START

0047050

Author: <vince@owt.com> at ~EXCHANGE
Date: 2/20/97 1:47 PM
Priority: Normal
TO: Pamela S Innis at ~HANFORD02A
Subject: Comments on DOE/RL-96-93, 233-S EE/CA

---------- Message Contents ----------

COMMENT #1: The document do not contain the names of companies or authors
for future readers to contact. Such information would provide future readers the ability to obtain more detailed information concerning 233-S.

COMMENT #2: PAGE 2-1, paragraph 4, last sentence.

The sentence states that the White Bluffs Road has been in use since antiquity. The perception is given that the road is still there and passible. Actually the road has not been used since the early forties, is
overgrown with shrubs and can barely be detected. Perhaps the road should
be clarified as a former road used by farmers in the 20s-30s and inactive
since the 40s.

The statement about being in use since antiquity is a figment of imaginaton.
The road is straight as a string from an old farm site on lower Rattlesnake
Mountain to the end of Gable Mtns. The road is the width of a bulldozer blade with a slight mound on each edge where the dirt piled up as the bulldozer went by. The sagebrush growing in the road are younger than those
on both sides. The younger sagebrush date the road in the 1930s.

The comment about a former Indian trail is a joke. Indians were smart enough to travel according to the terrain which meant zigging and zagging to
obtain the easier route. The existing road was made by a bulldozer in the
1930s and is straight as a string for several miles. There is no evidence
whatsoever that this is the exact route used by the Indians, especially since Indians did not have engineering principles to build trails straight
for 5-6 miles or more.

The evidence is very clear, especially from overhead photos where the road
can barely be seen as a straight line between the two points mentioned. I
am afraid that Hanford has been a victim of historical enhancement.

Hanford is cris-crossed with former Indian trails, many of them more famous
because they were used by the Yakimas during their escapades against early
settlers. These trails would be more historically significant. I have not

heard a single fact relating to the real significant trails nor am I aware
of attempts to locate and mark them. That just adds to the folly of calling
a bulldozer path an Indian trail. I will accept the fact that there might
be an Indian trail nearby, but to protect this single bulldozer path and
label it an Indian trail is not supported by scientific fact.

SUGGESTED ACTION: The bulldozer path has no significance with respect to
233-S.
There is no need to say more than "there are no identified archaeological
sites or artifacts in the vicinity of the 233-S Facility." The comment
about the White Bluffs bulldozer path should be deleted.

COMMENT #3. SECTION 2. The site description is missing key elements. There
are no photos of the facility. There are no photos which show the poor
state of the roof. There is no description of which portions of the
building are below grade and whether or not below grade rooms have sumps.

This information is important because throughout the document there is a
theme that rainwater will leak through the roof, come in contact with
contamination inside process cells/or tanks and carry the contamination
outside the building.
I the scenario about contaminated water is true, the water would be
expected to seep into the lowest rooms in the facility.

SUGGESTED ACTION: Photos and diagrams of the facility from each side and
each end should be included in the document. More clarity should be given
to explaining just how water that leaked through the roof would enter
process cells, and enter sealed tanks to carry enclosed contamination out of
the sealed tanks, or out of the process cells into the environment.

COMMENT #4: SECTION 2.4, page 2-16. The first sentence states that 233-S has
been in a continual state of slow deterioration, yet that deterioration is
never described. SUGGESTED ACTION: Provide a list of examples of slow
deterioration. Without such a list, the statement concerning slow
deterioration is hollow and unsupported.

COMMENT #5: SECTION 2.4, page 2-16. The third sentence states that ongoing
maintenance efforts are not totally responsive to the advancing
deterioration process. There is not a single example given of advancing
deterioration.
SUGGESTED ACTION: Provide examples of deterioration. Provide examples of
actual maintenance efforts which occur and explain which are effective and
which are not totally responsive. Perhaps there is a single maintenance
effort which can be improved.

For example, we are finding that tar applications on roofs are no longer
cost effective. Polyurea roofs last 2-3 times longer than tar roofs.
Fluor-Daniel is looking into switching maintenance techniques on the PUREX

building to save money.

COMMENT #6: SECTION 2.4, page 2-16, 2nd paragraph. The statement is made
that as the 233-S Facility ages, it will be more difficult to maintain radioactive material confinement. This statement needs to be explained. Without facts to back up the statement, the statement is hollow and unsupported.

COMMENT #7: SECTION 3.0, PAGE 3-1.
First bullet: The mechanism for release of haz. substances is not explained.
Second bullet: Who are the workers to be protected?
What are they to be protected from?
Third bullet: Eliminating S&M costs is a valid objective.
Fourth bullet: What are the appropriate requirements to be obtained?
(these are not listed in the report)
Fifth bullet: Minimize waste disposal costs is unrelated to 233-S issue and the purpose of this report.
Sixth bullet: Consistency with future 200 Area remediation is a good goal, but
since there are no 200 Area remediation plans at this moment,
this
means that 233-S remediation should be tabled for 5-10 years until
the remediation plans for 200-W can be agreed upon.
Overall, most of these objectives presented are not the real reasons behind
the motivation to take action in 233-S. The real reasons are a short list
which includes eliminating S&M costs.

COMMENT #8: SECTION 4.0, PAGE 4-1. paragraph in middle of the page. The next to the last sentence states that the current conditions in the facility
require expedited action. There is no evidence provided which backs up this
statement.
Earlier in the document the claim is made that corrective action will have
to be taken at some point in time. Now, a few pages later, the action has
to be expedited. Why this inconsistency? The lack of data, facts and photographic proof suggests such proof may be lacking.
SUGGESTED ACTION: Provide descriptions of those conditions and explain why
expedited action is required. Otherwise, delete the sentence.

COMMENT #9: SECTION 4.2, PAGE 4-3, last paragraph in Section 4.2.
The words "facility's decay" and "partial structural collapse" easily apply
to a facility made of cardboard or 1/4 inch plywood. These words don't easily apply to concrete walls 6 to 8 inches thick.
SUGGESTED ACTION: Either provide justification as to which portions of the
facility will decay and will be subject to partial structural collapse, or
delete the words altogether.

COMMENT #10: SECTION 4.3, 3rd paragraph section 4.3 on page 4-3.
The statement is made that severe weather conditions can create facility conditions amenable to radiological releases. What are the weather

conditions and what facility conditions would they create that would affect
radiological releases? Without such knowledge, this report has little value.

COMMENT #11: SECTION 4.3, top line on page 4-4. The statement is made that
minimal surveillance could result in a possible major fissile material inventory release. Please modify this report to explain what actions would
be omitted by minimal surveillance. Also explain how a major fissile material inventory release would occur.

If a major fissile material inventory release is credible, then perhaps actions to prevent such a release should be considered as a separate alternative.

COMMENT #12: SECTION 4.4, last paragraph on page 4-5. The statement is made
that there is a risk associated with what is called a major inventory of fissile material. There is no scientific evidence provided about the condition of this fissile material nor are there scientific explanations as
to how such fissile material would escape the facility.
There appears to be a rush to make judgements supporting the desired conclusion of the report without the presentation of evidence to support the
judgements.

COMMENT #13: SECTION 5.1, first paragraph (page 5-1).
The sentence, "Reducing the potential threat to acceptable levels is a threshold requirement and is the primary objective of the remedial program."
This wording is exactly taken from the document.

The document does not state what acceptable levels are nor does it define
potential threats. The words, "is a threshold requirement" don't make sense. The primary objective of the remedial program seems to change from
section to section.

Nowhere in the site description is the concept of "potential threat" developed in scientific, engineering terms. So at this point, the term is
essentially meaningless, because no explanation has been provided as to how
contamination on the walls of tanks can get out of the tank, get out of the
process cell, and get out of the building. So where is the potential threat?
It needs to be described in very clear terms.

COMMENT #14: SECTION 5.2, 2nd paragraph in section, page 5-2.
The statement is made that the no-action alternative would not attain compliance with a number of requirements. Why not? What specific aspects
of the 233-S would not comply with what specific requirement?

Without these facts, there is no basis to declare the no action alternative
unacceptable.

COMENT #15: SECTION 5.3, 1st paragraph, page 5-7.
The statement is made that the no-action alternative greatly increases risk
in the long term by allowing loose alpha contamination to be released..."
This statement is quite different from previous statements which declared
immediate action to be essential.

In this sentence, the meaning of long term is questioned. 50 years? 100 years?
Please explain what long term means.

COMMENT #16: SECTION 5.3, 2nd paragraph (page 5-7).
This paragraph discusses possible upgrades listing examples which have not
been fully explored in the document. The on-going maintenance of the exhaust/blower system is presented as a given. Is there an alternative which addresses sealing the process cell and shutting down the exhaust system? What are the factors which prevent entombment, or temporary entombment for 5-10-15 years until better plans can be made for 200-West facilities?

COMMENT #17: SECTION 5.5, last paragraph on page 5-9.
A fact is given that there is 1.5 microcuries of smearable alpha contamination throughout the facility. Nowhere in the document is there information which describes how this 1.5 microcuries smearable alpha is a
threat to leave the building. This amount is unusually small to justify building demolition.
This number is inconsistent with data presented in the Appendix (1.3 curies
on the surface of process hood).

COMMENT #18: Section 6.0, page 6-1.
This document does not provide the technical justification for the alternative recommended. There is an absence of technical facts to support
conclusions throughout the document, and as such, the document does not contain a valid engineering evaluation. SUGGESTED ACTION: Rewrite the document using observable facts to support every statement and conclusion.

COMMENT #19: GENERAL. This document was written to support the decision to
demolish the 233-S facility. There are other alternatives which need to be
explored by a valid engineering evaluation. These include improved specific
maintenance actions such as the use of a polyurea roof to gain another 40-50
years extension onto the life of the roof.

Other alternatives might include waiting 5 to 10 years to determine what the
overall plan will be for the 200-W area will be. Other alternative might be
to use the facility as a demonstration for laser decontamination technology
presently in use by the Navy in Bremerton to decontaminate metal and to cut
pieces of submarine into small pieces for recycle. Laser decon methods could be used to remove alpha materials and thus reduce the amount of

material labeled as TRU for expensive packaging and disposal offsite.

Another alternative may be to decontaminate the process cell. This action
is common to many alternatives, but would be a lower cost than complete
facility demolition.

Thank you for allowing me to comment on the document. I found Section
5.5
and the Appendix to be different from the rest of the document insomuch
as
these two portions appeared more practical with statements based on
fact. I
need to study both sections in more detail and hope to complete that
review
by Feb 25th.

Vince Panesko
1114 Marshall Ave.
Richland, Wa 99352

Phone 946-1229
FAX and voice mail: 943-8431
email: vince@owt.com

Work Phone: 946-0611
Work FAX: 943-8431