February 8, 2013

Kevin Smith, Manager
U.S. Department of Energy, Office of River Protection
P.O. Box 450 (H6-60)
Richland, WA 99352

Re: Independent Evaluation of Procedures and Industrial Hygiene Equipment Used to Monitor Tank Vapors and Flammable Gas

Dear Mr. Smith,

**Background**

In December 2012, health physics technicians discovered that industrial hygiene (IH) monitoring equipment in use at the Hanford tank farms may produce unreliable results when used in high humidity environments.

The Hanford Advisory Board (Board) is concerned that use of IH monitoring equipment in conditions outside of the manufacturer’s technical operating specifications and procedures may result in unreliable test results, and may undermine employee confidence in the IH monitoring program and the validity of past monitoring data.

The Board appreciates efforts by the U.S. Department of Energy (DOE) and their contractor to address concerns related to the reliability of IH monitoring instruments when used in high-humidity and extreme temperature conditions. In particular, the Board recognizes the effort expended to provide additional training for IH technicians and solicit the equipment manufacturers’ support in addressing worker concerns. However, the Board believes that worker safety, and the trust and credibility of the program will be enhanced with an independent review by the National Institute for Occupational Safety and Health (NIOSH).

**Advice**

- The Board advises DOE to continue its efforts to secure an independent evaluation by NIOSH of procedures and industrial hygiene equipment used to monitor tank vapors and flammable gas in conditions outside of the manufacturer’s technical operating specifications and procedures.
Sincerely,

Steve Hudson, Chair
Hanford Advisory Board

This advice represents Board consensus for this specific topic. It should not be taken out of context to extrapolate Board agreement on other subject matters.

Emmett Moore, (University) Washington State University abstained

cc: Matt McCormick, Manager, U.S. Department of Energy, Richland Operations
    Dennis Faulk, U.S. Environmental Protection Agency
    Jane Hedges, Washington State Department of Ecology
    Josh Harney, National Institute of Occupational Safety and Health
    Catherine Alexander, U.S. Department of Energy, Headquarters
    The Oregon and Washington Delegations