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**FACT SHEET**  
**PART III, OPERATING UNIT GROUP 6, CENTRAL WASTE COMPLEX**

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2 **FACT SHEET**

3 **PART III, OPERATING UNIT GROUP 6, CENTRAL WASTE COMPLEX**

4 **UNIT DESCRIPTION**

5 The Central Waste Complex (CWC) Operating Unit Group is located in Hanford's 200 West Area. Waste  
6 management operations began there in August 1988. At the CWC authorized dangerous waste  
7 management units, the Permittees store and treat mixed waste from both Hanford and offsite, including the  
8 retrievably stored transuranic waste being retrieved from old burial grounds.

9 In the original Hanford Facility Dangerous Waste Permit application (Part A form), the Waste Retrieval and  
10 Processing Facility (WRAP) was a component of CWC. In the mid-1990s, the Permittees submitted a  
11 separate Part A form for WRAP. Buildings 2404-WA, 2404-WB, and 2404-WC remained within the  
12 CWC boundary. In 2003 the Permittees removed Buildings 2404-WB and 2404-WC from the CWC and  
13 added them to the WRAP.

14 In this permit reissue, Building 2404-WA will transfer from the CWC to the WRAP. All these changes are  
15 identified in the Part A forms for the specific units.

16 The following wastes may be managed at the CWC:

- 17
- 18 • Dangerous or mixed waste that is generated from processes at the Hanford site.
  - 19 • Waste that is specifically identified in Section II, paragraph 8 of the Settlement Agreement re:  
Washington versus Bodman, Civil No. 2:30-cv-05018-AAM, January 6, 2006.

20 No other wastes may be managed at CWC unless authorized by a permit modification decision pursuant to  
21 Condition I.C.3. Requests for Permit modifications must be accompanied by an evaluation adequate for  
22 Ecology to comply with the State Environmental Policy Act.

23 Retrieval of transuranic and transuranic mixed waste from the old burial grounds supports Tri-Party  
24 Agreement Milestone M-91.

25 Treatment within the CWC is limited to absorption of free liquids, absorption to accomplish deactivation,  
26 and neutralization of corrosive material.

27 The CWC Operating Unit Group has the following dangerous waste management units:

- 28
- 29 • Flammable and Alkali Metal Waste Storage Modules.
  - 30 • Waste Storage Buildings.
  - 31 • 2401 – W Building.
  - 32 • 2402 – W Series Buildings.
  - 33 • 2403 – W Series Buildings.
  - 34 • CWC Outside Storage Area A (gravel).
  - 35 • CWC Outside Storage Area B (gravel).
  - 36 • CWC Outside Storage Area C (gravel).
  - 37 • CWC Outside Storage Area D (epoxy coated concrete pad).
  - 38 • CWC Outside Storage Area E (asphalt pad).
  - CWC Outside Storage Area F (asphalt pad).

1 CWC manages the following waste types:

- 2 • Containerized liquids/free liquids.
- 3 • Pressurized gas cylinders and aerosol cans.
- 4 • Bulk sodium metal (to be evaluated on a case-by-case basis).
- 5 • Labpack liquids (to be evaluated on a case-by-case basis).
- 6 • Solids/debris.
- 7 • Sludges/soils.

## 8 **Dangerous Waste Management Units in the CWC Operable Unit**

### 9 **Flammable and Alkali Metal Waste Storage Modules**

10 The Flammable and Alkali Metal Waste Storage Modules are pre-engineered structures of various sizes.  
11 These 24 modules are designed to meet all the storage requirements for ignitable, reactive, and corrosive  
12 dangerous or mixed waste.

#### 13 **2401-W Waste Storage Building**

14 The 2401-W Waste Storage Building is a pre-engineered steel structure , 15.2 meters wide, 24.4 meters  
15 long, and 6.1 meters high (to the eave), with a total of 37 square meters of waste management area. The  
16 2401-W building can store approximately 1,072 208-liter containers or equivalent volume.

#### 17 **2402-W Series Waste Storage Buildings**

18 This storage area has 12 pre-engineered steel buildings (2402-W, WB, WC, WD, WE, WF, WG, WH, WI,  
19 WJ, WK, and WL). Each building measures 15.2 meters wide, 24.4 meters long, and 6.1 meters high (to  
20 the eave), for a total of 371 square meters of waste management area each. The 2402-W Waste Storage  
21 Buildings are maintained at atmospheric pressure. The concrete curbing and floors within the buildings, or  
22 individual spill containment pallets, provide the necessary engineering controls to support waste  
23 management activities. Treatment of dangerous and/or mixed waste may be performed in these buildings.

#### 24 **2403-W Series Waste Storage Buildings**

25 This storage area has four buildings.

26 The 2403-WA, 2403-WB, and 2403-WC Waste Storage Buildings each measure 51.8 meters wide,  
27 61 meters long, and 6.1 meters high (to the eave), for a total of 3,159 meters of waste management area.  
28 Floor areas are divided into quadrants by approximately 12.7-centimeter-high concrete curbs and are coated  
29 with an epoxy resin floor surfacing system that is compatible with the stored waste. Aisle space is  
30 provided through the centers of these storage buildings to accommodate loading and unloading operations.

31 The 2403-WD Waste Storage Building measures 51.8 meters wide, 99 meters long, and 6.1 meters high (to  
32 the eave), for a total of 5,120 square meters of waste management area.

33 The 2403-W Waste Storage Buildings are maintained at atmospheric pressure. The concrete curbing and  
34 floors within the buildings, or individual spill containment pallets, provide the necessary engineering  
35 controls to support waste management activities.

36 Treatment of dangerous or mixed waste may be performed within the 2403-W Waste Storage Buildings.

#### 37 **CWC Outside Storage Area A**

38 CWC Outside Storage Area A is approximately 251.1 meters long and 140.2 meters wide, for a total of  
39 35,260 square meters of waste management area. It is an uncovered area that is graded and leveled with  
40 gravel and, thus, does not have a constructed secondary containment system. This area is primarily  
41 intended for waste management of waste boxes. However, it can be used for waste management of other  
42 containers.

43 No treatment of dangerous or mixed waste will be performed within the CWC Outside Storage Area A.

1 **CWC Outside Storage Area B (gravel)**

2 The CWC Outside Storage Area B is located between the CWC Outside Storage Area A and Building  
3 2403-WD. It is approximately 257 meters long and 20 meters wide, for a total of 5,140 square meters of  
4 area. It is an uncovered area that is graded and leveled with gravel and, thus, does not have a constructed  
5 secondary containment system.

6 No treatment of dangerous or mixed waste will be performed within the CWC Outside Storage Area B.

7 **CWC Outside Storage Area C (gravel)**

8 The CWC Outside Storage Area C is located between storage buildings 2403-WA and 2403-WB. It is  
9 approximately 48 meters long and 44 meters wide, for a total of 2112 square meters of area. It is an  
10 uncovered area that is graded and leveled with gravel and, thus, does not have a constructed secondary  
11 containment system.

12 No treatment of dangerous or mixed waste will be performed within the CWC Outside Storage Area C.

13 **CWC Outside Storage Area D (epoxy coated concrete pad)**

14 The CWC Outside Storage Area D is located east of the 2402-W Series buildings, north of Outside Storage  
15 Area E. It is approximately 27 meters wide and 30 meters long, for a total of 818 square meters of area.  
16 The area is curbed with 15.2 centimeters of concrete and was provided with an epoxy coating to prevent  
17 contaminants from entering the concrete. The CWC Outside Storage Area D is provided with an access  
18 ramp and a rainwater collection and removal system.

19 No treatment of dangerous or mixed waste will be performed within the CWC Outside Storage Area D.

20 **CWC Outside Storage Area E (asphalt pad)**

21 CWC Outside Storage Area E is located east of the 2402-Series buildings, south of CWC Outside Storage  
22 Area D. It is an asphalt pad approximately 62 meters long and 46 meters wide, for a total of 2,862 square  
23 meters of area.

24 No treatment of dangerous or mixed waste will be performed within the CWC Outside Storage Area E.

25 **CWC Outside Storage Area F (asphalt pad)**

26 CWC Outside Storage Area F is located between the 2403-WD building and the Flammable and Alkali  
27 Metal Waste Storage Modules Area. It is an asphalt pad approximately 170 meters long and 70 meters  
28 wide, for a total of 11,900 square meters of area.

29 No treatment of dangerous or mixed waste will be performed within the CWC Outside Storage Area F.

30 **TYPE AND QUANTITY OF WASTE**

31 The CWC stores and treats a variety of dangerous and mixed wastes. For specific types of waste by  
32 dangerous waste, See CWC Addendum A, Part A form. Table 1 provides a listing of each structure within  
33 the CWC Operable Unit and the maximum total volume of waste authorized for storage.

34 **Table 1 Maximum Total Volume (in liters) for CWC Buildings and Storage Areas**

Structure	Maximum total volume (liters)
2401-W	334,500
2402-W	334,500
2402-WB	334,500

<b>Structure</b>	<b>Maximum total volume (liters)</b>
2402-WC	334,500
2402-WD	334,500
2402-WE	334,500
2402-WF	334,500
2402-WG	334,500
2402-WH	334,500
2402-WI	334,500
2402-WJ	334,500
2402-WK	334,500
2402-WL	334,500
2403-WA	3,619,500*
2403-WB	3,619,500*
2403-WC	3,619,500*
2403-WD	5,460,000*
Flammable Waste Storage Module 1 (FS-01)	9,000
Flammable Waste Storage Module 2 (FS-02)	9,000
Flammable Waste Storage Module 3 (FS-03)	18,000
Flammable Waste Storage Module 5 (FS-05)	10,500
Flammable Waste Storage Module 6 (FS-06)	10,500

<b>Structure</b>	<b>Maximum total volume (liters)</b>
Flammable Waste Storage Module 7 (FS-07)	10,500
Flammable Waste Storage Module 9 (FS-09)	10,500
Flammable Waste Storage Module 10 (FS-10)	10,500
Flammable Waste Storage Module 11 (FS-11)	10,500
Flammable Waste Storage Module 12 (FS-12)	10,500
Flammable Waste Storage Module 14 (FS-14)	18,000
Flammable Waste Storage Module 15 (FS-15)	10,500
Flammable Waste Storage Module 16 (FS-16)	13,500
Flammable Waste Storage Module 17 (FS-17)	13,500
Flammable Waste Storage Module 18 (FS-18)	13,500
Flammable Waste Storage Module 19 (FS-19)	9,000
Flammable Waste Storage Module 20 (FS-20)	9,000
Flammable Waste Storage Module 21 (FS-21)	10,500
Flammable Waste Storage Module 22 (FS-22)	10,500
Flammable Waste Storage Module 23 (FS-23)	10,500
Flammable Waste Storage Module 24 (FS-24)	10,500
Flammable Waste Storage Module 25 (FS-25)	10,500
Flammable Waste Storage Module 26 (FS-26)	15,000
Flammable Waste Storage Module 27 (FS-27)	15,000

Structure	Maximum total volume (liters)
Alkali Metal Waste Storage Module 1 (AMW01)	10,500
Alkali Metal Waste Storage Module 2 (AMW02)	10,500
Alkali Metal Waste Storage Module 3 (AMW03)	10,500
Alkali Metal Waste Storage Module 4 (AMW04)	10,500
CWC Outside Storage Area A	132,525,000
CWC Outside Storage Area B	1,011,000
CWC Outside Storage Area C	412,500
CWC Outside Storage Area D	157,500
CWC Outside Storage Area E	550,500
CWC Outside Storage Area F	774,900
CWC Maximum Total Volume	156,412,400

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2 **BASIS FOR PERMIT CONDITIONS**

3 This permit is intended to protect human health and the environment while ensuring proper management of  
 4 waste at CWC. The permit addenda are incorporated into this permit and are enforceable by reference.  
 5 The conditions and addenda are derived from the permit application. Ecology has reviewed the permit  
 6 application for CWC to ensure the unit meets dangerous waste facility standards. The permit includes  
 7 requirements for complying with environmental standards and maintaining and modifying the permit. The  
 8 permit conditions address specifics such as personnel training, adequate staffing, process controls, and  
 9 inspection requirements.

10 **GENERAL WASTE MANAGEMENT REQUIREMENTS**

11 The CWC operating unit group is allowed to accept, store, and treat wastes that satisfy the CWC waste  
 12 acceptance criteria and permit conditions. Ecology does not authorize the receipt or storage of shock  
 13 sensitive wastes. In the event of an unexpected receipt, Ecology will address an emergency permit  
 14 authorization request.

15 The Permittees may store and treat wastes only in the permitted areas. The Permittees will comply with  
 16 the requirements and implement and maintain the practices described in Addendum B for waste analysis for  
 17 all dangerous and mixed waste managed at the CWC. [[WAC 173-303-300](#)]

1 **WASTE ANALYSIS REQUIREMENTS**

2 Condition III.6.C.1 requires the Permittees to comply with all the requirements in the waste analysis plan  
3 (WAP) in Addendum B for sampling and analysis of all dangerous and mixed waste managed within the  
4 CWC dangerous waste management units. [[WAC 173-303-300\(5\)](#)]

5 Suspect-transuranic waste retrieved from the burial grounds in support of the Tri-Party Agreement  
6 Milestone M -91 is defined as debris. Condition III.6.C.2 requires the Permittees to provide Ecology,  
7 within 14 days of the effective date of this permit, a modification request to address the following  
8 conditions [[WAC 173-303-300\(1\)](#)]:

- 9 • Condition III.6.C.2.a requires the Permittees to provide Ecology, within 14 days of the effective  
10 date of this permit, a modification request that provides test procedures and an evaluation process  
11 to demonstrate that wastes received at the authorized dangerous waste management units do not  
12 contain free liquids for individual containers prior to acceptance to any of the CWC dangerous  
13 waste management units. [[WAC 173-303-806\(4\)\(b\)\(ii\)\(A\)](#)]
- 14 • Condition III.6.C.2.b requires the Permittees to provide, within 14 days of the effective date of this  
15 permit, a schedule to work with Ecology staff to develop a performance criterion for determining  
16 the testing frequency of the presence or absence of free liquids. [[WAC 173-303-806\(4\)\(b\)\(ii\)\(A\)](#)]
- 17 • Condition III.6.C.2.c requires the Permittees to provide, within 14 days of the effective date of this  
18 permit, a revision to Addendum B to describe the processes for the determination of debris per the  
19 [WAC 173-303-040](#) definition.

20 The CWC WAP allows the Permittees to determine the presence of free liquids using nondestructive  
21 examination (NDE) by trained operators or the paint filter test (see Addendum B, Section B.2.1.2). This  
22 allows the Permittees to visually and quantitatively identify the presence of free liquids in a container.

23 The WAP defines the discrepant container management program. A discrepant container is one with  
24 issues about the contents of packaging. The WAP requires that discrepant containers with unknown free  
25 liquids be stored with separate secondary containment to comply with [WAC 173-303-630\(9\)\(a\)](#), except for  
26 containers going to an offsite treatment, storage, and disposal facility.

27 Containers only need secondary containment if the containers exceed the free liquid quantities specified in  
28 the WAP. The Permittees must inspect daily all containers managed within the discrepant container  
29 management program (identified in Addendum I as areas subject to spills). [[WAC 173-303-630\(6\)](#)]

30 **RECORDKEEPING AND REPORTING**

31 The basis of Condition III.6.D is [WAC 173-303-380](#) and [WAC 173-303-810\(16\)](#), for those requirements  
32 not elsewhere in the permit.

33 **SECURITY**

34 The CWC is within Hanford's secured area. Access to the operating area of the CWC is subject to the  
35 general security provisions of Condition I.L and Addendum E. In addition, Condition III.6.E defines  
36 security provisions, access controls, and signage specific to CWC. These requirements fully satisfy  
37 [WAC 173-303-310](#).

38 **PREPAREDNESS AND PREVENTION**

39 Addendum F contains CWC preparedness and prevention requirements. These requirements address  
40 internal and external systems used to communicate with CWC personnel and emergency responders  
41 (Hanford Fire Department, the hazardous materials response team, or Hanford Patrol) in the case of fire or  
42 other emergency.

1 **CONTINGENCY PLAN**

2 Condition III.6.G requires the Permittees to comply with the Contingency Plan, Addendum J, per Condition  
3 III.6.G.1 and the requirements of Condition II.A, when applicable. The basis for requiring a contingency  
4 plan is [WAC 173-303-350](#).

5 **INSPECTIONS**

6 Conditions III.6.H has general inspection requirements applicable to CWC, based on [WAC 173-303-320](#).  
7 The Permittees must comply with the Inspection Plan in Addendum I. The plan includes all safety,  
8 monitoring, security, and transportation equipment not addressed in Condition II.X. This set of conditions  
9 addresses responses to problems identified, and related documentation and recordkeeping.

10 The basis of Condition III.6.H.2, which requires the Permittees to inspect containers in the discrepant  
11 container management program daily, is [WAC 173-303-320](#).

12 **TRAINING PLAN**

13 Condition III.6.I.1 requires the Permittees to put the training requirements described in Addendum G of this  
14 permit into a written training plan required by Condition II.C [[WAC 173-303-330](#)(2)(a) and (b)]. This  
15 plan will be specific to the positions and job descriptions associated with CWC.

16 **OTHER GENERAL PERMIT REQUIREMENTS**

17 Condition III.6.J has requirements under [WAC 173-303-395](#)(1) for managing ignitable, reactive, or  
18 incompatible waste. It has conditions under [WAC 173-303-395](#)(2) for compliance with other  
19 environmental protection laws and regulations. The requirements for inspections of ignitable and reactive  
20 wastes are in the CWC inspection requirements.

21 **CLOSURE**

22 Condition III.6.K.1 requires the Permittees to close CWC dangerous waste management units according to  
23 Addendum H, Closure Plan. [[WAC 173-303-630](#)(3)]

24 **CONTAINER MANAGEMENT STANDARDS**

25 The Permittees must manage certain waste types according to the unit's conditions and Addendum C.  
26 Addendum C, Section C.1 defines the areas in the CWC Operating Unit Group for management of  
27 dangerous and mixed waste. Sections C.1.1, C.1.2, C.1.3, and C.1.4 document the waste management  
28 requirements for those areas. Addendum B, Section B.1.1.1.2.2, and Table B.1 have other requirements  
29 for waste compatibility. Condition III.6.O establishes the Permit requirement to manage the containers.

30 The basis for requirements in Section C.1 is [WAC 173-303-630](#)(7), which defines requirements for  
31 secondary containment and, indirectly, the capacity of the unit and the various storage devices in it.  
32 Section C.1 also specifies physical capacity limits of buildings, storage pads, etc. Capacity is based on the  
33 type and quantity of wastes in the CWC. Certain ignitable and reactive wastes must be managed in manner  
34 equivalent to the Uniform Building Code or the International Fire Code. [[WAC 173-303-630](#)(8)]

35 Management of dangerous and mixed waste according to Addenda C and F and Condition III.6 C complies  
36 with [WAC 173-303](#), and is protective of human health and the environment.

37 The Permittees currently store numerous large boxes of dangerous and mixed waste outside in the graveled  
38 storage area identified as Outside Storage Area A. The waste is not currently stored to meet the  
39 requirements of [WAC 173-303-630](#). To achieve compliance, Condition III.6.O.4.c requires the Permittees  
40 to immediately, upon the effective date of this permit, provide weather protection for the large boxes of  
41 waste stored in Outside Storage Area A. In addition, daily visual inspections will be done to look for  
42 leaking containers and for deterioration of containers caused by corrosion or other factors (i.e. weather) in  
43 accordance with Condition III.6.O.5.

44 Ecology recognizes the restraints and challenges of achieving secondary containment for oversize  
45 containers. However, the regulations are explicit on containment. Therefore, Condition III.6.O.4.d

1 requires the Permittees to provide, within 180 days of the effective date of the permit, a detailed schedule of  
2 how they will achieve compliance. Compliance will be met within 360 days of the effective date of the  
3 permit.

4 The following sections in Addendum C address requirements established in [WAC 173-303-630](#) for  
5 containers:

6 [WAC 173-303-630](#)(2) Condition of containers C.1.1, C.1.2

7 [WAC 173-303-630](#)(4) Compatibility of waste with Containers C.1.1

8 [WAC 173-303-630](#)(5) Management of containers C.1.2

9 [WAC 173-303-630](#)(8) Special requirements for ignitable or reactive waste C.1.6.1, and C.1.6.2

10 [WAC 173-303-630](#)(9) Special requirements for incompatible waste C.1.1.4.1, Figures C.1-C.5, and  
11 C.1.6.3

12 The following conditions address other requirements in [WAC 173-303-630](#):

13 Condition III.6.M Container labeling

14 Condition III.6.M Compatibility of waste with containers

15 Condition III.6.M Aisle space of containers

16 Condition III.6.M Removal of liquids

17 Addendum C, Section C.4.2, requires the Permittees to satisfy requirements for Level 1 controls either  
18 through using Department of Transportation-compliant containers or by keeping sealed lids on containers at  
19 all times, except when adding or removing wastes from containers.

## 20 **REQUESTED VARIANCES OR ALTERNATIVES**

21 There are no requested variances or alternatives for CWC.

## 22 **STATE ENVIRONMENT POLICY ACT (SEPA)**

23 The SEPA determination for CWC is in the Hanford-Wide Permit Fact Sheet.

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