

Fiscal Year 2017  
Chemical Vapors Communication Activities  
Quarterly Report #3  
*April – June 2017*



washington **river**  
**protection solutions**

*An AECOM-led company with Atkins and AREVA*



## Introduction

Washington River Protection Solutions (WRPS) is committed to the timely and transparent release of information related to chemical vapors in the Hanford tank farms. The information in this report represents an accounting of WRPS' efforts to increase engagement with the workforce and stakeholders on the chemical vapors issue.

In support of furthering Department of Energy (DOE) mission goals, WRPS has and will continue to pursue a variety of vapors-related initiatives. By increasing awareness of those goals, and the progress made toward meeting them, WRPS aims to bring greater understanding of chemical vapor hazards and how those risks are mitigated. Worker involvement and feedback is a key aspect in communications planning and delivery.

WRPS relies on a number of tools to inform workers and stakeholders on the topic of chemical vapors protection and strategy. Those tools include, but are not limited to:

- Employee meetings
- All-employee email messages
- Weekly newsletter articles
- Regular posts to the [Hanford vapors website](#)
- Participation in the employee-driven Chemical Vapors Solutions Team (CVST) and various subcommittees
- Public meetings
- Tours

By communicating openly and often through a variety of means, WRPS intends to create an understanding of what is happening, where we are going in the area of vapors and chemical protection initiatives and what it means to our employees, our families and our community.

## In this report: Fiscal Year 2017 – 3<sup>rd</sup> Quarter highlights

- New data sets posted to the Hanford vapors website
- HAMTC letter recognizes “collaboration and good faith interactions” between WRPS and union
- All-employee messages communicate waste-disturbing activities and related vapor controls
- All-employee survey seeks input on WRPS' safety culture and ways to improve trust and communication with the workforce
- WRPS hosts visit from then-Acting Assistant Secretary for DOE Environmental Management, Sue Cange, highlighting vapors technologies at Hanford's AP Farm
- WRPS conducts Lean Management Rapid Improvement Event to propose more effective means communicating vapors-related information with the WRPS workforce

## About us

*Washington River Protection Solutions is a limited liability corporation owned by AECOM and Atkins, with AREVA as its primary subcontractor. The company's mission is to reduce the environmental risk posed by 56 million gallons of radioactive and chemical waste stored in 177 underground tanks near the center of the 586-square-mile Hanford Site in southeastern Washington state. For more, visit [www.wrpstoc.com](http://www.wrpstoc.com).*

## April 2017

- Communications & Public Relations worked with the Chemical Protection Program Office to collect and post a number of updated data sets to the [Hanford vapors website](#). Updates included:
  - [46 updated headspace/source and non-personnel sampling data](#)
  - [21 new VMDS \(pilot-scale\) reports](#)
  - [13 new RJ Lee Mobile Lab weekly reports](#)
  - [7 updated AOP-015 table summary data reports](#)
  - [7 new AOP-015 Event Investigation Reports on newly created webpage](#)
  - Two new buttons on the [Employee Resources](#) section denoting two new pages:
    - A [Chemical Vapors Solutions Team \(CVST\) webpage](#)
      - Link to the [CVST charter](#)
      - 14 documents (agendas and meeting minutes)
    - Development of a [Chemical Protection Program Office \(CPPO\) webpage](#)
      - Posted 20 weekly reports and a Q1/Q2 quarterly report
  - [10 new AOP-015 Event Investigation Reports](#)
  - [2 CPPO Weekly Reports](#)
  - Four Vapors weekly updates:
    - [Vapors weekly update – April 6](#)
    - [Vapors Weekly update April 13](#)
    - [Vapors Weekly Update – April 20, 2017](#)
    - [Vapors weekly update – April 27, 2017](#)
- A [letter to WRPS and the Department of Energy Office of River Protection from Dave Molnaa](#), former Hanford Atomic Metal Trades Council (HAMTC) president, acknowledged the “collaboration and good faith interactions between WRPS and HAMTC” that have resulted in improvements in worker safety over the past year. The letter was sent to all WRPS employees and posted to the Hanford vapors website.
- A newsletter article highlighted completion of a new air bottle change tent in AW Farm. Located at the farm’s northwest corner, the structure was installed to accommodate approximately 30 workers who replaced the AW-106 pump. Replacement of the pump was necessary to support a waste volume reduction campaign at the 242-A Evaporator.
- An all-employee email was sent notifying workers of the Energy Employees Occupational Illness Compensation Program Act, or EEOICPA, meetings. The EEOICPA was passed by Congress to

Chemical Vapors Solutions  
Team (CVST) meetings  
April 12

CVST communications  
subcommittee meetings  
April 17



*Inside a SCBA air bottle change tent at AW Farm.*

compensate for and provide medical treatment of occupationally linked illnesses at DOE work sites.

- Several employee messages were sent to notify employees of waste transfers taking place between two double-shell tanks. As this is considered waste-disturbing work, a vapors control plan was included with the message outlining steps taken during operations to protect worker health.
- WRPS issued a message to all employees detailing preparations taking place to for AY-102 visual inspections. The vapor control strategy map was attached to the message, and controls were summarized in the body of the message.
- WRPS helped prepare a [briefing on tank farms infrastructure for the April 19 Hanford Advisory Board meeting](#). The presentation was delivered by Jeremy Johnson, DOE Deputy Federal Project Director for Tank Farms.

## May 2017

- Website posts:
  - [Vapors weekly update – May 4](#)
  - [Vapors weekly update – May 11](#)
  - [Vapors weekly update – May 18](#)
  - [Vapors weekly update – May 25](#)
  - [CPPO Weekly Report – May 4, 2017](#)
  - [21 new AOP-015 Event Investigation Reports](#)

- [EIR-2014-10](#)
- [EIR-2014-11](#)
- [EIR-2014-17](#)
- [EIR-2014-18](#)
- [EIR-2014-20](#)
- [EIR-2014-24](#)
- [EIR-2014-25](#)
- [EIR-2014-26](#)
- [EIR-2014-29](#)
- [EIR-2014-30](#)

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- [EIR-2014-33](#)
- [EIR-2014-37](#)
- [EIR-2014-46](#)
- [EIR-2015-13](#)
- [EIR-2015-14](#)
- [EIR-2015-18](#)
- [EIR-2015-24](#)
- [EIR-2015-30](#)
- [EIR-2015-33](#)
- [EIR-2016-39](#)
- [EIR-2016-54](#)

- A newsletter article highlighted issuance of WRPS' 2<sup>nd</sup> Quarter Award Fee Summary, which details approved use of full-face air-purifying respirators under limited conditions in Hanford's AP Farm; WRPS' continued work to foster open communication with its workforce and its dedication to post timely information to the vapors website; and ongoing projects to design, test and install vapors abatement technology.
- A safety culture survey will give WRPS employees an opportunity to be heard. WRPS will conduct an all-employee survey in July that will be independently administered by the Oak Ridge

Associated Universities. The end goal of the survey is to obtain specific, actionable feedback on the WRPS safety culture, including ways to improve trust and communication with the workforce on important issues, such as chemical vapors.



*WRPS representatives provided a tour for Sue Cange, then-Acting Assistant Secretary for DOE's Office of Environmental Management.*

- WRPS hosted a visit from then-Acting Assistant Secretary for DOE Environmental Management, Sue Cange. The tour, which provided an overview of the pilot-scale testing of technologies at Hanford's AP tank farm associated with WRPS' overarching chemical protection strategy, was highlighted in a newsletter article for WRPS employees.
- WRPS sent an email to employees regarding the Workers Compensation Program Audit. The review, conducted by the DOE Office of Inspector General, will look at the effectiveness of the Department's processes, procedures, and controls related to the Worker's Compensation Program at the Hanford Site.
- An all-employee message announced the start of work to extend the exhaust stack at Hanford's 242-A Evaporator. The exhaust stack was extended from about 63 feet above grade to 111 feet above grade. The stack extension project is designed to improve the dilution ratio of the exhaust gases by a factor 10 times better than the present stack. During construction, area around the worksite was restricted. The email sent to workers outlined those restrictions.
- Another email to workers announced the start of work to remove a long-length pump from tank AW-106. As this is considered waste-disturbing work, a vapors control plan was included with the message outlining steps taken during operations to protect worker health.
- WRPS conducted an all-manager meeting on May 15. The briefing included an update on chemical vapors and the comprehensive strategy being implemented to reduce potential worker exposure and further improve worker safety and health.

## June 2017

- Website posts:
  - Vapors Weekly Updates
    - [Vapors weekly update – June 1](#)
    - [Vapors weekly update – June 8](#)
    - [Vapors weekly update – June 15](#)
    - [Vapors weekly update – June 26](#)
  - New/updated data reports
    - [VMDS Weekly Report \(March 8-15, 2017\)](#)
    - [WMDS Weekly Report \(Feb. 1-8, 2017\)](#)
    - [WMDS Weekly Report \(March 1-8, 2017\)](#)

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- [AP Stack Weekly Report \(Feb. 1-8, 2017\)](#)
- [AP Stack Weekly Report \(March 1-8, 2017\)](#)
- [AP Stack Weekly Report \(March 8-15, 2017\)](#)
- [97 updated data reports \(non-personal headspace/source sampling data\)](#)
- AOP-015 communications
  - [Odors reported outside A Farm – 6/13/17](#)
  - [UPDATE: Odors reported outside Hanford's A Farm – 6/13/17](#)
  - [2nd UPDATE: Odors reported outside Hanford's A Tank Farm – 6/13/17](#)
- CPPO Weekly Reports
  - [June 22, 2017](#)
  - [June 8, 2017](#)
  - [June 1, 2017](#)
  - [May 25, 2017](#)
  - [May 18, 2017](#)
  - [May 11, 2017](#)
- CVST Agendas
  - [May 24, 2017](#)
- CVST Minutes
  - [May 24, 2017](#)
  - [April 12, 2017](#)
  - [March 22, 2017](#)
  - [March 8, 2017](#)
  - [Feb. 22, 2017](#)
  - [Jan. 25, 2017](#)
- Updated *HPMC Chemical Exposure Evaluation Form*, available in two locations:
  - <https://hanfordvapors.com/respond/chemical-exposure-evaluation-procedure/>
  - Direct from left-side navigation (How Do We Respond?>Chemical Exposure Evaluation Procedure>HPMC procedure): <https://hanfordvapors.com/wp-content/uploads/2017/06/Chemical-Exposure-Evaluation-Process.pdf>
- WRPS sent out a message to employees, including multiple updates, regarding an [odor event declared outside of Hanford's A Farm](#). Five workers were taken for medical evaluation and released to return to work. Three experience symptoms, while two did not. The employees were not in an area that required use of a supplied-air respirator when odors were reported. The messages were posted on the [Hanford vapors website](#).
- An all-employee message was sent regarding final preparations for the 242-A Evaporator campaign. As this is considered waste-disturbing work, a vapors control plan was included with the message outlining steps taken during operations to protect worker health.
- A newsletter article highlighted evaluation of Self-Contained Breathing Apparatus (SCBA) units. After evaluating 10 SCBA units for potential tank farm use, then narrowing the choices to four for testing at HAMMER, an employee committee selected two models for further testing inside the

tank farms this summer. The units are both manufactured by Scott Safety, a major provider of respiratory and personal protective equipment.

- A newsletter article highlighted a Lean Management Rapid Improvement Event held in May to propose more effective means of exchanging information between chemical vapor subject-matter experts and the WRPS workforce. The event, sponsored by the Chemical Protection Program Office, focused on finding ways to increase face-to-face communication with subject-matter experts, strengthen the use of the Chemical Vapors Solutions Team as an effective communication tool, and improve the workforce's access to web-based vapors resources.



*A Lean Management Rapid Improvement Event solicited input from workers across the tank farms.*

- An article highlighted work to replace the ventilation stack on the 242-A Evaporator. The stack was extended from about 63 feet above ground level to 111 feet. Moving the exhaust stream away from the work zone aims to improve worker safety and health.
- A newsletter article once again highlighted an all-employee survey in July that will be independently administered by the Oak Ridge Associated Universities. The end goal of the survey is to obtain specific, actionable feedback on the WRPS safety culture, including ways to improve trust and communication with the workforce on important issues, such as chemical vapors.
- In its employee newsletter, WRPS highlighted ongoing work at AP Farm to develop the Vapor Monitoring and Detection System (VMDS). The WRPS Chief Technology Office and Vapors Program have been working on developing a VMDS that will detect and measure vapor emissions.
- A newsletter article highlighted a group of WRPS and subcontractor tank farm workers who underwent two days of training and mock-up exercises in the use of portable air-line breathing systems at the HAMMER training facility. An air-line respirator delivers breathing air to a worker through a hose connected to a compressor or manifold located in, or drawing air from, a clean environment. It is being evaluated this summer as a potential alternative, in certain conditions, to SCBA use.
- WRPS helped prepare an [agency update on tank farms for the June 7 Hanford Advisory Board meeting](#). The presentation was delivered by Ben Harp, ORP Deputy Manager.
- Chemical Vapors Integration Manager Rob Gregory provided a vapors strategy update presentation to the Vapors Management Expert Panel.