



Department of Energy
Washington, DC 20585

May 27, 2011

Mr. Charles G. Spencer
President and Project Manager
Washington River Protection Solutions, LLC
2440 Stevens Center Place
Richland, Washington 99354

NCO-2011-01

Dear Mr. Spencer:

The U.S. Department of Energy (DOE) Office of Health, Safety and Security's Office of Enforcement and Oversight has completed its investigation into the facts and circumstances associated with identified deficiencies in the Washington River Protection Solutions, LLC (WRPS) corrective action management program, radiation control program, and sealed radioactive source accountability and control program. DOE views these programs as vital to protect workers and the public from the radiological hazards associated with monitoring and managing the 177 mixed hazardous waste storage tanks at the Hanford Tank Farm. The investigation addressed specific areas of potential noncompliance with DOE nuclear safety requirements established in Title 10 C.F.R. Part 830, *Nuclear Safety Management*, and Title 10 C.F.R. Part 835, *Occupational Radiation Protection*.

The Office of Enforcement and Oversight's investigation, which relied extensively on related assessments conducted by the DOE Office of River Protection (ORP) extending back to June 2008, identified significant nuclear safety deficiencies related to the WRPS programs mentioned above. Deficiencies were identified in the areas of training, quality improvement, work processes, High Radiation Area entry control, radiological area posting and labeling, maintaining radiation exposures As Low As Reasonably Achievable, radioactive material control, and sealed source accountability.

While these programmatic nuclear safety deficiencies are considered significant, it is recognized that: (1) there was no known adverse impact on the public; (2) no known worker radiation exposures could be directly attributed to these deficiencies; and (3) all sealed radioactive sources have been accounted for. WRPS took prompt action when the deficiencies were fully identified, including two formal causal analyses and associated corrective action plans. Identified



corrective actions have been approved by ORP and appear to be appropriate to address the identified nuclear safety deficiencies.

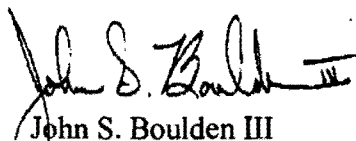
In accordance with 10 C.F.R. § 820.23, the Office of Enforcement and Oversight has exercised its enforcement discretion to resolve these issues through a Consent Order. DOE's decision to enter into a Consent Order is based upon WRPS's corrective actions taken in response to the identified deficiencies in its corrective action management program, radiation control program, and sealed radioactive source accountability and control program.

DOE reserves the right to initiate enforcement proceedings against WRPS if it later becomes known that any of the facts or information provided to DOE regarding the described deficiencies was false or inaccurate in any material way. Further, if there is a recurrence of nuclear safety deficiencies similar to those identified above, the Office of Enforcement and Oversight may decide to pursue additional enforcement activity. The Office of Enforcement and Oversight, the DOE Office of Environmental Management, and ORP will continue to closely monitor WRPS quality assurance and occupational radiation protection performance for this project.

Enclosed are two signed copies of the Consent Order. Please sign both, keep one for your records, and return the other copy to this office within one week from the date of receipt of this Order. By signing this Consent Order, WRPS agrees to remit a \$100,000 monetary remedy, payable to the Treasurer of the United States, in accordance with the directions in the enclosed Consent Order and to provide DOE with the information specified in Section IV of the Consent Order.

Should you have any questions, please contact me at (301) 903-2178, or your staff may contact Mr. Steven Simonson, Acting Director, Office of Nuclear Safety Enforcement, at (301) 903-7707.

Sincerely,



John S. Boulden III
Director

Office of Enforcement and Oversight
Office of Health, Safety and Security

Enclosure

cc: Scott Samuelson, ORP
Phyllis Bruce, WRPS
Richard Azzaro, DNFSB

In the matter of) Report No. NTS-ORP--WRPS-TANKFARM-2010-0001
) NTS-ORP--WRPS-TANKFARM-2010-0002
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Washington River Protection)
Solutions, LLC)
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) Consent Order NCO-2011-01

CONSENT ORDER INCORPORATING AGREEMENT BETWEEN
U.S. DEPARTMENT OF ENERGY AND WASHINGTON RIVER PROTECTION
SOLUTIONS, LLC

I

Washington River Protection Solutions, LLC (WRPS) is the prime contractor responsible for monitoring and managing the 177 underground mixed waste storage tanks (Tank Farm) at the Hanford Site. WRPS has performed this work under Contract No. DE-AC27-08RV14800 (Contract) to the U.S. Department of Energy's (DOE) Office of River Protection (ORP) since October 2008.

II

In June 2008, ORP issued a letter to CH2M-Hill Hanford Group (CHG), the former Tank Farm prime contractor, documenting a concern about the implementation of the High Radiation Area (HRA) program. Specific deficiencies included unlocked and accessible HRAs, inadequate key control, inadequate postings, inventory mismatches and documentation inconsistencies, barrier degradation, and failure to conduct critiques or root cause analyses to prevent recurrence of such deficiencies. In October 2008, the Tank Farm contract transitioned to WRPS. However, neither CHG nor WRPS took timely, effective corrective action to address the concerns about the Tank Farm HRA program identified by ORP.

In June 2010, ORP issued the results of an assessment of the WRPS radiation control program, which identified one concern and 15 findings. The one concern was that the WRPS corrective action management system did not provide objective evidence of a process that resulted in quality improvement in the radiation control program. The three most significant findings included: (1) the WRPS As Low As Reasonably Achievable (ALARA) and work planning programs were not consistently implemented; (2) radiation control work did not meet acceptable standards; and (3) the emergency management program did not integrate planning, preparedness, response, and recovery activities. In response to this assessment, WRPS conducted a causal analysis, which was subsequently approved by ORP. The WRPS analysis included the following specific causal factors: (1) WRPS lacked sufficient organizational discipline to consistently function at the necessary level of reliability in corrective action management, radiological program

elements, and planning and conducting of radiological work; (2) WRPS managers and workers did not take responsibility for problem identification, resolution, and follow-through; (3) several regulatory and contractual requirements were not uniformly viewed or managed as absolute requirements; and (4) the WRPS Radiological Controls organization was not fully aware of, and therefore did not adequately manage to their performance objectives, measures, and commitments. WRPS has developed, and ORP has approved, a comprehensive set of corrective actions to address the identified causal factors.

In January 2010, WRPS identified that the hasps on a source storage cabinet had been removed. Upon investigation, WRPS found that a subcontractor employee had removed the hasps, without first obtaining approval from the source owner, in order to determine the dimensions of the radioactive source in preparation for shipment. Since that event, WRPS has identified three additional events involving radioactive source control and conducted a causal analysis, which has been approved by ORP. The specific common causes identified by the analysis include: (1) source user and control training was less than adequate; (2) self-checking and peer-checking techniques were non-existent or less than adequate; (3) procedural content was less than adequate; and (4) periodic monitoring and oversight of source control were nonexistent or less than adequate. WRPS has developed, and ORP has approved, a comprehensive set of corrective actions to address the identified causes.

WRPS voluntarily reported potential noncompliances with DOE nuclear safety requirements to DOE via the Noncompliance Tracking System (NTS) NTS-ORP--WRPS-TANKFARM-2010-0001 and NTS-ORP--WRPS-TANKFARM-2010-0002).

In December 2010, pursuant to 10 C.F.R. § 820.21(a) and based on the ORP assessment and NTS reports, the Office of Enforcement and Oversight initiated an investigation into radiological safety programs associated with the operation of the Tank Farm. The Office of Enforcement and Oversight investigation identified several nuclear safety deficiencies associated with the WRPS corrective action management, radiation control, and sealed radioactive source accountability and control programs. Specific deficiencies are evident in the areas of training, quality improvement, work processes, HRA entry control, radiological area posting and labeling, ALARA, radioactive material control, and sealed source accountability.

III

Pursuant to 10 C.F.R. § 820.23, at any time during enforcement proceedings, DOE may resolve any or all issues with a Consent Order if the settlement is consistent with the objectives of the Atomic Energy Act of 1954, as amended, and DOE nuclear safety requirements.

To resolve the potential noncompliances of 10 C.F.R. Parts 830 and 835 requirements and in consideration of WRPS's investigation, causal analyses, and associated corrective actions taken since the issuance of the NTS reports mentioned above, which DOE found

to be comprehensive and appropriate, DOE has elected to enter into settlement. DOE and WRPS have reached agreement to resolve this matter through execution of this Consent Order.

IV

Accordingly, the terms of this Consent Order are as follows:

In consideration of the mutual agreements set forth in this section, the sufficiency and adequacy of which are acknowledged by DOE and WRPS (hereinafter the "Parties"), the following terms represent agreement by the authorized representatives of the Parties to resolve by settlement the potential noncompliances at the Tank Farm, in lieu of an enforcement action that DOE may issue pursuant to 10 C.F.R. § 820.24.

1. In response to the issues described above, on January 28, 2011, WRPS made a presentation to the Office of Enforcement and Oversight, focusing on the corrective actions taken by WRPS to address the issues. Based on DOE's need for an additional degree of confidence that the identified corrective actions will effectively prevent recurrence of the issues and result in overall program improvement, WRPS will arrange for an independent party (non-WRPS) to perform an effectiveness review of all the actions taken to address the identified deficiencies in the WRPS radiological control program, corrective action management program, and sealed radioactive source accountability and control program. The review should include corrective actions in the NTS reports cited in section II above and any other corrective actions that WRPS used as the basis for closing the ORP concern and findings from the ORP assessment of the WRPS radiation control program (February through April 2010).

The review shall commence following the completion of corrective actions for the issues discussed in this Consent Order. The review shall be completed and a report issued no later than 12 months following the completion of the last corrective action. The report shall be provided to the Office of Environmental Management, ORP, and the Office of Enforcement and Oversight upon completion.

2. WRPS shall pay the amount of \$100,000, reflecting an agreed upon monetary remedy in lieu of the issuance of an enforcement action with the proposed imposition of a civil penalty pursuant to 10 C.F.R. § 820.24.
3. WRPS agrees to return a signed copy of this Consent Order, within one week from the date of receipt, to the address provided in item 5 below.
4. The Effective Date of this Consent Order shall be the date upon which WRPS signs this Consent Order.
5. WRPS shall remit the monetary remedy of \$100,000 by check, draft, or money order payable to the Treasurer of the United States (Account Number 891099) within

30 calendar days after the Effective Date of this Consent Order. Payment shall be sent by overnight carrier to:

Director, Office of Enforcement and Oversight
Attention: Office of the Docketing Clerk, HS-40
U.S. Department of Energy
19901 Germantown Road
Germantown, MD 20874-1290

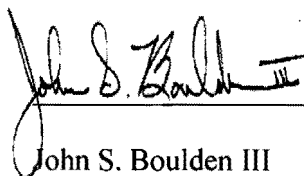
6. This Consent Order shall constitute a full and final settlement of the potential noncompliances identified in the referenced NTS reports, subject to: (a) WRPS's payment of the monetary remedy in accordance with item 5 above; (b) WRPS's completion of all actions set forth in item 1 above to the satisfaction of the Office of Enforcement and Oversight.
7. Pursuant to 41 U.S.C. § 256(k) and the implementing provisions of the Federal Acquisition Regulation found at 48 C.F.R. § 31.205-47, *Costs related to legal and other proceedings*, neither the monetary remedy nor costs incurred by, for, or on behalf of WRPS relating to coordination and cooperation with DOE concerning the investigation of matters covered by this Consent Order shall be considered allowable costs under the Contract. However, costs incurred by, for, or on behalf of WRPS relating to the development and implementation of corrective actions, including costs associated with the effectiveness review required under item 1 above, shall be considered allowable costs under the Contract.
8. This Consent Order does not preclude DOE from re-opening the investigation or issuing an enforcement action under 10 C.F.R. § 820.24 with respect to a potential noncompliance if: (a) after the Effective Date (as defined in item 4 above), DOE becomes aware of any false or materially inaccurate facts or information provided by WRPS; (b) there is a recurrence of nuclear safety deficiencies similar to those identified above; or (c) WRPS fails to complete all actions identified in item 1 above in a timely and effective manner to prevent recurrence of the identified issues.
9. Any modification to this Consent Order requires the written consent of both Parties.
10. WRPS waives any and all rights to appeal or otherwise seek judicial or administrative review of the terms of this Consent Order. DOE retains the right to judicially enforce the provisions of this Consent Order by all legal means.
11. This Consent Order is issued pursuant to DOE's authority under Section 234A of the Atomic Energy Act of 1954, as amended (42 U.S.C. § 2282a), and the implementing provisions of 10 C.F.R. Part 820 governing enforcement of DOE nuclear safety requirements.
12. Pursuant to 10 C.F.R. § 820.23(d), this Consent Order shall become a Final Order 30 calendar days after the signed copy, referenced in item 3 above, is filed by the

Office of Enforcement and Oversight's Office of the Docketing Clerk unless the Secretary of Energy files a rejection of the Consent Order or a Modified Consent Order.


On behalf of my respective organization, I hereby agree to and accept the terms of the foregoing Consent Order.

FOR U.S. Department of Energy:

FOR Washington River Protection Solutions, LLC:

 Date 5/27/11

John S. Boulden III
Director
Office of Enforcement and Oversight
Office of Health, Safety and Security
U.S. Department of Energy

 Date 6/2/11

Charles G. Spencer
President and Project Manager
Washington River Protection Solutions, LLC