note in Figures 2-2 and 2-3, the groundwater elevation is approximately 60 and 70-ft below grade and would not be an issue.
 3. The discussion should include some mention of the added benefits resulting from vitrification such as: the product will exhibit no hazardous characteristics and should easily pass TCLP testing, the vitrified product has an extremely low leaching rate-even if ground to a fine powder and inundated in water and the vitrified product is expected to have a geologic life expectancy substantially greater than 10,000 years.
- B.) PROPOSED PLAN FOR INTERIM REDIAL ACTION AND DANGEROUS WASTE MODIFIED CLOSURE OF THE TSD UNITS ASSOCIATED SITES IN 100-NR-1 OPERABLE UNIT, DOE/RL-97-30 REV. 0.

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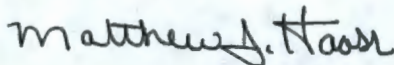
General Comments regarding the 116-N-1, 116-N-3 Cribs and Trenches preferred alternative of removal and disposal in the Environmental Restoration Disposal Facility (ERDF)

1. Given the high concentration of radionuclides in the 116-N-1 and -N-3 Cribs and Trenches, a discussion should be provided on how this material will meet the ERDF waste acceptance criteria (WAC). I assume the waste is not being diluted to meet the WAC requirements. A table showing the WAC criteria versus available characterization information from the subject units should be included.
2. Given that plutonium concentrations greater than 100 nCi/g are considered to be a TRU regulated waste, some discussion should be provided on the TRU components of the waste being shipped to ERDF.
3. Given that the proposed plan is selected for implementation, the 116-N-1 and 116-N-3 units will still require institutional controls for the radionuclide plume that will be left in place; thus elimination of purely in situ treatment options for similar reasoning does not seem to be justified or logical. Additional discussion on why in situ treatment alternatives have not been evaluated should be provided.

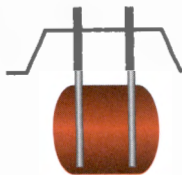
If you have questions concerning the above comments, please give me or Jim Hansen a call at (509) 375-0710. Geosafe looks forward to reviewing the final draft of the 100-NR-1 work plans when they become available.

Sincerely,

GEOSAFE CORPORATION



Matthew J. Haass, P.E.
Senior Project &
Business Development Engineer



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