

6.0 PROCEDURES TO PREVENT HAZARDS **[WAC 173-303-806(4)(a)(iv),(v),(vi),(viii),(ix),310, 320, 340]**

AREVA, as a condition of its NRC license, is required to operate its facilities in accordance with strict controls and formal procedures as a means to minimize hazards associated with its operations. AREVA maintains a facility emergency plan which describes the protocols AREVA employs to prevent and/or mitigate hazards associated with emergency situations. Ongoing programs and activities aimed at the recognition, evaluation, and control of hazards associated with routine (non-emergency) operations can be found in various operations procedures.

6.1 SECURITY

This section describes the security measures implemented at the AREVA facility to satisfy the requirements of WAC 173-303-310(1) and (2).

6.1.1 Security Procedures and Equipment

Security functions at the AREVA facility are administered under a formal physical protection plan mandated by AREVA's NRC license. Security practices and equipment required under that plan meet or exceed security requirements applicable to management of dangerous wastes. Key physical and operational aspects of AREVA's security program are described in subsequent sections.

6.1.2 24-Hour Surveillance

AREVA security guards provide 24-hour surveillance of the facility. The perimeter of the facility is patrolled and verified for integrity on a periodic basis by a security guard. All points of ingress/egress are monitored by a security guard.

Additionally, the entire boundary of the facility is monitored by a video security system.

The AREVA facility is entirely bounded by buildings or fencing and the portion that is not bounded by buildings is also surrounded by a Jersey barrier (concrete) barricade. Buildings forming the perimeter of the facility are concrete block construction in excess of 12 feet in height with non-opening windows. Fencing and gates are 2-inch woven, diamond mesh chain link of No.11 gauge steel wire. Top and bottom salvages have twisted and barbed ends. Total height of the fence equals or exceeds 8 feet. The perimeter of the facility is lighted by a series of low pressure sodium lights.

Outside of the fenced area is a concrete Jersey barricade that surrounds the entire facility (where buildings do not form the boundary). Vehicle access to the plant is controlled by bollard gates and subsequent chain link gates, both of which are operated by AREVA security personnel. All vehicles are inspected by security personnel prior to entering the facility.

6.1.3 Warning Signs

Warning signs with the legend "Danger – Unauthorized Personnel Keep Out" are posted at each point of entry to the DWSF in sufficient number to be seen from any approach. The CCWT is marked as "Danger, Corrosive Waste" on two opposing sides. The signs/labels for both the DWSF and CCWT are legible from a minimum distance of 25 feet and are written in English.

6.1.4 Waiver

AREVA is not requesting a waiver from the requirements of WAC 173-303-310(1).

6.2 INSPECTION PLAN

This section demonstrates that all required inspections are conducted, the results recorded, and any necessary corrective actions are implemented in a timely manner.

6.2.1 General Inspection Requirements

Dangerous waste is managed in containers of various sizes located throughout the facility in satellite accumulation containers and ultimately at the DWSF. AREVA has procedures in place which include general inspection criteria for the DWSF. The inspections are conducted by AREVA Uranium Conversion and Recovery Technicians at least every 7 days and are documented on an inspection form which is kept on file.

Emergency equipment repositories are maintained throughout the facility (12 as of 5/27/2008). A wide array of monitoring, personal protective, communication, first aid, decontamination, and general emergency response equipment are staged at these repositories. The repositories are inspected on a monthly basis to assure that all equipment is present. The inspections are scheduled via AREVA's computer-based preventive maintenance system (SAP), which also generates the log form utilized to document the inspection. Additional information on emergency equipment most pertinent to the DWSF and CCWT is located in Section 7.0 of this application (Contingency Plan).

AREVA has strategically placed appropriate portable fire extinguishers throughout the facility. These extinguishers are inspected on a monthly and biannual basis as scheduled via SAP. The fire extinguisher inspection procedure includes checklists which are completed at the time of inspection and kept on file.

6.2.2 Inspection Log

The weekly stored waste inspection log for the DWSF includes the following data entries:

- the date and time of inspection,
- printed name and handwritten signature of the inspector,
- a notation of any observations made,
- an account of any spills or discharges,
- the date and nature of any repairs,
- proper container labeling and segregation, and
- 30 inch aisle spacing.

The weekly inspection log is maintained by the Uranium Conversion and Recovery Technicians.

Inspection protocol relative to the CCWT is discussed in Section 6.2.5.1, below.

6.2.3 Schedule for Remedial Action for Problems Revealed

Consistent with WAC 173-303-320(3), if inspections identify leaks, spills, or liquid in secondary containment at either the DWSF or CCWT, the liquid will be removed and any required cleanup completed on a schedule that prevents hazards to human health and the environment. If corrosion or other obvious structural deficiencies are observed on a container(s), the container(s) in question will be repackaged in a timeframe established by the Environmental Engineer.

If structural or other damage is detected on any portion of the CCWT, including ancillary piping, the tank will be taken out of service immediately.

Response to any leak or spill will be consistent with WAC 173-303-640(7) and, if pertinent, AREVA's Dangerous Waste Contingency Plan (Section 7.0).

6.2.4 Specific Process or Waste Type Inspection Requirements

6.2.4.1 Container Inspections

Dangerous waste stored in containers is managed at satellite accumulation locations throughout the facility and the DWSF. AREVA has procedures in place to ensure that dangerous and mixed wastes are managed appropriately and inspected. Per AREVA procedure, the inspections are documented and kept on file for a minimum of five years. Satellite container inspections are typically conducted by the Environmental Engineer from within the Licensing and Compliance organization.

The DWSF inspection is conducted by AREVA Uranium Conversion and Recovery Technicians on a weekly basis. Key components of the container inspection include:

- Secondary containment pallets contain no liquid,
- Confirmation that container labels are readable and not obscured,
- Inspection for deteriorating or leaking drums,
- Verification of appropriate aisle space,
- Inspection of emergency equipment.

6.2.5 Tank System Inspections and Corrective Actions

6.2.5.1 Tank System Inspections

AREVA has a procedure in place which requires inspections to be performed on the CCWT and associated piping each operating day. Inspection requirements include the name of the person performing the inspection, date and

time of the inspection, a notation of any observations made during the inspection, and the date and nature of any repairs or remedial actions taken. The completed inspection log is kept at the facility for at least five years. The CCWT structural integrity assessment as required by WAC 173-303-640 is included as Attachment 4.2.

6.2.5.2 Tank System Corrective Actions

In the event that liquid is detected in the interstitial space between the primary CCWT and the secondary tank, the actions taken would include:

- Any flow of waste into the CCWT will be stopped and an inspection of the tank will be performed;
- Waste collected in the interstitial space shall be removed within 24 hours of detection;
- Within 24 hours or the earliest practicable time, remaining wastes will be removed from the primary tank, if necessary, to prevent further leaking and to allow for any required repairs to the primary tank;
- If the cause of the leak (not a spill, overflow, etc.) is determined to be from the primary tank due to tank failure, fitting failure, or other structural type defect requiring extensive repairs, an independent engineering assessment of the tank shall be completed before the tank is returned to service.

6.3 Preparedness and Prevention Requirements

6.3.1 Equipment Requirements

The following sections describe the internal and external communications system and the emergency equipment required.

6.3.1.1 Internal Communications

AREVA operates an internal telephone system, a plant public address system, cellular phones, and two-way radios for internal communications. Telephones are located throughout the facility, allowing rapid communication in the event of an emergency. A telephone is located on the south wall of the DWSF and adjacent to the CCWT in the component pickle work area. Emergency situations are communicated to the Security Officer in the Central Guard Station. An internal emergency number (8111) provides direct access to the Central Guard Station. Security guards have direct access to all communication systems, including the plant public address system.

6.3.1.2 External Communications

Primary communication to outside response agencies is by telephone. Operational tests of the telephones are conducted daily by routine use and response; agencies' telephone numbers are verified quarterly by Plant Security.

Alternate communications to response agencies is by radio to the emergency dispatch center servicing Richland and other local jurisdictions. The staff at that location could provide telephone patch or relay to distant emergency response organizations. Operational tests of the radio link are conducted daily by Plant Security.

6.3.1.3 Emergency Equipment

Portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment are maintained at the DWSF. Located adjacent to the CCWT is an acid-neutralizing spill gun and emergency safety shower. In addition to these, similar equipment is located at other areas throughout the facility in emergency equipment repositories. Emergency equipment most

pertinent to the DWSF and CCWT is listed by location in the AREVA Dangerous Waste Contingency Plan (Section 7.0).

6.3.1.4 Water for Fire Control

Water supply is provided by the City of Richland. Both water pressure and volume are adequate for water hose streams, foam producing equipment, and automatic sprinklers. There are two separate city water supply lines to the AREVA facility.

6.3.2 Aisle Space Requirement

AREVA maintains adequate aisle space (30" minimum) to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation.

6.4 Preventive Procedures, Structures, and Equipment

6.4.1 Unloading/loading Operations

AREVA does not receive dangerous/hazardous wastes from offsite. However, AREVA does receive, on a periodic basis, containerized wastes which are classified as low level (radioactive) combustible waste which is destined for onsite incineration. These drums are not managed at the DWSF.

Waste loading operations consist of loading waste drums directly from storage at the DWSF to the contracted waste company's truck. The drums are stored on pallets that are lifted into the truck with a fork lift. Once inside the truck, the drums are secured and the pallets returned to the DWSF.

Waste downloading at the CCWT consists of connecting the contracted waste company's truck to the CCWT and pumping the contents directly into the tanker; there is no intermediate storage of the liquid waste. The downloading is a continuously manned process conducted in accordance with a site management control procedure.

6.4.2 Run-off

A significant portion of the DWSF is covered. The remaining area is sloped to prevent stormwater run-on. All containers on the uncovered portion of the DWSF are stored on pallets to prevent contact with stormwater and contain only wastes with no free-standing liquids.

The CCWT is a fully contained, double walled tank that sits above-grade on a concrete pad.

6.4.3 Water Supplies

The operation of the DWSF and CCWT do not impact water supplies. Piped domestic water is received from offsite (City of Richland). Local groundwater does not serve as a water supply source.

6.4.4 Equipment Failure and Power Outage

AREVA has four emergency diesel generators which would supply sufficient electricity to continue plant operations in the event of a power failure.. In addition, several portable generators are maintained at the AREVA facility and may be used as necessary (i.e., to operate pumps or other emergency equipment) in the event that a power supply outlet is not readily available.

6.4.5 Personal Protective Equipment

AREVA has procedures in place to ensure that appropriate personal protective equipment is used by all personnel working at the DWSF. The level of protection is selected to be commensurate with the work being performed. Enhanced personal protective equipment (respiratory protection, clothing, etc.) is maintained for use by emergency response personnel. At a minimum for any waste drum movement at the DWSF or inspection activities associated with the CCWT, safety glasses and steel-toed shoes are required. Additional personal protective equipment may be required, commensurate with the activity performed.

6.5 Prevention of Reaction of Ignitable, Reactive, and/or Incompatible Wastes

6.5.1 Precautions to Prevent Ignition or Reaction of Ignitable or Reactive Waste

Smoking is not permitted at the AREVA facility other than in designated smoking areas. None of these designated areas are near the DWSF or CCWT. Additionally, AREVA has a procedure which includes requirements for all cutting and welding that may be conducted outside of the dedicated maintenance areas of the facility.

All ignitable waste is stored under the covered portion of the DWSF which blocks direct sunlight and prevents excessive temperatures.

The CCWT does not store ignitable or reactive wastes; no reactive wastes are stored at the DWSF.

6.5.2 Precautions for Handling Ignitable or Reactive Waste and Mixing Incompatible Wastes

General precautions for handling ignitable or reactive wastes and mixing incompatible wastes at the DWSF are documented in AREVA Procedures. The CCWT receives waste which is hard-piped directly from the generating process which minimizes the opportunity to add incompatible wastes.

6.5.3 Ignitable or Reactive Wastes in Tanks

This section is not applicable.

6.5.4 Incompatible Wastes in Containers

General precautions for storing ignitable or reactive wastes in containers and mixing incompatible wastes are documented in AREVA Procedures. Instruction regarding incompatible waste storage and adequate separation/spacing are addressed in the operating procedures.