

**JOINT STATEMENT  
FROM WRPS AND HANFORD CHALLENGE  
ON INDEPENDENT REVIEW OF CHEMICAL VAPORS  
INDUSTRIAL HYGIENE STRATEGY**

The Hanford tank farms present unique complexities, uncertainties and challenges to protecting workers from exposure to chemical vapors.

After Washington River Protection Solutions (WRPS) assumed the tank farm contract in 2008, it drafted a strategy for improving the management of chemical vapors in the tank farms based on a model developed by the American Industrial Hygiene Association. WRPS and Hanford Challenge then jointly requested the Hanford Concerns Council contract for a subsequent review of WRPS' proposed strategy, focusing on the Industrial Hygiene program and implementation of protection practices in addition to reviewing the technical underpinnings of the protection strategy.

The council selected experts in the field of industrial hygiene, shepherded the gathering of relevant data, and facilitated on-site visits and interviews. The review was an iterative process that fostered mutual understanding of the proposed strategy and allowed for suggestions and input into its development and refinement. As a result, some improvements to the proposed strategy have already been adopted during the course of the review.

In the executive summary of its report, the Independent Review Panel (IRP) states:

*Managing chemical vapors at the Hanford Tank Farms is complex and requires development of strategies and procedures not typically encountered in traditional workplaces. The complexities of this situation are well appreciated by WRPS. During the process of this review, WRPS has made important improvements over previous drafts of the Tank Farm Chemical Vapor Management Strategy (TFCVMS). Further, it is evident to the IRP that WRPS recognizes the unique challenges and is committed to developing comprehensive, defensible, and appropriate strategies and continued improvements. While strides have been made to improve exposure assessment strategies, this report identifies further opportunities to improve on the proposed management strategy.*

*Some of the suggestions and recommendations outlined in this report are intended to ensure a robust statistical approach for evaluating exposures within the tank farms. It is important to recognize that any assessment strategy should err on the side of being protective. In some cases, the IRP is concerned that the proposed application of statistical tools designed to be used in more routine work places may lead to an underestimation of exposure. In other cases the IRP's comments focus on the need to improve risk communication and risk management procedures. If implementation of the TFCVMS ultimately incorporates these suggestions, the proposed new strategy will strengthen current practices for managing chemical vapor exposures in the tank farms, a complex and uniquely challenging environment.*

Hanford Challenge and WRPS have embraced the report as a strong platform from which to improve vapor protection measures in the tank farms.

“I appreciate the improvement opportunities suggested by the Independent Review Panel,” says Chuck Spencer, president and project manager of WRPS. “The recommendations are consistent with our principle of keeping chemical exposures “As Low As Reasonably Achievable” and meets our goal of continually improving worker safety at Hanford’s tank farms. Over the past two years, WRPS has taken many steps to more accurately characterize tank vapors and to reduce or eliminate worker exposures to tank vapors.”

WRPS is taking steps to identify funding and implement high-priority recommendations by initiating pilot projects that could lead to full implementation, and will work with DOE to assess the feasibility of other recommendations. There are three general areas of improvements: Hardware and Engineering Controls, Program Enhancements, and Worker Enhancements.

In the area of Hardware and Engineering Controls, WRPS will continue with modifications to heighten double-shell tank stacks, evaluate their effectiveness and determine if additional engineering controls are needed, and continue to test and implement new vapor detection instruments.

In the area of Program Enhancements, WRPS will adopt Similar Exposure Groups (SEGs) using the process defined in the American Industrial Hygiene Association (AIHA) Exposure Assessment (EA) Model, and evaluate and refine sampling strategies and the exposure assessment process.

Regarding Worker Enhancements, WRPS will ensure representative sampling of workers within Similar Exposure Groups and utilize the data to support medical monitoring and expand worker awareness of potential symptoms of tank vapor exposure.

“I appreciate the improvements made to date by WRPS and their willingness and openness in participating in this process and responding positively to the recommendations,” said Tom Carpenter, Hanford Challenge executive director. “The proof, of course, is in implementation. We will continue to vigilantly work to ensure these recommendations are adopted in a reasonable timeframe and become reality in the tank farms.”

Chuck Spencer, WRPS, stated, “The health and safety of our workforce is a core value and critical to the success of the Hanford cleanup mission. We appreciate the hard work of the Independent Review Panel and of the Hanford Concerns Council and appreciate working with groups like Hanford Challenge to achieve a level of protection above and beyond regulatory compliance that ensures chemical exposures are As Low As Reasonably Achievable.”