



## WAG 3 FACT SHEET

---

### INTRODUCTION

The INEEL CAB reviewed DOE's draft fact sheet entitled "Comprehensive investigation reveals extent of contamination within Waste Area Group (WAG) 3."

The Board acknowledges the difficulty of summarizing the volumes of highly technical information in a fact sheet. While the draft fact sheet is not a bad first draft, revisions could minimize confusion and result in improved communication of key concepts.

### RECOMMENDATION

The Board recommends that the following changes be made to the fact sheet before it is finalized for distribution to the public:

- The fact sheet should review basic information about WAG 3, including its location. It should also review what the RI/FS included and what it did not (i.e., the buildings and tanks).
- The fact sheet should more clearly communicate the sources, magnitude, and types of risks (i.e., human health or ecological) posed by WAG 3.
- Please provide both vicinity and location maps for tritium, strontium, and Iodine-129 plumes in relation to the site boundary.
- Add a separate paragraph at the top of page 6 that describes present contamination and that which is projected for the future based on decay, dilution, and natural attenuation. If space allows, use maps to illustrate the expected (modeled) changes.
- Add a definition for radioactive decay in the sidebar on the page where the term is first used.
- The fact sheet should explain how DOE will ensure that contamination of the aquifer by plutonium, americium, and europium will not occur.
- The fact sheet should explain that the computer modeling is based on the no-action alternative.
- Review of the fact sheet led some of the Board members to conclude that existing Iodine-129 regulations are unreasonable and unjustified. The Board intends to review this regulation. At this time, however, the Board recommends that the fact sheet be worded in such a way as to communicate that DOE fully intends to comply with all existing regulations.
- On page 1, in the 2nd paragraph, the text suggests the possibility of consolidating soils at one facility. What other alternatives were considered and why were they ruled out?
- The 1st paragraph on page 2 implies that all liquid wastes have been calcined. This is not true even for non-sodium bearing liquid waste and certainly not true for the sodium bearing liquid waste. The fact sheet should acknowledge that the calcination process is ongoing.
- In the sidebar on page 2, the term "calcine" would be a better name for that process.

- In the sidebar on page 2, perched water is defined as water that is perched between layers. A definition must not rely on the word being defined, use terms familiar to the general public. The definition should be revised by using the word "isolated" instead.
- On pages 2 and 3 of the fact sheet, statements are made that indicate that disposal of radioactive and chemical waste through the injection well was "acceptable at the time." The fact sheet should explain past practices but not attempt to justify them.
- On page 3, the phrase "the extent of the lower perched water bodies is less well defined" is confusing. Please clarify whether this refers to the extent of the contamination or the size/location of the water body.
- On page 4, tritium, I-129 and strontium-90 are referred to in the last two paragraphs but the order is changed. This adds unnecessary confusion. The fact sheet should minimize confusion by using a consistent format.
- In the 1st paragraph of page 5, it is unclear if the 44 monitoring wells are on WAG 3, on-site, off-site, or a combination of these locations. Please clarify.
- Repeated statements as to what was dumped at WAG 3 are contradictory (i.e., page 5, 3rd paragraph and discussion of europium).
- The fact sheet implies that there are numerous hazards at WAG 3. The only hazards that are well described are I-129 and mercury contamination in soils. The fact sheet should clearly list all contaminants of concern and the risks posed by each. Risk discussions should address both on-site and off-site risks.
- In the middle of page 5, 2nd paragraph under Human Health Evaluation, and in the upper figure, the term "risk management" is used incorrectly. Risk management decisions are made at all risk levels above  $1 \times 10^{-6}$ . Actions are sometimes taken at levels between  $1 \times 10^{-6}$  and  $1 \times 10^{-4}$  and almost always taken at levels above  $1 \times 10^{-4}$ . Please correct.
- In the legend for Figure 4-15, the term H-3 distribution is used without explanation. Also it would be better to spell out Snake River Plain Aquifer rather than use the acronym in a figure legend. The remediation alternatives discussed on pages 6 and 7 are so poorly defined that they are not understandable. Please provide better definitions.