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CP3-WM-1037 FRev. 2A	TITLE: Generation and Temporary Storage of Waste Materials	Page 1 of 27

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REVISION/CHANGE LOG

Revision/Change Letter	Description of Changes	Pages Affected	Date of Revision/Change
FR0	Bluesheet	ALL	10/19/17
FR1	Initial Release.	ALL	1/17/18
FR2	Correct reference CP2-WM-0001 title. Change title of Section 6.1. CAPA # CA-001277, Action Item # AI-0001726, Incorporate language in Attachment C regarding Hazardous Waste Generator Improvements Rule pertaining to large quantity generators. Delete form CP3-WM-1037-F01. Update CP3-WM-1037-F03 to include additional requirements for PCB TWSAs.	ALL	4/25/19
FR2A	CAPA # CA-001754, AI-0002806. Updated Step 6.3.9 to change notification for 90DAAs from 60 days to 80 days. Added Step 6.3.10 for PCB Items to make notifications when it reaches 8 months Date-to-Storage. Add Step 6.4.3 to provide Container # and PCB Date-to Storage to Waste Generator Services Manager and PCB Coordinator.	9-10	7/24/19

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1.0 PURPOSE AND SCOPE

1.1 Purpose

This procedure directs actions to establish, operate, inspect, and demobilize Temporary Waste Staging Areas (TWSAs) containing hazardous and nonhazardous wastes in a safe and environmentally acceptable manner. This procedure complies with regulatory and company requirements for this process.

1.2 Scope

The requirements of this procedure apply to all Four Rivers Nuclear Partnership, LLC (FRNP) employees and subcontractors (if included in their contract) who generate, handle, treat, or temporarily store the types of waste described in this procedure as part of the FRNP contract with the U. S. Department of Energy (DOE).

This procedure provides the processes to satisfy requirements related to temporary staging of waste in the following documents:

- 40 *Code of Federal Regulations* (*CFR*), Protection of the Environment
- DOE O 435.1, Chg. 1, *Radioactive Waste and Materials*
- DOE M 435.1-1, Chg. 1, *Radioactive Waste and Materials Manual*
- 401 *Kentucky Administrative Regulations* (*KAR*), Energy and Environment Cabinet Department for Environmental Protection

The following types of waste are covered in this procedure and must be handled promptly in accordance with regulations in order to meet applicable storage time limit and time-to disposal limits:

- Resource Conservation and Recovery Act [RCRA];
- Toxic Substances Control Act [TSCA];
- Comprehensive Environmental Response, Compensation, and Liability Act [CERCLA];
- low–level waste [LLW];
- Federal Facilities Compliance Agreement [FFCAs]; and
- Universal and Recyclable waste.

The TWSAs covered in this procedure are:

- Satellite Accumulation Area (SAA)
- 90-Day Accumulation Area
- Generator Staging Area (GSA)
- Polychlorinated Biphenyl (PCB) 30-Day Area
- PCB 180-Day Area

- CERCLA Staging Area
- Universal Waste and/or Used Oil Collection Area

2.0 REFERENCES

2.1 Use References

- CP2-ER-1125, *Contingency Plan for Temporary Staging Areas at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*
- CP2-WM-0011, *Waste Acceptance Criteria for the Treatment, Storage, and Disposal Facilities at the Paducah U.S. Department of Energy Site*
- CP3-QA-3001, *Issues Management*
- CP3-RD-0010, *Records Management Process*
- CP3-WM-0015, *Management of Fissile Waste Materials*
- CP3-WM-1036, *Nuclear Criticality Safety Implementation Requirements for Handling and Storage of Fissile and Potentially Fissile Waste*
- CP3-WM-3015, *Waste Packaging*

2.2 Source References

- 40 *CFR* 261, *Identification and Listing of Hazardous Waste*
- 40 *CFR* 262, *Standards Applicable to Generators of Hazardous Waste*
- 40 CFR 264, *Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities*
- 40 *CFR* 265, *Interim Standards for Owners and Operators of Hazardous Waste Storage, Treatment, and Disposal Facilities*
- 40 *CFR* 268.7(a), *Treatment Standards*
- 40 CFR 273, *Standards for Universal Waste Management*
- 40 *CFR* 761, *Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions*
- 401 *KAR 39,Hazardous Waste*
- 401 *KAR, Energy and Environment Cabinet Department for Environmental Protection*
- 49 *CFR Department of Transportation (DOT) Requirements*
- CP2-TR-0100, *Training Program*
- CP2-WM-0001, *Four Rivers Nuclear Partnership, LLC Paducah Deactivation and Remediation Project Waste Management Plan*CP3-NS-1031, *Nuclear Criticality Safety Program*
- CP3-TR-0102, *Conduct of Training*
- CP3-WM-2100, *Operation of Temporary Fissile Storage Areas*
- CP3-WM-2110, *Waste Container Handling, Overpacking, and Transportation*

- DOE M 435.1-1, *Radioactive Waste Management Manual*
- DOE O 435.1, *Radioactive Waste Management*
- JHA-11420, *Waste Management - Routine Work Activities*

3.0 COMMITMENTS

None

4.0 PRECAUTIONS AND LIMITATIONS

There are two procedures governing the handling and storage of fissile or potentially fissile waste depending on the applicable Nuclear Criticality Safety Evaluation (NCSE). The handling requirements of CP3-WM-0015, *Management of Fissile Waste Material*, apply to waste controlled by NCSE-RM-FISSMAT-0015. CP3-WM-1036, *Nuclear Criticality Safety Implementation Requirements for Handling and Storage of Fissile and Potentially Fissile Waste*, applies to all other fissile or potentially fissile waste. The appropriate NCS requirements shall be met prior to transferring fissile or potentially fissile waste from one NCSE to another.

5.0 PREREQUISITES

None

6.0 INSTRUCTIONS

6.1 Preparation for Generating/Accumulating Waste in TWSAs

<u>Waste Generator</u>

NOTES:

The TWSA type selected must be appropriate for the waste contained within the area in accordance with all applicable regulations.

Waste containers with multiple regulated contaminants (for example RCRA and PCB), must meet the requirements of all regulations applicable to the waste types staged in the TWSA.

CP3-WM-1036 or CP3-WM-0015 shall be referred to, as appropriate, for fissile/potentially fissile waste handling requirements.

CERCLA staging areas may be equivalent to one or more types of other TWSAs and subject to the substantive requirements for each type of TWSA. In general, reporting to regulatory agencies and time requirements are administrative.

Certain interim containers (for example: tilt dumpsters, roll-off bins, totes, etc.) may be placed for short-term collection of waste prior to further processing for disposal by Waste Management. At the discretion of Waste Management, use of these interim containers may not require the establishment of TWSAs.

6.1.1 Determine the waste(s) to be generated.

6.1.2 Contact Waste Management for guidance.

NOTE:

The decision for establishing a TWSA needs to take into account the following:

- Availability/accessibility of existing TWSAs;
- Duration and volumes of waste to be generated;
- Type of waste being generated.

Waste Generator Manager/Waste Engineer/Field Engineer

6.1.3 Select the type of TWSA from options depicted in the Appendix B, *Temporary Waste Storage Options* table based on project needs and waste type.

6.2 Establishing a TWSA

Waste Generator

6.2.1 Notify the following persons or entities prior to establishing a new TWSA:

- Waste Engineer
- Waste Management Field Engineer
- Waste Generator Manager
- Facility Manager

NOTE:

Existing Request for Disposal (RFD) number of railcars on Paducah Gaseous Diffusion Plant (PGDP) Rail System is the assigned TWSA number.

6.2.2 Contact Waste Management to obtain a unique TWSA number that incorporates the building/area number. Example prefixes may include the following:

- S – SAA
- C – CERCLA Staging Area
- G – GSA
- H – 90-Day Area
- PCB/30 – 30-Day Area
- PCB/180 – 180-Day Area
- U – Universal Waste and/or used oil collection area

NOTE:

Examples of TWSAs can be found in Appendices F, *SAA Example* and H, *GSA Example*.

6.2.3 Establish the TWSA in accordance with the specific requirements in Appendix C, *Temporary Waste Staging Area Requirements*.

NOTE:

Railcars that are staged on PGDP Rail System are considered a Mobile TWSA.

The PGDP Rail System is a defined location.

Mobile TWSAs are shown as being mobile in the tracking log and include a typical storage location when not in use.

6.2.4 Provide Waste Management with a detailed physical description and location of the TWSA.

Waste Generator Manager/Waste Engineer/Field Engineer

6.2.5 **If** a new CERCLA TWSA is being established, **then** review the approved work plan to determine the applicability of the inspection checklist items identified on CP3-WM-1037-F03, *TWSA Inspection Checklist*, for CERCLA staging areas.

6.2.6 **If** new inspection criteria was identified during the review of the approved work plan, **then** revise CP3-WM-1037-F03 to reflect the approved work plan inspection requirements.

Waste Generator

6.2.7 For a 90-day accumulation area or CERCLA staging area (if required by the approved work plan), Complete form CP3-WM-1037-F02, *TWSA Description*.

6.2.8 Attach copy to back of CP2-ER-1125 *Contingency Plan for the Paducah Environmental Remediation Project Temporary Staging Areas at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky* **and** post in a conspicuous place near the TWSA where personnel can see it entering and leaving the TWSA.

NOTE:

Boundaries of TWSAs may include the container itself, walls of buildings, trailers or gondolas.

6.2.9 **If** additional boundaries are needed, **then** install boundaries using rope, chain, tape, etc.

NOTE:

Examples of signs are found in Appendices E, *SAA Example Sign*, G, *GSA Example Sign*, and I, *CERCLA Area Example Sign.*

6.2.10 Install a sign designating the area as a TWSA **and** identify the following at a minimum on the sign:

- TWSA Identification number;
- Emergency Contact (for example FM, responsible manager);
- TWSA location.

Waste Generator Manager/Waste Engineer/Field Engineer

6.2.11 Upon notification by the Waste Generator, review information related to proposed TWSA **and if** deemed acceptable, **then** approve the use of the TWSA.

6.2.12 Once TWSA is approved, post pertinent information on TWSA spreadsheet in folder ..\..\Temporary Storage Areas.

6.2.13 Ensure CP2-WM-0011-F02, *Request for Disposal (RFD)* form is initiated for the waste in accordance with CP2-WM-0011, *Waste Acceptance Criteria for the Treatment, Storage, and Disposal Facilities at the Paducah U.S. Department of Energy Site*.

6.3 TWSA Operation

NOTE:

Waste cannot be stored in a TWSA unless: the unique identification number has been assigned by Waste Management; form CP3-WM-1037-F03 has been modified as necessary; for CERCLA and 90-day TWSAs, form CP3-WM-1037-F02 (if required) has been developed and/or approved; boundaries are established; signs are posted, and approval has been issued by the Waste Generator Manager .

Waste Generator

6.3.1 Contact Waste Management to coordinate the delivery and/or pick-up of waste containers.

6.3.2 Contact the Facility Manager for inventory control compliance with applicable nuclear safety basis documents prior to adding regulated waste to TWSAs.

NOTE:

Container operations (adding or removing waste) are to be under the control of the Waste Generator at all times. Tamper Indicating Devices (TID) must be used on waste containers that will not be further processed by Waste Management prior to disposition. Typical TWSAs established for routine Surveillance and Maintenance wastes (such as Boundary Control Station [BCS] trash, used oil, fluorescent lamps, etc.) do **NOT** require the use of a TID.

6.3.3 Manage containers in accordance with requirements in Appendix D, *Requirements for Temporary Waste Staging Area Containers*.

6.3.4 Package waste in accordance with the applicable treatment, storage, and disposal facility (TSDF) Waste Acceptance Criteria in accordance with CP3-WM-3015, *Waste Packaging* or specific direction from Waste Management.

NOTE:

Certain interim containers (for example, tilt dumpsters, roll-off bins, totes, etc.) may be placed for short-term collection of waste prior to further processing for disposal by Waste Management. At the discretion of Waste Management, use of these interim containers may **NOT** require the establishment of TWSAs or the use of a container logsheet.

Certain containers such as tilt dumpsters, roll-off bins, parts bins, etc. may be placed for collection of bagged waste, cardboard, scrap metal, etc. and may not have lids or tops that can be closed.

6.3.5 Maintain the waste container closed, except when necessary to add, remove, sample, or observe waste.

6.3.6 Ensure containers stored outside are protected from the weather using tarps or other protective devices and/or equipment.

6.3.7 Maintain CP3-WM-3015-F01, *Waste Item Container Logsheet (WICL)* with container and provide completed WICL to Waste Management to initiate pick-up of completed waste containers.

NOTE:

Waste Management approval must be obtained prior to waste acceptance into a PGDP TSDF in accordance with CP2-WM-0011.

6.3.8 For SAAs, **if** 55 gallons of hazardous waste **or** 1 quart of acutely hazardous waste have been accumulated, **then** mark **and** label the container with the accumulation start date (AD) and move it to one of the following locations within 3 days/72 hours:

- 90-Day Accumulation Area
- Permitted storage facility
- Off-site TSDF

6.3.9 For 90-Day Accumulation Areas, **if** waste has been stored for 80 days from the accumulation date in a 90-Day Accumulation Area, even if the container is not filled , **then** contact Waste Management **and** initiate the approval process to move the container to a permitted storage facility or off-site TSDF. Chg A

6.3.10 For PCB Items, **if** PCB Items Date-to Storage has reached 8 months, **then** notify Waste Management to initiate disposition process. Chg A

6.4 TWSA Inspection

Field Engineer

NOTE:

TWSA inspection frequencies are outlined in Appendix D, Item 4, and are also included on the TWSA spreadsheet maintained by Waste Management in folder ..\..\..\Temporary Storage Areas.

6.4.1 Inspect the area and container(s) utilizing form CP3-WM-1037-F03.

6.4.2 Ensure PCB Items Date to Storage and Container ID # are recorded in the Remarks section of CP3-WM-1037-F03.

6.4.3 For PCB Items, provide the Date-to Storage and Container ID# to Waste Generator Services Manager and PCB Coordinator. Chg A

Waste Management

6.4.4 **If** conditions for record storage are adverse (sunlight or moisture that could fade or damage paper records) at the TWSA, **then** establish an alternative storage location that can be readily accessed by all who require access to those records.

Field Engineer/Designee

6.4.5 Sign **and** date the inspection checklist.

6.4.6 Immediately notify Waste Generator Manager of any environmental noncompliances **and** report in accordance with CP3-QA-3001, *Issues Management.*

6.4.7 Maintain the original inspection checklists in accordance with CP3-RD-0010, *Records Management Process.*

6.4.8 Place electronic copies of completed checklists in folder ..\..\Temporary Storage Areas.

Waste Generator

6.4.9 **If** processes are modified such that a different type of TWSA is required, **then** coordinate the TWSA change with Waste Management **and** dismantle it in parallel with establishing the appropriate TWSA in accordance with this procedure.

Waste Generator Manager/Field Engineer

6.4.10 Review the proposed changes to the TWSA to ensure compliance with applicable regulatory and company requirements.

6.4.11 Update the TWSA spreadsheet to reflect the change in TWSA type.

6.5 Dismantling a TWSA

Waste Generator

6.5.1 **If** the use of a TWSA is no longer needed because processes are discontinued or modified and all wastes have been dispositioned, **then** dismantle the TWSA **and** notify the following parties in writing, no later than 30 days after last waste is removed from the area, that the use of the TWSA has been discontinued, all waste removed, and the date the TWSA ceased operating:

- Field Engineer
- Waste Generator Manager

Waste Generator Manager/Field Engineer

6.5.2 Walk-down the area to ensure TWSA closure requirements are met.

6.5.3 Update the TWSA spreadsheet to reflect closure of the TWSA.

6.5.4 Submit required records (for example, inspection checklist) to FRNP Records Management (Include the TWSA identification number to aid in record retrieval) in accordance with CP3-RD-0010.

7.0 ACCEPTANCE CRITERIA

None

8.0 POST PERFORMANCE WORK ACTIVITIES

None

9.0 RECORDS

9.1 Records Generated

The following records may be generated by this procedure:

- Form CP3-WM-1037-F02, *TWSA Description*
- Form CP3-WM-1037-F03, *TWSA Inspection Checklist*

9.2 Records Disposition

The records are to be maintained in accordance with CP3-RD-0010, *Records Management Process*.

Appendix A – Acronyms/Definitions

ACRONYMS

ARARS – Applicable or Relevant, and Appropriate Requirements

BCS – Boundary Control Station

BMP – best management practice

CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act

CFR – *Code of Federal Regulations*

DOE – U.S. Department of Energy

DOT– Department of Transportation

FFCA – Federal Facilities Compliance Agreement

FRNP – Four Rivers Nuclear Partnership, LLC

GSA – generator staging area

KAR– Kentucky Administrative Regulations

LLW – low–level waste

PCB – polychlorinated biphenyl

PGDP – Paducah Gaseous Diffusion Plant

RCRA – Resource Conservation and Recovery Act

RFD – Request for Disposal

SAA – satellite accumulation area

TID – Tamper Indicating Devices

TSCA – Toxic Substances Control Act

TSDF – treatment, storage, and disposal facility

TWSA – temporary waste staging area

UW – universal waste

VOC – Volatile Organic Compound

WICL Waste Item Container Log

Appendix A – Acronyms/Definitions (continued)

DEFINITIONS

Accumulation Start Date – For RCRA waste, it is the date accumulation of hazardous waste begins. For waste originating from a satellite accumulation area, the accumulation start date is the date the waste goes into a 90-day area or permitted storage facility. For newly discovered RCRA waste the accumulation start date would be the date it originally was determined to be a RCRA waste.

Dike – An embankment or ridge of either natural or man-made materials used to prevent the movement of liquids, sludges, solids, or other materials.

Facility – A building or operational unit.

Generation/Origin Date – The date that the waste item was generated and/or accumulated LLW collection container is filled/declared a waste. For bulking operations, the origin date for the newly generated waste (the bulked waste) will be the earliest origin date noted for any of the wastes bulked. If a waste is identified in the Agreed Order and is still managed and labeled as hazardous waste pending determination, then the generation date would be the date that the container went into the storage unit and would remain that after the determination is made, either hazardous or not hazardous.

Generator Staging Area (GSA) – A TWSA within a building or facility used for the accumulation of containers of all waste produced in the building or facility except hazardous waste. The Generator Staging Area is the responsibility of the Facility Manager or waste generator.

Low-Level Waste (LLW) – All radioactive waste that is not high–level waste, spent nuclear fuel, transuranic (TRU) waste, by–product material [as defined in section 11e.(2) of the Atomic Energy Act of 1954, as amended], or naturally–occurring radioactive material.

Mixed Waste (MW) – Waste that is both RCRA and radioactive.

Ninety (90)-Day Accumulation Area – A TWSA used to collect hazardous waste for 90 days or less before transfer to a permitted hazardous storage facility or shipment to a permitted hazardous waste treatment/disposal facility.

PCB Bulk Product Waste - PCB bulk product waste is >50 ppm PCB waste derived from manufactured products containing non-liquid PCBs. PCB bulk product waste excludes PCB Items, PCB remediation waste, PCB household waste, and wastes from research and development activities. Check with Regulatory Compliance and Policy for additional guidance. Examples of PCB bulk product waste include but are not limited to:

- Non-liquid bulk waste or debris from building demolition that contains PCBs (PCB bulk product waste excludes debris from the demolition of buildings or other man-made structures from which spilled PCBs have not been removed)
- Fluorescent light ballasts containing PCBs in the potting material
- PCB-containing wastes from the shredding of automobiles and appliances (shredder fluff)

Appendix A – Acronyms/Definitions (continued)

- Plastics, preformed or molded rubber parts, applied dried paints, sealants, caulking, adhesives, paper, Galbestos, noise insulation, and felt or fabric products such as gaskets from air-handling system gaskets.

PCB/180 – One Hundred Eighty (180)- Day PCB TWSA – A TWSA used to collect PCB bulk product or bulk remediation waste at the clean-up site or site of generation for 180 days subject to the conditions of 40 *CFR* 761.65(c) (9). The waste will only need to be removed to a waste storage facility or shipment to a disposal facility within 180-days.

PCB waste(s) – PCBs and PCB Items that are subject to the disposal requirements of 40 *CFR* 761, Subpart D.

Satellite Accumulation Area (SAA) – A TWSA designated for the temporary accumulation of hazardous waste located at or near the point of generation and under the control of the operator of the process generating the waste.

Thirty (30)-Day PCB TWSA – A TWSA used to collect PCB waste for 30 days or less before transfer to a waste storage facility or shipment to an approved waste disposal facility.

Universal Waste (UW) – Several groups of hazardous wastes subject to streamlined requirements for collection, storage and processing if they are recycled under the Universal Waste Rule. Batteries, certain pesticides, thermostats and mercury-containing lamps have been designated as universal wastes under the federal rule. The UW rule enables recycling and proper disposal of certain hazardous wastes, while reducing the time and money required to manage them as hazardous waste. In Kentucky, a generator has the option to manage batteries, unused pesticides, mercury thermostats, and spent lamps either as hazardous waste or as universal waste. However, if one of these wastes is radiologically contaminated, it cannot be designated as universal waste; it must be managed as a mixed waste.

Waste Container – A receptacle for waste, including any liner, shielding, or material that is intended to accompany the waste in disposal.

Waste Management – The planning, coordination, and direction of those functions related to generation, handling, treatment, storage, transportation, and disposal of waste, as well as associated surveillance and maintenance activities.

Waste Generator – An individual (such as Facility Manager, supervisor of a waste-generating activity, or appointee) or organization whose act or process produces waste to be managed for the DOE.

APPENDIX B – TEMPORARY WASTE STAGING OPTIONS

Type of Waste	TWSA Classification						
	SAA	**90-Day**[3]	**GSA**	**PCB 30-Day**	**PCB 180-Day**	**CERCLA**[4]	**UW**
Hazardous or Mixed[1]	X	X				X	X[7]
Hazardous/PCB[1]	X	X				X	
PCB[1]			X	X[5]	X[6]	X	
Low-Level Radioactive[2]	X	X	X			X	

NOTES

1 Includes waste containing radioactivity
2 Includes other types of nonhazardous and/or non-PCB wastes
3 A 90-Day Area should not be established for the staging of only nonhazardous waste
4 CERCLA waste staging types depend upon the approved work plan and identified Applicable or Relevant and Appropriate Requirements (ARARs) which may include substantive requirements for 1 or more of the other types of TWSAs
5 PCB solids or non-leaking items
6 PCB bulk product/PCB remediation waste
7 Universal Waste (UW) by definition is a hazardous (non-RAD) waste destined for recycle.

Appendix C – TEMPORARY WASTE STAGING AREA REQUIREMENTS

PCB Waste Staging Requirements:

General Facility Criteria (Applicable to other TWSAs if PCB Waste is staged):

- If waste is RCRA and TSCA, it must meet both RCRA and TSCA staging requirements.
- Not located at a site that is below the 100 year flood waste elevation;
- Adequate roof and walls to prevent rainwater from reaching the stored PCBs and PCB items (Not required for 30 day staging areas).
- Adequate floor that has continuous curbing with a minimum 6 inch high curb made of material that has a continuous, smooth, non-porous surfaces that minimizes penetration of PCBs.
- Solid PCB waste is exempt by the Uranium Enrichment TSCA FFCA from curbing requirements.
- Liquid radioactive wastes that are fissile or potentially fissile do not require a six inch curb, but the secondary containment must meet the volume requirements.
- No drains, valves, expansion joints, or other openings that would permit liquids to flow from the curbed area.
- Secondary containment of PCB liquid wastes must provide containment that equals or exceeds the following volumes (whichever is greater):
- \- Twice the volume of the largest container or;
- \- 25% of the total volume of all the items and containers stored within the area.
- Areas must be marked with the ML mark or label (minimum 6 inch by 6 inch label) pursuant to 40 CFR 761.45.
- Any PCB waste currently in a TWSA as of December 31, or that had been in a temporary staging area during the year, must be accounted for in the annual PCB document. The RFD and/or equivalent information must be provided to Waste Management by January 15th of the following calendar year, even for containers in temporary staging areas that are not full. PCB waste may be stored in RCRA-permitted waste storage areas in accordance with 40 CFR 761.65(b)(2) providing any spills/releases in the facility are cleaned pursuant to 40 CFR 761, Subpart G.
- Contact Regulatory Compliance for additional guidance.

30-Day PCB TWSAs:

- Non-leaking PCB Articles, PCB Article Containers, and PCB Containers may be stored temporarily in an area that does not comply with the requirements of the General Facility Criteria (above) for up to 30 days from the date of their removal from service, providing they are non-leaking and if liquid PCBs are present, the staging area is addressed in the SPCC Plan (PAD-REG-1005), [40 *CFR* 761.65 (c)(1)].

180-Day PCB TWSAs:

- PCB bulk product or non-liquid PCB remediation waste may be stored temporarily in an area that does not comply with the requirements of the General Facility criteria (above) at the clean-up site or site of generation for up to 180 days, if the waste does not generate leachate, is staged in a pile protected from run-on/run-off, and any water that contacts the waste is collected for treatment. [40 CFR 761.65 (c)(9)].

Appendix C – TEMPORARY WASTE STAGING AREA REQUIREMENTS (continued)

RCRA Waste Staging Requirements:

General Facility Criteria:

- If waste is both RCRA and TSCA, it must meet both RCRA and TSCA requirements.
- Containers must be in good condition, be compatible with the waste placed in them, and be closed when not adding/removing wastes.
- Containers, tanks, and processing systems used for wastes containing Volatile Organic Compound (VOCs) must be vapor tight in accordance with 40 CFR 264 Subparts AA, BB, and CC.
- Containers must be clearly marked "Hazardous Waste" [40 CFR 262.17(a)(5)(i) and 262.17 (a)(5)(ii)] and an indication of the hazard(s) of the contents (corrosive, toxic, reactive, ignitable, etc.) .
- Nonhazardous waste containers stored in 90-Day Area need only to be marked with their contents.
- Signs/Posting shall be placed in locations such that they can be readily seen from any approach.
- Provide reporting requirements for annual reports (RCRA, TSCA, Emergency Planning and Community Right-to-Know, etc.) for all off-site shipments.
- Provide adequate spill control equipment and supplies for the type of waste being accumulated in the area as identified in the contingency plan (40 *CFR* 265.252).

90-Day Accumulation Areas:

- Must be inspected at least every 7 days [40 *CFR* 262.17(a)(1)(v)].
- Must be marked with the Accumulation Start Date [40 CFR 262.17(a)(5)(i)(C)].
- The Contingency Plan (CP2-ER-1125) must be posted near area [40 CFR 262.17(a)(6) and 40CFR 262.262.]
- Form CP3-WM-1037-F02 shall be approved by Regulatory Compliance and attached to the Contingency Plan.
- Must be posted with "90-Day Accumulation Area for RCRA Hazardous Waste", "Danger-Authorized Personnel Only" [40 *CFR* 264.14 (c)], and "2-Way Radio or cell phone required for entry" (40 CFR 262.252) signs.
- Appropriate spill control equipment/supplies identified on Form CP3-WM-1037-F02 will be maintained at the area (40 CFR 262.252).
- Must have and maintain fire suppression equipment as directed by FRNP Fire Services identified on Form CP3-WM-1037-F02 (40 *CFR* 262.252).
- Must be at least 50 feet from property line [40 *CFR* 265.17(a)(vi)((A)].

Satellite Accumulation Areas:

- Must not have capacity for more than 55 gallons of hazardous waste or 1 quart of liquid acute hazardous waste or 1 kg (2.2 lbs.) of solid acute hazardous waste[40 *CFR* 262.15(a)]. Excess must be marked with date and removed within 3 days (72 hours) [40 *CFR* 262.15 (a)(6)].
- Must be located near the activity generating wastes [40 *CFR* 262.15(a)].
- Should be inspected at least monthly to ensure general and specific requirements are being met.
- Must be under the control of the generator or generating organization [40 *CFR* 262.15(a)].
- Must be clearly marked "Hazardous Waste" [40 CFR 262.15(a)(5)(i) and 262.15 (a)(5)(ii)] and an indication of the hazard(s) of the contents (corrosive, toxic, reactive, ignitable, etc.) . .

Appendix C – TEMPORARY WASTE STAGING AREA REQUIREMENTS (continued)

CERCLA Staging Requirements:

General Facility Criteria:

- CERCLA waste staging must comply with ARARs identified in the approved CERCLA work plan. In general, these include the substantive requirements that would otherwise be applied if the project were not CERCLA, for the type and quantity of wastes stored. For example, for storage of HW >55 gallons:
    - Containers must be in good condition, be compatible with the waste placed in them, be closed when not adding/removing wastes, and must be inspected at least weekly (40 CFR 264 Subpart I).
    - Containers, tanks, and processing systems used for wastes containing VOCs must be vapor tight in accordance with 40 CFR 264 Subparts AA, BB, and CC.
    - Containers must be clearly marked "Hazardous Waste" [40 CFR 262.17(a)(5)] and/or be marked with the contents of the containers (if non-hazardous).
    - Contingency Plans, Spill Control, and Fire Suppression:
        - These requirements, if applicable, are identified in the appropriate **ARARs** within the CERCLA decision document.

Universal Waste Staging Requirement:

General Facility Criteria:

- See Appendix E of procedure CP3-WM-3015 for list of Universal/Recyclable.
- Must manage universal waste batteries in a way that prevents releases of any universal waste or component of a universal waste to the environment (40 *CFR* 273.33).
- Must package waste in accordance with applicable section of procedure CP3-WM-3015 for packaging of UW/recyclable waste.
- Must be marked "Universal Waste" and the type, i.e. batteries, pesticides, mercury, lamps (40 *CFR* 273.34).
- Must mark the earliest accumulation start data and ship universal waste for recycling within 1 year of this date (40 *CFR* 273.35).

Low-level Waste Staging Requirement:

General Facility Criteria:

- Containers must be in good condition, be compatible with the waste placed in them, be closed when not adding/removing wastes, and must be inspected per Appendix D.

Appendix D – REQUIREMENTS FOR TEMPORARY WASTE STAGING AREA CONTAINERS

Requirements[2]	SAA	90-Day	30-Day (PCB Only)	GSA	CERCLA	UW
1. Must be in good condition (40 *CFR* 264.171)	Yes	Yes	Yes	Yes	Yes	Yes
2. Must be compatible with the waste in the container (40 *CFR* 264.172)	Yes	Yes	Yes	Yes	Yes	Yes
3. Must be closed at all times except when adding or removing waste (40 *CFR* 264.173)	Yes	Yes	Yes	Yes	Yes	Yes
4. Inspection requirements [40 *CFR* 264.174, 761.65(c)(5)]	BMP: Monthly	Every 7 days	Every 30 days	BMP: Monthly	Every 7 days	BMP: Monthly
5. Dating requirements [40 *CFR* 761.65(c)(8)]	On the date 55 gallons (or 1 quart for acute wastes) is exceeded or removed from the SAA PCB: On the earliest date the PCBs are removed from service; e.g. waste first goes in the container	On the date the waste first goes in the container (unless previously dated at an SAA prior to transfer) PCB: On the earliest date the PCBs are removed from service; e.g. waste first goes in the container	On the earliest date the PCBs are removed from service; e.g. waste first goes in the container	PCBs: On the earliest date the PCBs are removed from service; e.g. waste first goes in the container	Per applicable ARARS[1]	On the date the first waste is placed in container.
6. Maximum length of storage(40 *CFR* 761.65[a][1]; TSCA FFCA Appendix1, 2[D])	Unlimited (Note: Unlimited; however, LDRs limit waste storage to one year) or 3 days once volume is exceeded PCBs: do not exceed limit of 9 months	90 days	30 days from the earliest date the PCB Item is removed from service	PCBs: 1 year for PCB/rad per 40*CFR* 761.65(a)(1)	Per applicable ARARS[1]	Do not exceed limit of 9 months

Appendix D – REQUIREMENTS FOR TEMPORARY WASTE STAGING AREA CONTAINERS (Continued)

Page 2 of 2

Requirements[2]	SAA	90-Day	30-Day (PCB Only)	GSA	CERCLA	UW
7. Maximum waste volume in storage	55 gallons (or 1 quart for acute wastes)	Unlimited, subject to secondary containment	Unlimited	Unlimited	Unlimited	Unlimited
8. Personnel training required	RCRA: No PCB: Yes	RCRA: Yes PCB: Yes	PCB: Yes	PCB: Yes	Per applicable ARARS[1]	Yes
9. Can treat hazardous waste in a unit	No	Yes	No	No	Per applicable ARARS[1]	No
10. Containment Controls [40 *CFR* 264.175, 761.65(b)(1)(ii)-(iv)]	RCRA: BMP PCB: Yes	RCRA: BMP PCB: Yes	BMP	LLW: BMP PCB: Yes	Per applicable ARARS[1]	BMP
11. Special requirements for ignitable/reactive wastes (40 *CFR* 264.176)	BMP	Yes	No	No	Per applicable ARARS[1]	BMP
12. Special requirements for incompatible wastes (40 *CFR* 264.177)	BMP	Yes	No	No	Per applicable ARARS[1]	BMP
13. Must comply with Subparts AA, BB, and CC air emission standards (40 *CFR* 264.179)	BMP	Yes	No	No	Per applicable ARARS[1]	NA
14. Must comply with preparedness, prevention, contingency plan, and emergency procedures in Part 264, Subparts C & D	No	Yes	Yes (PCB Liquids)	No	Per applicable ARARS[1]	No
15. Closure requirements	No	40 *CFR* 264. 111-115	No	No	Per applicable ARARS[1]	No
16. Marking requirements	Containers shall be marked in accordance with applicable ARARs					

NOTE: All PCB liquids must be in secondary containment.

NOTE: LLW is required to be dispositioned within 1 year from the date it is placed into a permanent storage facilities governed by a Radioactive Waste Management Basis in accordance with DOE O 435.1.

NOTE: "Best Management Practices" (BMP): Therefore, not regulatory requirements, however, they add elements of safety that are important to the protection of workers and the environment.

NOTE:

- Adequate aisle space will be maintained for inspection purposes (recommended minimum of two feet).
- Each waste container will be posted with an individual waste item container log (refer to CP2-WM-0011) except when processing for transfer to another storage facility or off-site shipment.
- Spills will not be flushed to a storm drain unless specific permission has been obtained from Environmental Compliance.
- Containers will be stored on pallets as practical.

[1] Implement Waste Management practices for the CERCLA staging area that support requirements specified in the approved work plan for a particular CERCLA response action.

Appendix E – SAA EXAMPLE SIGN

HAZARDOUS WASTE

SATELLITE ACCUMULATION AREA

BLDG. –

SUPVR. – I. N. Charge

AREA –

SAA No. – S-743-T17-01

PHONE – 270-123-4567

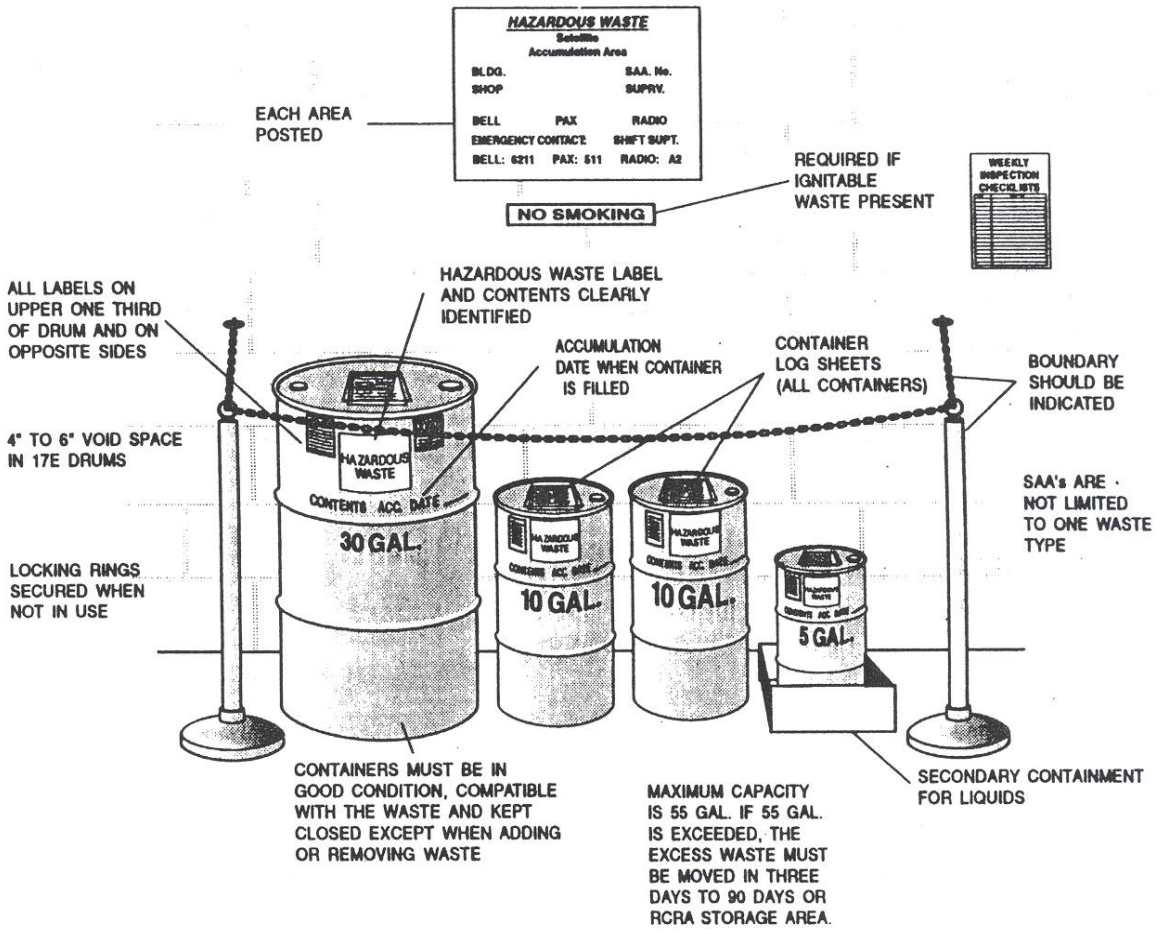
RADIO – A555

EMERGENCY CONTACT SHIFT SUPERINTENDENT

PHONE - 270-441-6211

RADIO – A2

Appendix F – SAA EXAMPLE



Appendix G – GSA EXAMPLE SIGN

GENERATOR STAGING AREA

BLDG. – C-743-T17 **SUPVR.** – I. N. Charge

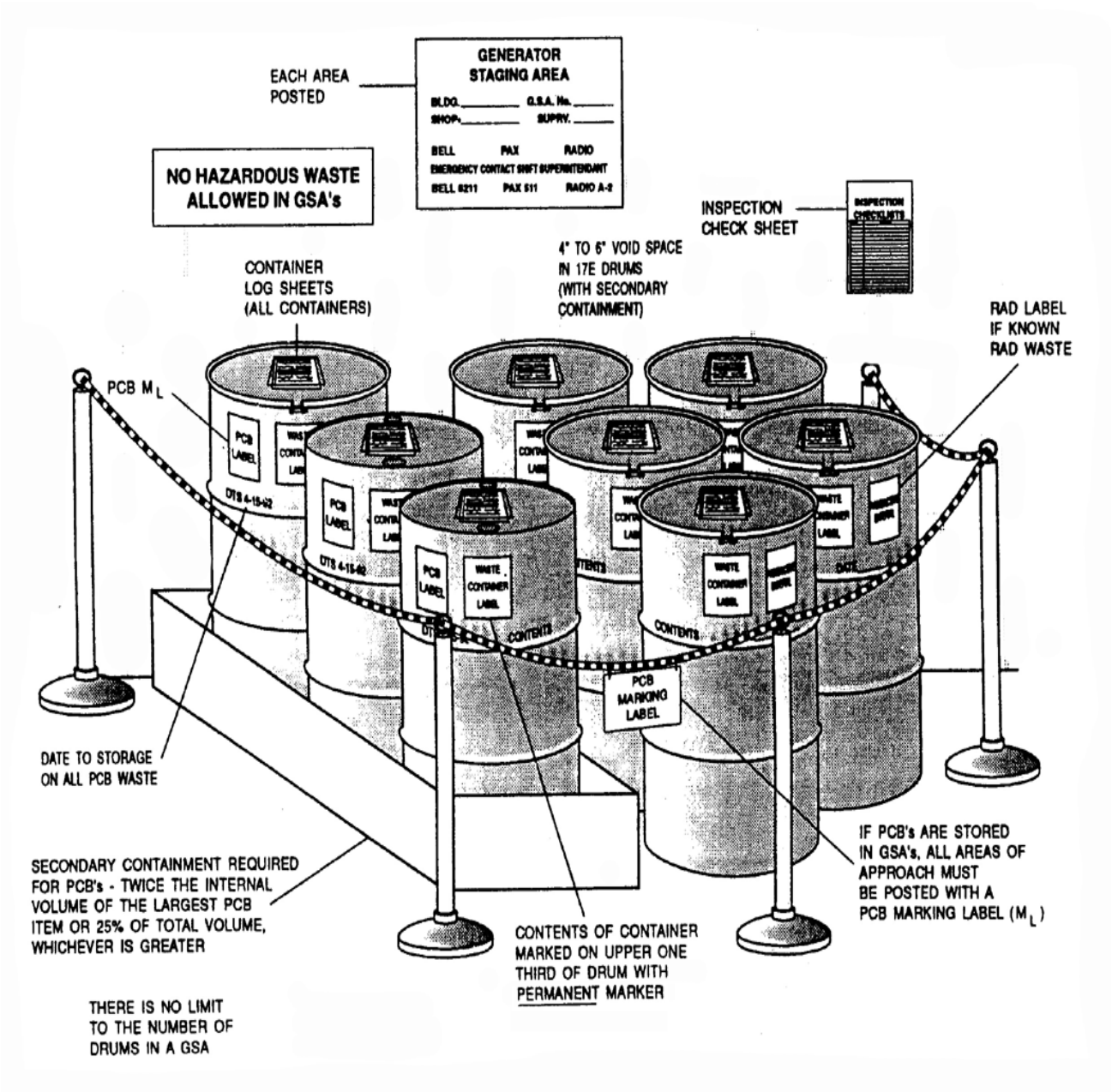
AREA – **GSA No.** – G-743-T17-01

PHONE – 270-123-4567 **RADIO** – A555

EMERGENCY CONTACT SHIFT SUPERINTENDENT

PHONE - 270-441-6211 **RADIO** – A2

Appendix H – GSA EXAMPLE



Appendix I – CERCLA AREA EXAMPLE SIGN

CERCLA
STAGING AREA

BLDG. – C-743-T17 **SUPVR.** – I. N. Charge

AREA – **GSA No.** – C-743-T17-01

PHONE – 270-123-4567 **RADIO** – A555

EMERGENCY CONTACT
SHIFT SUPERINTENDENT

PHONE - 270-441-6211 **RADIO** – A2

Form CP3-WM-1037-F02 –Temporary Waste Staging Area Description

TEMPORARY WASTE STAGING AREA DESCRIPTION

Temporary Waste Staging Area ID#: _____

Draw/Sketch Temporary Waste Staging Area – Include normal waste configuration/location, evacuation routes, assembly points and location of emergency equipment (e.g. fire extinguishers, absorbents, alarms)		
Emergency Equipment Available at TWSA:		
Equipment	**Quantity/Amount (Specify)**	**Purpose/Capability**
Absorbent (loose)		Absorb/Contain Spills
Tyvek® Coveralls		Protect against contamination
Gloves		Protection for Hands
Booties		Protection for Feet
Overpack Drum		Containment for leaking drum
Brooms		Cleanup of solid residue
Shovels		Cleanup of solid residue
Fire Extinguishers		Portable Apparatus for extinguishing incipient fires
Portable Eyewash		Device to wash foreign objects from eyes
Other:		
Other:		
Other:		
Point of Contact (Sign/Print):		**Date:**
Waste Generator Manager (Sign/Print)::		**Date:**

Form CP3-WM-1037-F03 – TWSA INSPECTION CHECKLIST

Facility Location: _____TWSA # _____
Month/Year:_____
Last Inspection Date_____

TEMPORARY WASTE STAGING AREA INSPECTION CHECKLIST
Circle all that is applicable: RCRA, PCB, PCB-30, PCB-180 (Bulk Product or bulk remediation, Asbestos, LLW, CERCLA)

	INSPECTION CRITERIA	Date 1			Date 2			Date 3			Date 4			Date 5		
		Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA
1.	Is the TSA posted correctly? (SAA, GSA, 30-day, 90-day, CERCLA, and PCB M_L label) (Circle all that apply)															
2.	Is the area/container(s) free of leaks or spills?															
3.	Is secondary containment that is free of cracks, holes etc. that would allow liquid to escape? (Solids must be stored in an area sloped or is otherwise designed to drain and remove liquid resulting from precipitation to prevent contact between wastes and accumulated liquid but not require secondary containment). PCB Solids must have an impervious floor, but do not require secondary containment.															
4.	Is secondary containment adequate to contain the greater of: Twice the volume of the largest item or 25% of the total volume of all the items? (PCB Liquids)															
5.	Are containers marked/labeled and have CP2-WM-3015-F01 been completed, as required? **NOTE: The WICL may be removed from the container and attached to the RFD for processing.**															
6.	Are containers compatible with waste, in good condition, have no leaks, and not over-pressurized?															
7.	Are containers closed to prevent spills if tipped over? (Containers should only be open for addition/removal of waste)															
8.	Are all PCB items marked with PCB M_L label (40 CFR 761.40) and date to storage?															
9.	Does storage of PCB items have adequate roof and walls to prevent rainwater from reaching stored PCB items? **NOTE: Not required for 30-day storage area.**															
10.	For PCB Items, record the Date to Storage and Container ID # in the Remarks section. Is the Date to Storage less than 8 months?															
11.	Is unacceptable waste present (e.g., incompatible waste or waste type not suitable for storage in type of TSA)?															
12	Are items stored outside protected by the use of tarps, plastic, etc. to prevent in-leakage of precipitation?															
13.	**For PCB 30 Day areas only**: Have any of the containers exceeds 25 days from date to storage?															
14.	**For SAA only:** Does the total quantity of waste meet or exceed 55 gallons of hazardous waste or 1 quart of acute hazardous waste. If yes, contact Waste Facility Operations immediately?															
15.	**For 90-day only:** Have any of the containers exceeded 80 days from date to storage?															
16.	Is an approved copy of the contingency plan located in the storage area? **NOTE: Not applicable to GSAs, SAAs, or Universal Waste Areas.**															
17.	**For 90-day only:** Is adequate spill control equipment, supplies and fire suppression equipment located in the 90-day area?															

Inspector Name/Signature and Date:
Date 1: _____
Date 2: _____
Date 3: _____
Date 4: _____
Date 5: _____

Note: Sign only the line for appropriate inspection date.

Remarks: (If no waste is present, document here)

PCB Date to Storage (first date waste is put in container) and Container ID #: