

Many Voices Working for the Community

## Oak Ridge Site Specific Advisory Board

May 4, 2000

Mr. Rod Nelson Assistant Manager for Environmental Management DOE-Oak Ridge Operations P.O. Box 2001, EM-90 Oak Ridge, TN 37831

Dear Mr. Nelson:

## Draft Environmental Assessment for the Sale of Zinc Bromide Solutions for Commercial Recycling and Reuse, DOE/EA-1324, February 2000

At our May 3, 2000, Board meeting, the Oak Ridge Site Specific Advisory Board (ORSSAB) unanimously approved the following recommendation.

ORSSAB has reviewed the subject document and has concluded that neither the action decision DOE contemplates in this situation nor the analysis of issues contained in the draft environmental assessment (EA) seem particularly relevant to the requirements of the National Environmental Policy Act (NEPA).

It has been determined that the material in question is neither low-level radioactive waste nor RCRA hazardous waste. As such, the solutions can be released as government surplus property in accordance with established property management procedures that do not normally involve NEPA evaluations. In addition, the principle technical element of the EA analysis involves the protocols established in DOE Order 5400.5 for the release of "residual radioactive materials." Again, neither this order nor the protocols cited would seem applicable to these materials or the situation being evaluated. Ironically, although the EA indicates that the most likely use of the materials to be sold on the commercial market will involve the deliberate dispersion of these chemicals into the natural environment, no substantive attempt is made in the EA to evaluate the actual environmental impacts that might result from those discharges.

The SSAB recommends that DOE discontinue any further unnecessary attempts to address this proposed action under NEPA and simply advise the State of Tennessee in formal, written correspondence that, despite earlier erroneous designations, these zinc bromide solutions are not, in

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fact, low-level radioactive or hazardous wastes and that all references to these materials can be deleted from the Site Treatment Plan.

Should DOE elect to issue the EA, we request that the enclosed comments on the document be addressed.

Sincerely,

im H. Kapp

Steven H. Kopp, Chair

Enclosure

SHK/plo

cc: Brian DeMonia, DOE-ORO Susan Gawarecki, LOC Clayton Gist, DOE-ORO John Hankinson, EPA Earl Leming, TDEC Teresa Perry, DOE-ORO Bryan Westich, DOE-ORO



Oak Ridge Site Specific Advisory Board Comments on the *Draft Environmental Assessment* for the Sale of Zinc Bromide Solutions for Commercial Recycling and Reuse, DOE/EA-1324, February 2000

## **GENERAL COMMENTS**

We find that, although the inventory of used zinc bromide solutions currently stored at the East Tennessee Technology Park (ETTP) may be safely released from DOE control for recycling by Tetra Technologies, the evaluation and decision-making process may require more clarification than the document provides.

A more thorough discussion may be useful of the process in DOE Order 5400.5 to determine that the radionuclide levels of DOE-owned zinc bromide are not statistically different from the levels found in virgin material and any similarity to the No-Radioactivity-Added (NRA) determinations for hazardous waste to be shipped off-site for commercial treatment, storage, or disposal. DOE Order 5400.5 itself states that no guidance is currently available for release of volumetrically contaminated materials but that such materials may be released if criteria and survey techniques are approved by EH-1. NRA determinations are understood to have standards for use of process knowledge, analytical results, or combination of the two. Process knowledge is understood to include adequate knowledge of the complete history of the material and that it was not exposed to unconfined radioactive material or particle beams capable of causing activation. The change in the initial characterization of this material as a waste and removal from service at Oak Ridge National Laboratory to a storage facility at ETTP may indicate a deficiency in process knowledge. The NRA determination process based on analytical results is understood to involve a statistical determination that the radioactivity level is not significantly greater than background from commercially available or virgin materials. Any gap in process knowledge undermines the validity of a null hypothesis that no radioactivity has been added. We feel, therefore, that discussion of process knowledge should be added.

## **SPECIFIC COMMENTS**

- Page 1: Sect. 1.2, paragraph 3 D002 is the RCRA hazardous waste code for corrosive characteristic. Lead is D008.
- Page 3: Sect. 1.2, first partial paragraph Samples of new zinc bromide from another commercial supplier may have increased the credibility of the comparison.
- Page 3: Table 1 All radionuclide results should be in terms of a result  $\pm$  uncertainty.
- Page 14: Waste Management Disposal of empty containers is not mentioned.
- Page 18: Hydrology and Water Quality For treatment in an on-site wastewater treatment facility, it is thought that any bromide in the treated effluent may require special consideration in the National Pollutant Discharge Elimination System permit. If so, this be an additional disadvantage of the alternative.
- Page 21: Hydrology and Water Quality The same comment about bromide in treated effluent from an on-site wastewater treatment facility is applicable to leachate from a landfill.