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DOCUMENT CATEGORY: ☐ Administrative ☒ Technical

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REVISION/CHANGE LOG

Revision/Change Letter	Description of Changes	Pages Affected	Date of Revision/Change
FR0	Bluesheet Procedure	All	8/10/2017
FR1	Initial Issue. Incorporation of blue-sheet non-intent changes	All	1/10/2018
FR2	Document rewritten based on FRNP execution strategies and processes. This revision is intended to provide resolution to CAPA issues CA-000785 and CA-000760 by aligning procedural requirements with current FRNP processes and commensurate with the training and qualification of the performers. This includes specifically identifying the training requirements for Transportation Specialists who perform transportation activities. This revision provides resolution to CAPA CA-000320 by clarifying pre-transportation check and peer check requirements and CAPA CA-000801 by aligning NMC&A reporting requirement with NMC&A procedures and incorporating appropriate references.	All	5/24/18
FR3	Document revised to clarify purpose and scope and remove text that states that off-site shipping is “on behalf of U.S. Department of Energy”	All	6/14/18

FR4	Revision to resolve CAPAs CA-001371, CA-001372, and CA-001375 which resulted from Self-Assessment SA-FY18-0061. Specific changes include deletion of references to forms CP3-WM-3028-F05 and CP3-WM-3028-F06. These forms were removed and replaced with guidance information of contents of shipment files now found in Appendix H. Examples of these forms are also removed from the procedure. Sections and work steps referencing the forms were replaced with references to Appendix H. Appendix F was rewritten and diagrams removed to account for changes in operations that include loading palletized drums. Work step 6.5.2 has been added to require container contents be reviewed against profiles prior to shipment. A note was added before work step 6.5.5 to ensure three meter unshielded radiation levels are evaluated for material to be classified as LSA or SCO. Added definitions of Shipper and Peer Checker/Reviewer to Appendix A and defined specific work steps for completion of Form CP3-WM-3028-F02, *Hazardous Material Checklist and Peer Review.*	All	2-26-19

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1.0 PURPOSE AND SCOPE

1.1 Purpose

This procedure defines a process by which shippers, trained and certified according to Title 49, Code of Federal Regulations (CFR) 172 Subpart H, *Training*, to plan, prepare, certify, and release shipments of hazardous materials for off-site transport. This procedure establishes a process for ensuring the requirements established in U.S. Department of Energy (DOE) Order 460.1D, *Packaging and Transportation Safety*, DOE Order 460.2A, *Departmental Materials Transportation and Packaging Management*, and contracted commercial Treatment, Storage, and Disposal Facility (TSDF) acceptance criteria are compliantly met. The level of detail provided in this procedure is consistent with its use only by properly trained and certified personnel.

1.2 Scope

The requirements of this procedure apply to all off-site shipments of hazardous materials and wastes by highway and rail performed by Paducah Gaseous Diffusion Plant (PGDP) Deactivation and Remediation (D&R) contractor transportation personnel at the DOE PGDP Site.

The approved process for transporting of hazardous materials by aircraft is defined in CP3-WM-9503, *Off-Site Shipments by Air Transport*. Hazardous material transportation to off-site facilities is within the scope of this document only to the extent required by approved subcontract documents.

This procedure does **NOT** include all processes and requirements needed to transport hazardous materials or waste to the Nevada National Security Site (NNSS). Additional requirements for NNSS shipments are defined in CP3-WM-0707, *NNSS Specific Waste Characterization, Profiling, Packaging and Shipping*. The processes defined by this procedure are completed in conjunction with NNSS requirements to ensure full compliance with transportation and disposal facility requirements.

2.0 REFERENCES

2.1 Use References

- 10 *CFR* 61.55, *Waste Class and Stability of Waste*
- 40 *CFR* 761, *Polychlorinated Biphenyls (PCB) Manufacturing, Processing, Distribution in Commerce and Use Prohibitions*
- 49 *CFR* 172.203, *Additional Description Requirements, Radioactive Material*
- 49 *CFR* 172, Subpart D - Marking
- 49 *CFR* 172, Subpart E - Labeling
- 49 *CFR* 172, Subpart F – Placarding
- 49 *CFR* 172, Subpart H - Training
- 49 *CFR* 173.2, *Hazardous material classes and index to hazard class definitions*
- 49 *CFR* 173.443, *Contamination control*

- 49 *CFR* 174, *Carriage by Rail*
- 49 *CFR* 174.55, *General Requirements*
- 49 *CFR* 177, *Carriage by Public Highway*
- 49 *CFR* 177.834, *General Requirements*
- CP2-SS-3000, *Nuclear Materials Control and Accountability Plan for the Paducah Gaseous Diffusion Plant, Paducah, Kentucky*
- CP2-WM-0025, *Four Rivers Nuclear Partnership, LLC, Paducah Deactivation and Remediation Project Transportation Security Plan for the Transport of Hazardous Materials in Commerce*
- CP3-NM-3001, *External Shipments and Receipt of Nuclear Material*
- CP3-QA-3005, *Occurrence Reporting*
- CP3-RP-1105, *Receipt Transport & Movement of Radioactive Materials*
- CP3-RP-1114, *ALARA Program*
- CP3-WM-0437, *Waste Characterization and Profiling*
- CP3-WM-0707*, NNSS Specific Waste Characterization, Profiling, Packaging, and Shipping*

2.2 Source References

- 10 *CFR* 71, *Packaging and Transportation for Radioactive Material*
- 10 *CFR* 835, *Occupational Radiation Protection*
- 40 *CFR*/401 *KAR*, *Environmental Protection*
- 49 *CFR*, 100-185, *Transportation*
- 49 *CFR* 173.427, *Transport requirements for low specific activity (LSA) Class 7 (radioactive) materials and surface contaminated objects (SCO)*
- 49 *CFR* 173.441, *Radiation level limitations and exclusive use provisions*
- 49 *CFR* 835, *Testimony of Board Employees*
- Applicable state and tribal regulations
- Applicable TSDF WAC
- CP3-EP-1010, *Termination and Recovery after Emergencies*
- CP3-OP-0207, *Use of Procedures*
- CP3-SM-1102, *Activity Level Work Execution and Closeout*
- CP3-TR-0102, *Conduct of Training*
- CP3-WM-9503, *Off-Site Shipments by Air Transport*

- DOE M 435.1-1, Chg 2, *Radioactive Waste Management Manual*
- DOE O 435.1, Chg 1, *Radioactive Waste Management*
- DOE Order 460.1D, *Packaging and Transportation Safety*
- DOE Order 460.2A, *Departmental Materials Transportation and Packaging Management*
- JHA-8692, *Waste Management, General*

3.0 COMMITMENTS

None

4.0 PRECAUTIONS AND LIMITATIONS

4.1.1 The process defined by this procedure is to be performed by personnel meeting the general and function-specific training requirements defined in 49 *CFR* 172, Subpart H, Training, as hazardous material shippers.

4.1.2 The procedure does not include all requirements for shipment of material to the NNSS. The requirements of CP3-WM-0707, *NNSS Specific Waste Characterization, Profiling, Packaging and Shipping*, must be performed in conjunction with the requirements of this procedure.

4.1.3 Unless coordinated and approved by the TSDF, no waste will be shipped off-site without having the necessary procurement documents (e.g. subcontracts, purchase orders) are in place with the receiving facility.

5.0 PREREQUISITES

None

6.0 INSTRUCTIONS

6.1 Training of Transportation Specialists

Transportation Manager

NOTES:

Training modules are maintained by the D&R contractor Training organization.

If approved by D&R contractor Training, **then** training may be performed by a subcontracted Subject Matter Expert or Trainer.

6.1.1 Assign initial and recurrent training or certification to Transportation Specialists to ensure compliance with 49 *CFR* 172, Subpart H, *Training*.

6.1.2 Provide recurrent training or certification in required areas at least triennially.

6.2 Identification of Material/Waste Requiring Off-Site Transportation

Transportation Manager

NOTE:

Information only needs to be obtained once for ongoing shipments of the same material. The Transportation Manager will work with the project and assigned Waste Engineer to determine the information required for ongoing shipments.

As noted in Section **1.2** of this procedure, the additional requirements for shipments of waste to NNSS are defined in CP3-WM-0707, *NNSS Specific Waste Characterization, Profiling, Packaging and Shipping*.

6.2.1 **If** the hazardous material is a waste for disposition, **then** review available waste inventory information maintained and provided by the Waste, Materials, & Environmental Services Database Administrator.

6.2.2 **If** the hazardous material is **NOT** a waste (for example, chemicals, equipment, oils, etc.) requiring off-site shipment, **then** review the requirement for shipping and determine the required level of oversight necessary for compliance.

NOTE:

Information used to prioritize containers and materials for off-site shipment may include the requirements of federal regulations and DOE Orders, project priorities, availability of disposal facility or capacity, contractual requirements, or realization of economic efficiencies in transportation of materials.

6.2.3 Based on available information, prioritize containers and materials for off-site shipment or disposition.

6.2.4 Identify and assign a Transportation Specialist who will have responsibility for the shipment of the containers or materials.

6.2.5 **If** the hazardous material to be shipped is not a waste for transportation to an off-site TSDF, **then** skip Sections **6.3** and **6.4 and** proceed to Section **6.5**.

6.2.6 **If** the material to be shipped is a waste for transportation to an off-site TSDF, **then prior** to proceeding to Section **6.5,** complete Sections **6.3** and **6.4**.

6.3 Determination of Disposition Options for Identified Waste

Transportation Manager/Designated Transportation Specialist

NOTES:

The process work steps in this section are intended for shipments of waste to off-site TSDFs and are **NOT** required for shipments of hazardous materials for project organizations that are **NOT** waste.

Determining the sufficiency of characterization may require preliminary determination of disposition alternatives to ensure profiling and waste acceptance criteria (WAC) can be met.

6.3.1 Based on information available about the waste, identify potential TSDFs that could accept the identified waste containers/materials.

NOTE:

If NNSS is selected as the TSDF for disposal of waste, **then** additional requirements for characterization of the waste are defined in CP3-WM-0707, *NNSS Specific Waste Characterization, Profiling, Packaging and Shipping*.

6.3.2 **If** waste containers require disposition to an off-site TSDF, **then** verify waste characterization is completed according to CP3-WM-0437, *Waste Characterization and Profiling,* and the material is sufficiently characterized to allow compliant shipment and/or disposition.

6.3.3 **If** characterization is determined to be incomplete or insufficient for disposition, **then** coordinate completion of additional characterization with the responsible Waste Engineer according to CP3-WM-0437, *Waste Characterization and Profiling*.

6.3.4 Identify, based on completed characterization, the TSDF(s) that can accept the waste containers or materials being dispositioned.

NOTE:

Whenever possible, to ensure sufficient review time, a bid period of seven (7) calendar days should be allowed for obtaining pricing quotes from TSDF vendors. Bid request timing should also allow sufficient time to coordinate profile approval and shipment logistics consistent with TSDF requirements.

6.3.5 Coordinate with the Waste Generator organization to obtain contracted pricing or bids, as needed from the prospective TSDF(s).

Transportation Manager or Logistics Coordinator

NOTE:

If NNSS is selected as the TSDF for disposal of waste, **then** additional requirements for shipment of the waste are defined in CP3-WM-0707, *NNSS Specific Waste Characterization, Profiling, Packaging and Shipping*.

6.3.6 Based on award by the Procurement organization, initiate purchase of disposition services from the awarded facility.

6.3.7 **If NOT** already determined, **then** coordinate with the Transportation Specialist to identify a target shipment date for the material or containers to be transported off-site.

6.4 Initiation of a Waste Shipment File

Transportation Specialist

NOTES:

The process work steps in this section are intended for shipments of hazardous materials or waste to off-site TSDFs only and are **NOT** required for shipments of hazardous materials for project organizations that are not waste for disposal or waste-like materials for recycling or reclamation.

The Waste Shipment File and associated Table of Contents is intended to be developed as required documentation is complete and will **NOT** be finalized until a certificate of destruction/disposal is received for the waste shipped to the TSDF.

6.4.1 Begin assembly of Shipment File by identifying needed documentation and developing a draft Shipment File Table of Contents as described in Appendix H, "Off-site Shipment File Table of Contents Guidance."

NOTES:

For shipments destined to other TSDF's **NOT** specifically addressed herein additional guidance is available in the specific site's WAC for assigning shipment identification numbers.

For shipments requiring a Uniform Hazardous Waste Manifest (UHWM) (U.S. Environmental Protection Agency (EPA) Form #: 8700-22), the unique identifying number is printed on the pre-printed forms, or identified by the EPA electronic manifest (e-manifest) system as applicable.

For NNSS Shipments, CP3-WM-0707 includes the process for assigning specific package and shipment numbers.

The convention for shipment numbers to the ENERGY*SOLUTIONS*/Clive facility include the approved profile number for the waste followed by a unique sequential shipment number.

Shipment numbers are **NOT** reused.

6.4.2 Assign a unique identifying Shipment Number and, as required, associated package numbers, for the shipment contents.

6.5 Identification, Classification, and Proper Shipping Name Selection for Hazardous Materials

Transportation Specialist

6.5.1 For each container (or discrete quantity) of hazardous materials that will be shipped, review the following (as applicable):

- Waste characterization package (if waste)
- Waste Requests for Disposal documents and associated Waste Item Container Log Sheets (if waste)
- Associated analytical data (if sampled)
- Safety Data Sheets (for chemicals)

- Process knowledge
- Waste profile approved by TSDF (if waste)

6.5.2 **If** shipping waste for treatment and/or disposition, review the contents of each container in the shipment against the waste profile, approved by the TSDF, to ensure the waste is consistent with the profile description and parameters.

NOTE:

Waste profiles (new or revised) must be approved by the TSDF prior to proceeding with off-site shipping of waste.

6.5.3 **If** container contents do not meet a currently approved profile, **then** request Waste Engineer to either revise the approved profile or develop a new profile according to CP3-WM-0437 and obtain approval from the TSDF.

6.5.4 **If** the shipment includes accountable nuclear material in reportable quantities, as defined in CP2-SS-3000, *Nuclear Material Control and Accountability Plan*, **then** request authorization to ship at least three (3) days prior to the scheduled shipment according to CP3-NM-3001, *External Shipments and Receipt of Nuclear Material*.

NOTE:

All software, spreadsheets and/or databases are quality checked for accuracy. Testing and validation of computer programs and verification of data results from those programs are conducted and documented according to Appendix L in CP3-WM-0437, *Waste Characterization and Profiling*.

Radiological calculations may be performed by hand or using an Excel spreadsheet as necessary for isotopes that are **NOT** included on the Master Rad Calc Sheet. **When** calculations are performed, verification from a peer reviewer is required to be performed and documented.

Profile limits are to be cross-referenced by the current TSDF-approved profile limits and will be referenced by the user of the spread sheet.

6.5.5 As necessary for radiological materials, perform radiological calculations for U. S. Department of Transportation (DOT) determinations using the most current version of the Master Rad Calc Sheet located at S:\Waste & Materials Mgt\Transportation\PAD DOT\ Rad Calc Sheets.

6.5.6 Classify the material according to 49 *CFR* 173.2 & 173.2a (See Appendix B, *Classifying and Identifying Waste Flowchart*).

NOTES:

Unless determined by a project Radiation Protection Manager to be impractical or inconsistent with the Principle of As Low As Reasonably Achievable (ALARA), LSA/SCO dose rate determinations are made based on documented radiation surveys performed by Radiological Controls.

For high energy alpha-emitting radionuclides, shielding with material such as lead or steel may result in increased dose rates due to Bremsstrahlung radiation effect. Whenever practical, unshielded dose rates should be used for these materials.

In the event that the unshielded dose rate is expected to be greater than 100 mrem/hour at 30cm from the source of radiation, the material will be in a High Radiation Area as defined by 10CFR835.2(a), or the materials will be shielded to protect personnel from unnecessary exposure to radiation. In these scenarios, alternative methods of evaluation may be considered to determine compliance, as determined and approved by a project Radiation Protection Manager, to determine if the radiation dose at one meter from unshielded material is within the LSA/SCO limit in order to ensure radiation doses to Radiological Controls and support personnel are maintained as low as reasonably achievable (ALARA) consistent with FRNP procedure CP3-RP-1114 FR2, *ALARA Program*.

6.5.7 **If** the material is potentially LSA or SCO for transportation, **then** obtain documentation from Radiological Controls that the external dose rate of the unshielded material is no greater than one rem at three (3) meters from the material as required by 49CFR173.427(a)(1).

6.5.8 Evaluate any regulatory exceptions or limited quantities based on the material to be shipped to determine which, if any, may apply to the material being shipped **and** determine whether any exceptions will be taken.

NOTE:

Materials shipped off-site as reviewed by qualified project personnel for classification, including Unclassified Controlled Nuclear Information (UCNI), or Export Control Information (ECI).

6.5.9 Assess potential security classification issues associated with the waste or material to be shipped **and**, if appropriate, establish any required security protocols prior to shipment.

6.5.10 Select the most appropriate proper shipping name(s) based on the hazard class(es) and contents of each container to be included in the shipment according to 49 *CFR* 172.101, *Hazardous Materials Table*.

NOTE:

The term “excepted package” does **NOT** apply to material shipped as Low Specific Activity (LSA) or Surface Contaminated Object (SCO) packages since shipment of these material require carriers to be participants in the DOE Motor Carrier Evaluation Program (MCEP) to transport the material for DOE.

6.5.11 **If** the hazardous materials to be shipped is **NOT** waste being shipped to an off-site TSDF or for recycling or reclamation **and** the material will be shipped as limited quantities or excepted package according to 49 *CFR*, **then** proceed to Section **6.14** to complete the shipment.

6.5.12 **If** the hazardous material is waste being shipped for off-site disposition **or** the material is **NOT** limited quantity or excepted package according the 49 *CFR*, **then** proceed to section **6.6**.

6.6 Package Preparation

Transportation Specialist

NOTE:

Legacy containers are **NOT** used for shipment to NNSS according to CP3-WM-0707.

6.6.1 Review documentation to ensure the container or package is acceptable **and** appropriate for the material being shipped.

6.6.2 Verify that pre-shipment radiological surveys of containers have been completed according to CP3-RP-1105, *Receipt Transport & Movement of Radioactive Materials*.

6.6.3 Mark each package, conveyance, or freight container according to the following (as applicable):

- 10 *CFR* 61.55 (Waste Class and Stability of waste)
- 40 *CFR* 761 (polychlorinated biphenyls)
- 49 *CFR* 172, Subpart D, *Marking*

NOTE:

Other hazardous material trained packaging personnel (Operators, etc.) may affix labels as specifically directed by the Transportation Specialists.

6.6.4 Label each package according to requirements of 49 *CFR* 172, Subpart E, *Labeling*, if applicable.

6.6.5 Determine the appropriate placards required according to the requirements of 49 *CFR* 172, Subpart F, *Placarding*.

6.7 Carrier Preparation

Logistics Coordinator or Transportation Specialist

6.7.1 **If** the shipment will be by highway, **then** select a carrier who has been evaluated and approved through the MCEP **and** verify that the motor carrier selected is on the current approved MCEP.

NOTE:

For shipments of classified material, drivers must have active security clearance at the level based on the classification of the material being shipped.

6.7.2 Order the conveyance (truck/rail) from the transporter as appropriate.

6.7.3 Confirm receipt of the following documentation from transporters (as applicable):

- Insurance
- Hazardous Material Registration from all affected states
- One time notification for a Certificate or registration for Hazardous Waste (HW) Activity from the Kentucky Department for Environmental Protection (KDEP)Division of Waste Management (DWM)
- EPA Identification Number
- HW Permits for destination states (HW shipments only)
- PCB registration with US EPA (Toxic Substances Control Act [TSCA] Shipments)
- City, State, and DOT # must be on the tractor, unless excepted by the regulations

NOTE:

NNSS shipment may include additional options for citizenship verification defined in CP3-QA-2501.

6.7.4 Ensure U.S. citizenship for all drivers transporting materials from the Paducah Site by reviewing documentation of one of the following acceptable items:

- DOE L or Q Clearance;
- Statement signed by a representative of the driver's company that reads:

  "I attest under penalty of perjury, that I have examined the document(s) presented by the above-named employee(s) that the documents reviewed appear to be genuine and to relate to the employee(s) named. To the best of my knowledge, the employee(s) is a U.S. Citizen." Signature by the carrier must appear on the same page with the employee(s) name(s).

6.7.5 Verify the EPA ID number for the transporter as well as the TSDF. EPA ID numbers can be verified by PGDP D&R Contractor Regulatory Compliance Group.

NOTE:

Documentation of approved justifications is retained by Procurement Group.

6.7.6 **If** the low cost carrier is **NOT** used, **then** use CP3-WM-3028-F03 *Justification for use of Other Than Low-Cost Carrier or Mode of Transportation* (Example in Appendix J), as required by DOE Order 460.2A, ATT. 2, CRD, PARA. 4.d," as documentation for justification **or** document electronically on the approved purchase requisition for the shipment.

6.7.7 **If** shipping to NNSS, **then** obtain recent completed Motor Carrier due diligence worksheet completed by NNSS RWAP.

6.7.8 Resolve any issues with the transporter.

6.7.9 Coordinate delivery of the conveyance to the project with the carrier and Waste Operations.

6.8 Conveyance Preparation

Transportation Specialist

NOTES:

Inspections of incoming transport conveyances include evaluation of safety or reliability issues that could impact compliant transport.

If NOT acceptable, **then** the conveyance should be rejected and transport provider contacted for replacement or repair.

6.8.1 Inspect incoming transport conveyance to ensure acceptability for loading (documentation of acceptability **NOT** required).

NOTE:

If survey results indicate unacceptable levels of residual contamination on the conveyance, **then** the conveyance should be rejected and transport provider contacted for replacement.

6.8.2 Review the incoming radiological survey for the conveyance to verify completion **and** identify anomalous results (above acceptable limits).

6.8.3 Determine the appropriate general loading guidance found in Appendix F, *Guidelines for Loading and Securing Shipments*, **and** inform Waste Operations of the containers to be loaded, and any shipment-specific securement requirements.

6.8.4 Once loading is completed by Waste Operations, coordinate staging of loaded conveyance for transport off-site.

6.8.5 Inspect the material being shipped to ensure it is loaded and segregated according to 49 *CFR* 177 (for highway shipments), or 49 *CFR* 174 (for rail shipments).

6.8.6 Verify that the containers or materials to be shipped are properly blocked, braced, or otherwise secured to prevent movement during transport according to requirements in 49 *CFR* 177.834 (highway) and 49 *CFR* 174.55 (rail).

NOTE:

Drivers have the final responsibility for securement of cargo on vehicles under their control.

6.8.7 Visually inspect, (truck or rail) to ensure placarded according to 49 *CFR* 172, Subpart F, *Placarding*.

6.9 Shipment Preparation

Transportation Specialist

NOTE:

Peer checking may be performed individually, but independently, after initial checks are completed. Form sections are signed upon completion of the associated checks and peer cheeks on the dates they are completed.

6.9.1 Initiate a checklist utilizing the CP3-WM-3028-F02, *Hazardous Material Checklist and Peer Review*, for the shipment.

NOTE:

Removable contamination as reported by Radiological Control (RADCON) does **NOT** include adjustments for wipe efficiency as required in 49 *CFR* 173.443. For the purposes of calculating SCO and for ensuring contamination control requirements are met, the wipe efficiency will be assumed to be 10% according to 49 *CFR* 173.443(a)(1)(i).

6.9.2 Check RADCON surveys to confirm that radiological surveys are performed as required for each shipment of material leaving the site per the applicable RADCON procedure(s) and applicable 49 *CFR* requirements (173.427, 173.441 & 173.443).

6.9.3 Provide notifications to the applicable TSDF as follows:

A. NNSS (See CP3-WM-0707 for specifics)

B. ENERGY*SOLUTIONS*/Clive

1. 90 day shipping forecast within 3 working days of receipt of request from ENERGY*SOLUTIONS*/Clive Customer Service Representative.

2. 5-Day Advance Shipment Notification at least 5 working days prior to planned arrival according to Energy*Solutions* customer portal.

NOTE:

Review of electronic manifest text files include review of the text file data merged associated manifest forms to ensure accurate rendering of final manifests.

3. Obtain shipment approval notification prior to release of shipment. Advanced Manifest Text File shall be prepared, peer reviewed for accuracy, **and** submitted to Energy*Solutions* (for example, via the customer portal) for TSDF approval prior to release of shipment.

C. For other TSDFs or Disposition Facilities perform according to the applicable TSDF WAC.

NOTE:

There are some shipments that may require live loading. In this case efforts should be made to reduce driver detention time as much as possible while ensuring the safety of personnel.

6.9.4 Ensure the following are completed prior to or upon driver arrival to avoid unnecessary detention and demurrage charges by carrier loading and unloading at the receiving facility:

- All necessary paperwork
- RADCON surveys
- Coordination with operator to deliver shipment

NOTE:

Materials being shipped off-site are evaluated by the project personnel to determine the presence of Classified, UCNI, and/or ECI waste. The project is required to supply an SSTF-106, *Swift and Staley Team/DOE Paducah Site Classification Office (CO)/Technical Information Office (TIO) and Operations Security (OPSEC) Release Form*, to Transportation Services.

6.9.5 **If** the shipment includes classified materials, **then** coordinate shipping through SST Security.

6.9.6 Coordinate shipments of ECI or UCNI waste with DOE and with the receiving facilities as necessary to ensure any required approval are obtained.

6.9.7 **If** the shipment includes accountable nuclear material, **then** complete final "Tally-Out" forms **and** submit to Nuclear Material Control & Accountability (NMC&A) on the day of the shipment as established in CP3-NM-3001, *External Shipments and Receipt of Nuclear Material*.

NOTE:

Welding may be used with or in lieu of Tamper Indicating Devices (TIDs) (such as, Security Seals) if packages are being dispositioned as direct burial.

6.9.8 Confirm TIDs are on each package and match the CP3-WM-3015-F02, *Paducah Non -NNSS Pre-Transportation Checklist,* provided by Waste Operations.

6.9.9 **If** flatbed trailer, **then** document TID #s on CP3-WM-3028-F02, Item F22.

6.9.10 Verify that CP3-WM-3015-F02, *Paducah Non-NNSS Pre-Transportation Inspection Checklist*, **or** CP3-QA-2501-F01, *Pre-Transportation Container Inspection Checklist*, as applicable, have been completed.

NOTE:

The shipper initiating the checklist is responsible to initially complete, or verify satisfactory completion of, checklist items.

6.9.11 Review all shipment preparations and associated documentation. Document completion of applicable requirements and shipment paperwork by completing Sections A through E of form CP3-WM-3028-F02 and signing as "Transportation Specialist" for the "Pre-Shipment Activities" element of the form.

6.9.12 Provide the partially completed form CP3-WM-3028-F02 to the Peer Checker/Reviewer

Peer Checker/Reviewer

6.9.13 Using the Form CP3-WM-3028-F02 provided by the Transportation Specialist, peer check completion of Sections A through E of the form and document any deficiencies or incomplete/undocumented items on the form.

6.9.14 Initial each section reviewed as Peer Checker/Review **and** return the partially completed form CP3-WM-3028-F02 to the Transportation Specialist.

Transportation Specialist

6.9.15 Using the Form CP3-WM-3028-F02, correct or complete identified issues **and** document actions to correct identified issues on the form.

Peer Checker/Reviewer

6.9.16 Sign as "Peer Checker/Reviewer" for the "Pre-Shipment Activities" Element of the form.

6.10 Activities on Shipment Date with Highway Carrier

Transportation Specialist

6.10.1 **If** the shipment includes accountable nuclear material, **then** complete final "Tally-Out" forms **and** submit to Nuclear Material Control & Accountability (NMC&A) on the day of the shipment as established in CP3-NM-3001, *External Shipments and Receipt of Nuclear Material*.

6.10.2 **If** the conveyance is an enclosed trailer, **then** verify the TID # on the loaded trailer matches TID Waste Operations documentation **and** open the trailer's door for load inspection by the driver.

6.10.3 **If** conveyance is an enclosed trailer, **then,** upon reclosing, attach TIDs to the shipping trailer's door latches prior to departure from the site **and** provide additional TID to the driver for use after inspection of the load securement before arrival at TSDF.

6.10.4 Document the trailer TID numbers, including any removed for inspection, on CP3-WM-3028-F02.

6.10.5 **If** shipping to NNSS, **then** complete the Due Diligence Follow-up Review for day of shipment and document on CP3-WM-3028-F02.

6.10.6 Inspect the following driver documented items **and** document on form CP3-WM-3028-F02.

- Commercial Driver's License (CDL), driver MUST HAVE HAZMAT ENDORSEMENT (Appendix D, *Types of Commercial Drivers Licenses and Endorsements*, provides an explanation of CDL Class specific endorsements).
- Current DOT Medical documentation.
- Additional documentation for specific training requirements may be necessary as determined by the Transportation Manager.

NOTE:

Written instructions for "Exclusive Use" are provided to the transporter on the shipping papers according to 49 *CFR* 172.203(d) (9). Exclusive Use CP2-WM-0025-F01, *En Route Transportation Security Measures and Antiterrorism Security Radioactive Shipments Consigned as Exclusive Use*, and CP2-WM-0025-F02, *Exclusive Use or Dedicated Service Instructions for NNSS*, are discussed in CP2-WM-0025, *Four Rivers Nuclear Partnership, LLC, Paducah Deactivation and Remediation Project Transportation Security Plan for the Transport of Hazardous Materials in Commerce*.

6.10.7 Brief the transporter on security and Exclusive Use or Dedicated Service requirements according to CP2-WM-0025, *Four Rivers Nuclear Partnership, LLC, Paducah Deactivation and Remediation Project Transportation Security Plan for the Transport of Hazardous Materials in Commerce*.

6.11 Completion of Hazardous Material Shipping Papers and Waste Manifests

Transportation Specialist

NOTES:

Hazardous Waste Manifest Exceptions, other than for PCB Bulk Product according to 40 CFR 761.62(b) (6), are reviewed and approved by Regulatory Compliance before use.

FRNP is designated as generator in Block #5 of the Hazardous Waste Manifest.

Manifest generator certifications are signed on behalf of FRNP.

6.11.1 Complete the appropriate shipping paper(s) and documentation for the materials in the shipment according to 49 *CFR* **and** the appropriate TSDF WAC (See Appendix C, *Shipping Paper Selection*).

6.11.2 For UHWM completion, include the following in Block #14: "Four Rivers Nuclear Partnership, LLC (FRNP) and the U.S. Department of Energy (DOE) are co-generators pursuant to a Co-Generator agreement dated September 13, 2017. Under this agreement, FRNP is responsible for performing all Resource Conservation and Recovery Act (RCRA) generator activities on behalf of both FRNP and DOE for all activities under the scope of FRNP's Contract DE-EM0004895, including, but **NOT** limited to, characterizing waste, manifesting waste to off-site facilities, packaging and labeling waste for transport, and storing and managing waste, in accordance with RCRA requirements. Transportation hereunder is for DOE and the actual total transportation charges paid are to be reimbursed by the Government pursuant to Contract DE-EM0004895."

NOTE:

When shipping to NNSS according to CP3-WM-0707, shipments that do **NOT** meet "Exclusive Use" are made using as "Dedicated Service" and "Dedicated Service" is indicated on the shipping documents instead of "Exclusive Use Shipment"

6.11.3 Include the words "Exclusive Use Shipment" on the shipping papers for Exclusive Use shipments according to 49 *CFR* 172.203(d)(9).

6.11.4 **If** shipping to TSDF by truck, **then** perform the following:

A. Include the following documentation with shipment paperwork with the driver:

- Uniform LLRW Manifest
- Bill of Lading
- UHWM (as applicable)
- Exclusive Use Instructions (as applicable)
- Applicable North American Emergency Response Guide (NAERG) Page – including applicable Proper Shipping Name
- Isotope Report
- Land Disposal Restriction (LDR) Notification/Certification forms (as applicable)
- Special Nuclear Material (SNM) Exemption Certification Form (as applicable)
- Asbestos Waste Shipment Record (as applicable)
- Additional Information Attachments (as applicable)

B. Obtain the driver or transporter's signature on all shipping documents for truck shipments

C. Provide driver with at least one copy of completed and signed shipping paper (such as, NRC Manifest, UHWM, BOL, Exclusive Use Instructions, ERG, SNM Exemption, etc.).

NOTE:

Shipping Documents are scanned and submitted directly to the TSDF electronically, via e-mail or fax, for rail shipments.

6.11.5 **If** shipping to TSDF by rail, **then** perform the following:

A. Forward the following documentation electronically:

- Uniform LLRW Manifest
- Bill of Lading
- UHWM (as applicable)
- Exclusive Use Instructions (as applicable)
- Applicable North American Emergency Response Guide (NAERG) Page – including applicable Proper Shipping Name
- Isotope Report
- Land Disposal Restriction (LDR) Notification/Certification forms (as applicable)
- Special Nuclear Material (SNM) Exemption Certification Form (as applicable)
- 741 form (as applicable)
- Asbestos Waste Shipment Record (as applicable)
- Additional Information Attachments (as applicable

B. **If** shipping waste requiring a UHWM by rail, **then** affix a copy of the signed UHWM to the train for the rail carrier.

NOTE:

If allowed by the rail carrier, **then** the Transportation Specialist may sign the BOL on behalf of the carrier.

C. Provide the contracted rail carrier with completed and signed shipping paper (such as, NRC Manifest, UHWM, BOL, Exclusive Use Instructions, ERG, SNM Exemption, etc.) either electronically or using a method specified by the carrier.

NOTE:

The shipper initiating the checklist is responsible to initially complete, or verify satisfactory completion of, checklist items.

6.11.6 Review all shipment activities and associated documentation. Document completion of applicable requirements and shipment paperwork by completing Sections F through H of form CP3-WM-3028-F02 **and** signing as “Transportation Specialist” for the “Shipment Activities” element of the form.

6.11.7 Provide the partially completed form CP3-WM-3028-F02 to the Peer Checker/Reviewer

Peer Checker/Reviewer

6.11.8 Using the Form CP3-WM-3028-F02 provided by the Transportation Specialist, peer check completion of Sections F through H of the form **and** document any deficiencies or incomplete/undocumented items on the form.

6.11.9 Initial each section reviewed as Peer Checker/Review **and** return the partially completed form CP3-WM-3028-F02 to the Transportation Specialist.

Transportation Specialist

6.11.10 Using the Form CP3-WM-3028-F02, correct or complete identified issues **and** document actions to correct identified issues on the form.

Peer Checker/Reviewer

6.11.11 Sign as "Peer Checker/Reviewer" for the "Shipment Activities" Element of the form.

NOTE:

Movement of railcars to the off-site rail siding for pick up is accomplished by Waste Facility Operations using CP3-WM-0618, *Paducah Railcar Operation*

6.11.12 Release the shipment.

6.11.13 Notify the Plant Shift Superintendent (PSS) of the departure **and** provide copies of the Bill of Lading, Appendices, and applicable NAERG Page to the PSS.

6.12 Emergency Response

Transportation Manager/Specialist

6.12.1 **If** a transportation incident or event occurs that requires Emergency Response, **then** notify appropriate personnel according to the applicable NAERG, Appendix E, *Emergency Response Plan for Transportation of Hazardous Materials from D&R Contractor at the PGDP*, and CP3-WM-3028-F04, *Hazardous Materials Incident or Accident Call-In Worksheet*, (Example in Appendix K).

NOTE:

Quality Assurance personnel determine which shipment(s) are to be selected for the 24-hour Emergency Response notification test.

6.12.2 **If** requesting testing of the 24-hour emergency number for off-site shipments, **then** SEND e-mail to QualitySupport@pad.pppo.gov.

6.13 Post-Shipment Activities

Logistics Coordinator or Transportation Records Clerk

6.13.1 Place the signed copies of the shipping papers in the Shipment File.

Logistics Coordinator

6.13.2 Update the shipment status in the shipment log.

Transportation Specialist

NOTE:

For PCB Shipments, other than those exempted from manifesting requirements (such as, PCB Bulk Product), the TSDF is contacted to verify arrival of shipment. Pertinent information is documented (date and name of person confirming the receipt) in the Shipment Tracking Database that the receiving TSDF confirmed arrival of the material.

The shipper initiating the checklist is responsible to initially complete, or verify satisfactory completion of, checklist items.

6.13.3 Review all post-shipment requirements and associated documentation. Document completion of applicable requirements and shipment paperwork by completing the "Post Shipment" element of form CP3-WM-3028-F02 and signing as "Transportation Specialist".

6.13.4 Provide the partially completed form CP3-WM-3028-F02 to the Peer Checker/Reviewer

Peer Checker/Reviewer

6.13.5 Using the Form CP3-WM-3028-F02 provided by the Transportation Specialist, peer check completion of the "Post Shipment" Element of the form and document any deficiencies or incomplete/undocumented items on the form.

6.13.6 Return the partially completed form CP3-WM-3028-F02 to the Transportation Specialist.

Transportation Specialist

6.13.7 Using the Form CP3-WM-3028-F02, correct or complete identified issues **and** document actions to correct identified issues on the form.

Peer Checker/Reviewer

6.13.8 Complete Form CP3-WM-3028-F02 by signing as "Peer Checker/Reviewer" for the "Post Shipment" Element of the form.

Transportation Specialist

6.13.9 Complete Shipment File **and** finalize the Shipment File Table of Contents, using the guidance provided in Appendix H, "Off-site Shipment File Table of Contents Guidance."

Logistics Coordinator

6.13.10 Scan **and** retain signed and returned UHWM and LDR form electronically for potential review or inspection by regulators.

6.13.11 When received from the disposing facility, disseminate the certificate of disposal to the waste management records custodian for inclusion in the Shipment File.

Transportation Specialist

6.13.12 Notify Regulatory Compliance personnel when changes are made to returned signed UHWM.

6.14 Shipment of Limited Quantity or Excepted Package Material Hazardous Material

Transportation Specialist

6.14.1 Verify that the material being shipped meets all requirements for limited quantity or excepted package shipment according to 49 CFR 173, *Shippers – General Requirements for Shipments and Packagings*.

6.14.2 Prepare the package(s) according to the exception/limited quantity requirements defined in the applicable regulation.

6.14.3 **If NOT** a private carrier shipment **or NOT** already identified by subcontract, **then** coordinate with the Logistics Coordinator and identify a common or contract carrier for ground shipment of the material to its destination.

NOTE:

"Excepted Package" packages do **NOT** require shipping papers per 49 *CFR* 172, Subpart C, *Shipping Papers*. A straight bill of lading identifying the material being shipped, number of packages, and the quantity shipped is still required for the carrier for manifesting and billing purposes.

6.14.4 As required by the carrier **or if NOT** excepted, **then** prepare a straight bill of lading for the material including the description requirements defined in 49 *CFR* 172.202, *Description of Hazardous Material on Shipping Papers*.

6.14.5 **If** required by regulation or the carrier, **then** certify the shipment by signature on the bill of lading and release the material to the carrier for transport.

7.0 ACCEPTANCE CRITERIA

None

8.0 POST PERFORMANCE WORK ACTIVITIES

Logistics Coordinator

8.1.1 For waste shipments, confirm that TSDFs acknowledge receipt of waste by providing a signed copy of shipping documentation within mandated time constraints documented in Appendix G, *TSDF Waste Receipt Acknowledgement Requirements*.

Transportation Specialist

8.1.2 **If** any containers are **NOT** received within the expected delivery time, **then** initiate a trace to locate the shipment.

Transportation Manager

NOTE:
For UHWMs, notifications will be made and documented according to 40 *CFR* 262.42, Exception Reporting.

8.1.3 **If** notified of a DOT or other regulatory violation, **then** initiate an occurrence report according to CP3-QA-3005, *Occurrence Reporting*.

9.0 RECORDS

Records described in Sections D and E of the Shipment File are those that are required to be maintained by the applicable regulations governing their use.

9.1 Records Generated

The following records, including their Appendices may be generated for each off-site shipment by this procedure:

- CP3-WM-3028-F02, *Hazardous Material Checklist and Peer Review*
- CP3-WM-3028-F03, *Justification for use of Other Than Low-Cost Carrier or Mode of Transportation as required by DOE Order 460.2A, ATT. 2, CRD, PARA. 4.d*
- CP3-WM-3028-F04, *Hazardous Materials Incident/Accident Call-In Worksheet*

Forms are to be completed in accordance with CP3-OP-0024, *Forms Control*.

9.2 Records Disposition

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

Appendix A – Acronyms/Definitions

ACRONYMS

CDL – commercial driver's license

CFR – Code of Federal Regulations

CO – Classification Office

D&R - Deactivation and Remediation

DOE – U.S. Department of Energy

DOT – U.S. Department of Transportation

ECI – export control information

EPA – U. S. Environmental Protection Agency

GCWR – gross combination weight rating

GVWR – gross vehicle weight rating

HW – hazardous waste

LSA – Low Specific Activity

MCEP – DOE Motor Carrier Evaluation Program

NAERG – North American Emergency Response Guide

NNSS – Nevada National Security Site

OPSEC – Operations Security

PCB – polychlorinated biphenyl

PGDP – Paducah Gaseous Diffusion Plant

PSS – plant shift superintendent

RADCON – Radiological Control

RCRA – Resource Conservation and Recovery Act

SCO – surface contaminated object

SNM – special nuclear material

Appendix A – Acronyms/Definitions (continued)

TID – tamper indication device

TIO – Technical Information Office

TSCA – Toxic Substances Control Act

TSDF – treatment, storage, and disposal facility

UCNI – unclassified controlled nuclear information

UHWM – Uniform Hazardous Waste Manifest

WAC – waste acceptance criteria

DEFINITIONS

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.

Hazardous Materials (HM) – A substance or material that the Secretary of Transportation has determined is capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and has designated as hazardous under section 5103 of Federal hazardous materials transportation law (49 U.S.C. 5103).

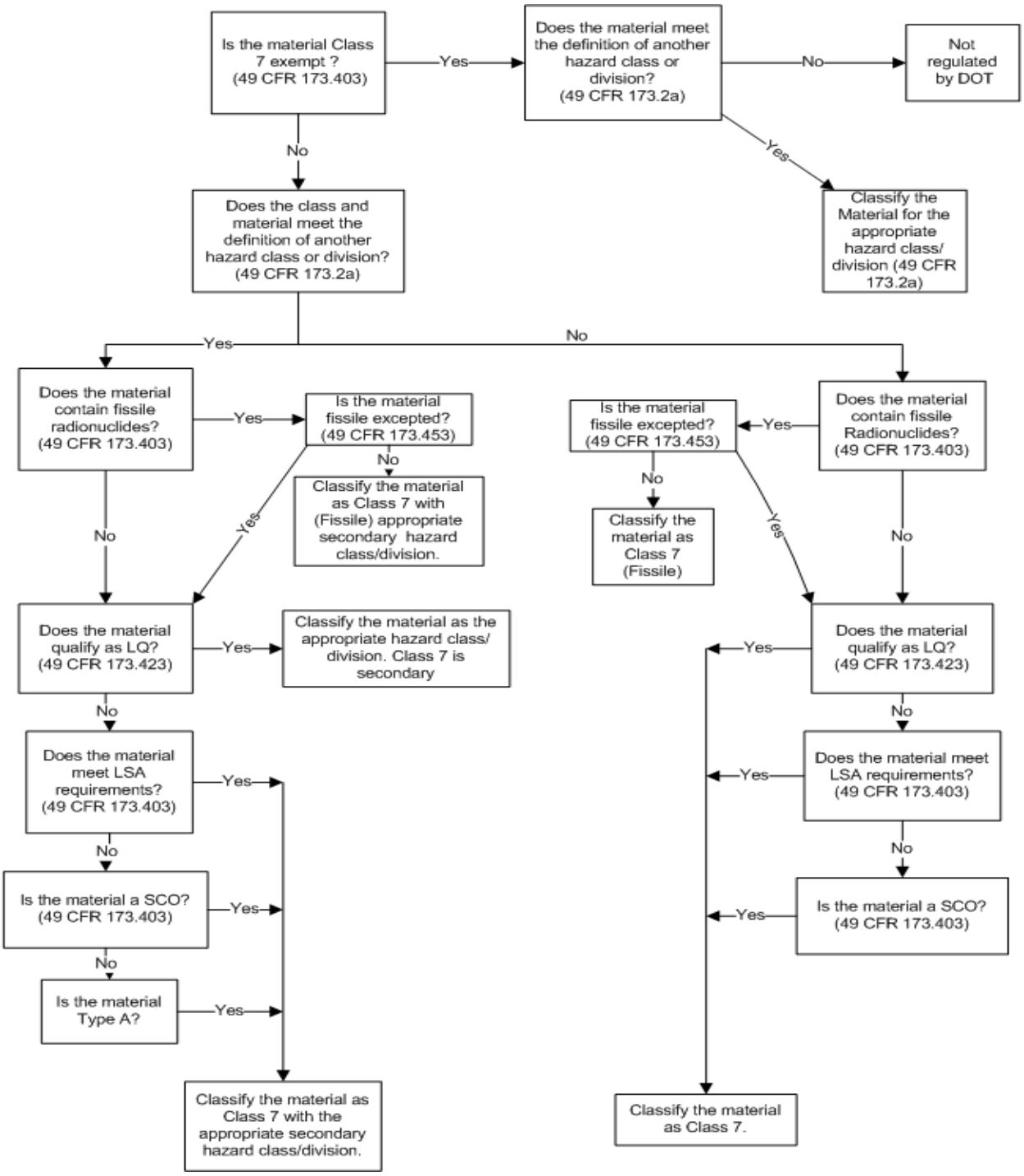
Peer Checker/Reviewer – An individual with, at least, the same level of qualification and function-specific training as the Transportation Specialist responsible for the off-site shipment. This individual is responsible to verify the correct application and implementation of DOT HM regulations by the responsible shipper. The peer checker/reviewer is also responsible to very completion of required actions and procedural work steps to ensure each shipment is compliantly executed by the shipper. Peer Checkers/Reviewers are not authorized to make changes to forms or correct information documented by the shipper, but is responsible to identify errors for correction by the shipper.

Shipper – The Transportation Specialist assigned to compliantly plan and execute shipments of hazardous materials consistent with the requirements of DOT HM regulations and FRNP procedures.

Waste Acceptance Criteria (WAC) – The technical and administrative requirements that a waste must meet in order for it to be accepted at a treatment, storage, or disposal facility.

Waste Certification Official (WCO) – The person who affirms by signature that wastes meet all of the waste acceptance and other applicable criteria for NNSS. Also ensures that independent oversight is conducted to verify that quality assurance requirements and waste acceptance criteria are satisfied

Appendix B – Classifying and Identifying Waste Flowchart

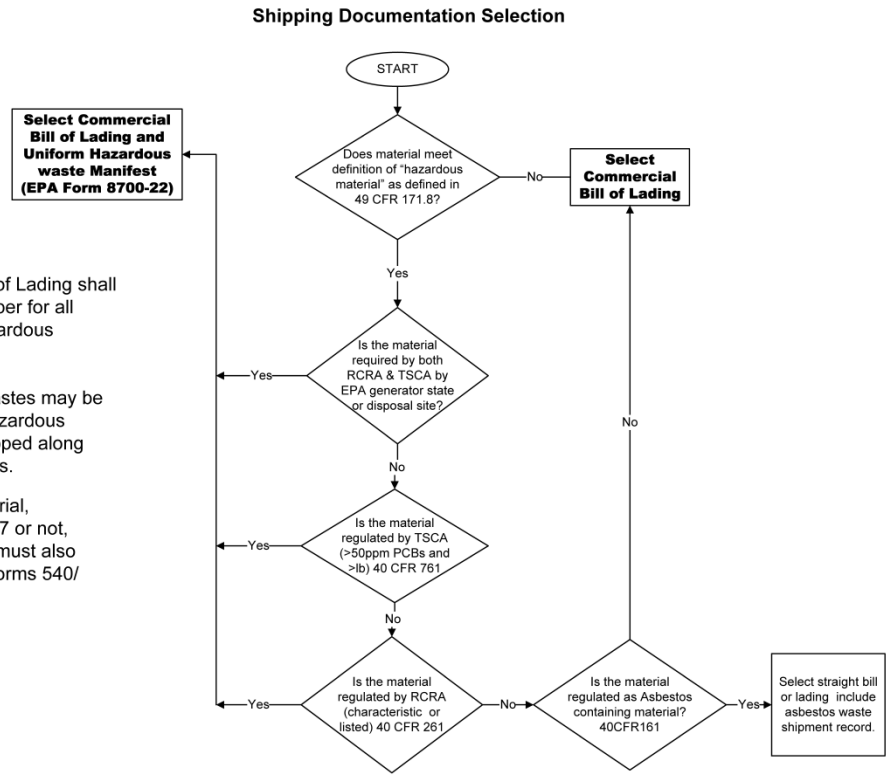


Appendix C – Shipping Paper Selection

NOTE 1: Commercial Bills of Lading shall be used as the shipping paper for all shipments of regulated hazardous materials.

NOTE 2: Nonhazardous wastes may be manifested on a uniform hazardous waste manifest if being shipped along with other hazardous wastes.

NOTE 3: Radiological material, whether regulated as class 7 or not, going to a non DOE TSDF must also be manifested using NRC forms 540/ 541.



Appendix D – Types Of Commercial Drivers Licenses and Endorsements

A/CDL – Any combination of vehicles with a Gross Combination Weight Rating (GCWR) of more than 26,001 pounds provided the Gross Vehicle Weight Rating (GVWR) of the vehicle(s) being towed is in excess of 10,000 pounds.

(Examples: 18 wheelers, log trucks)

B/CDL – Any single heavy straight vehicle with a GVWR of more than 26,001 pounds, or any such vehicle towing a vehicle not in excess of 10,000 pounds GVWR.

(Examples: dump trucks, cement mixer, box trucks, motor coaches)

C/CDL – A motor vehicle or a combination of a motor vehicle and one of more vehicles that:

- The GCWR is greater than 26,000 pounds where the GVWR of the towing vehicle is 26,000 pounds or less, and the combined GVWR of the vehicle or vehicles being towed is 10,000 pounds or less; or
- Does not meet the definition of Class A or B, and

(A) Is designed to transport more than 15 passengers including the driver, or (B) Is used in the transportation of hazardous materials which require the motor vehicle to be placarded under the Federal hazardous Material Regulation (49 *CFR* Part 172.500).

Endorsement Code, Test Requirements & Endorsement Type

H– Knowledge and Background Check (Driver Qualification Check is done annually) Hazardous Material in amounts that require placards

N – Knowledge – Hauling liquids in bulk (Tank)

P – Knowledge and Skills (road test) – Transporting more than 15 passengers

T – Knowledge – Double or Triple Trailers

X – Knowledge and Background Check (Driver Qualification Check is done annually) Combination of N and H endorsements

NOTE: States may use additional codes, provided that each code is explained on the reverse side of the CDL.

Appendix E – Emergency Response Plan for Transportation of Hazardous Materials from D&R Contractor at the PGDP

The Paducah Shift Superintendent (PSS) is the 24-hour phone contact per 49 *CFR* 172.604 for Paducah Gaseous Diffusion Plant (PGDP) Deactivation and Remediation (D&R) contractor Hazardous Materials shipments. The PSS phone number (270) 441-6211 must be on each shipping paper containing hazardous materials so defined by the Department of Transportation, as applicable.

In the event of an Incident and/or Accident involving Hazardous Materials during loading, unloading, transit or short term storage incidental to transportation the following steps shall be taken, per 49 *CFR* 171.15, and documented on the Call-In worksheet found in Appendix J.

A reportable incident/accident is any incident involving a for-hire or private contracted motor vehicle carrying DOT defined hazardous materials in-transit, which, as a direct result of the hazardous material, causes one or more of the following:

- A person is killed; or
- A person received injuries requiring admittance to a hospital; or
- The general public is evacuated for more than one hour; or
- A major transportation artery or facility is closed or shut down for one hour or more; or the operational flight pattern or routine is altered.
- Fire, breakage, spillage, or suspected radioactive contamination occurs involving radioactive materials; or
- Fire, breakage, spillage, or contamination occurs involving an infectious substance other than a diagnostic specimen or regulated medical waste; or
- A release of marine pollutant in a quantity exceeding 450 L (119 gal) for liquids or 400 kg (882 lb.) for solids; or
- A situation exists of such a nature that in the judgment of the person in possession of the HM it should be reported to the National Response Center (1-800-424-8802) even though it does not meet any of the criteria from above.

Additionally, on-site incidents and/or accidents will be handled through the established Site Management Plan (SMP) and the Occurrence Notification and Reporting process which spell out precise measures to take for certain classes and amounts of HM released and/or spilled, personal protective equipment and other precautions to take. The Emergency Operations Center (EOC) will be initiated per site procedures, as applicable.

Appendix E – Emergency Response Plan for Transportation of Hazardous Materials from D&R Contractor at the PGDP (Continued)

Emergency Response Steps

Driver/Carrier makes the following contacts upon the event of an on-site accident, HM spill or other incident:

- Driver contacts PGDP D&R personnel (e.g. Transportation Manager or Transportation Specialist)
- Driver contacts D&R PSS at x6211 (270-441-6211).
- Driver contacts Carrier by calling or utilizing Qualcomm or other similar telecommunication device.

Driver/Carrier makes the following contacts upon the event of an off-site accident, HM spill or other incident:

- Driver (or someone on behalf of driver) contacts Local Emergency Management (e.g. local 911).
- Driver contacts D&R PSS at x6211 (270-441-6211).The 24-hour Emergency Response number is listed on Bill of Lading.
- Driver contacts Carrier by calling or utilizing Qualcomm or other similar telecommunication device.
- For a reportable incident/accident as specified on the previous page, or if there is a release of a reportable quantity of material per 49 *CFR* 172.101 (Table 1 to Appendix A); the carrier contacts the National Response Center at 1-800-424-8802, according to 49 *CFR* 171.15 and 40 *CFR* 302.6.

PSS or designee makes the following contacts once notified by Driver, Carrier or other Company Personnel:

- Contact Transportation Manager and/or Transportation Specialists. A list of PGDP D&R Transportation Personnel phone numbers have been provided to the PSS and will be updated as changes occur.

Transportation Manager (or designee) shall perform the following actions upon being notified:

- Contact the Waste Management Manager
- Contact the Site DOE Office according to CP3-QA-3005, *Occurrence Reporting*.
- DOE contacts State Elected Officials.
- DOE makes other contacts per DOE Orders and Procedures.

Appendix E – Emergency Response Plan for Transportation of Hazardous Materials from D&R Contractor at the PGDP (Continued)

Transportation Manager (or designee) shall contact the following local and state authorities as applicable:

- On-Site: Paducah-McCracken County Office of Emergency Management
- Off-Site (In-State): Paducah-McCracken County Office of Emergency Management or the Kentucky Division of Emergency Management in Frankfort (as appropriate).
- Off-Site (Out of State): Appropriate state authorities
- Other state and tribal organizations as appropriate

Ensure that the Carrier has been notified.

Notify the Receiving facility.

Notify Security Personnel for Classified Shipments.

Initiate recovery actions according to CP3-EP-1010, *Termination and Recovery.*

File an occurrence report, as appropriate, according to CP3-QA-3005.

Carrier Follow-Up Responsibilities:

Carrier completes a written report on DOT Form F 5800.1, in duplicate, and forwards it to the DOT within 30 days of discovery. This form may be found at http://hazmat.dot.gov. A copy is to be forwarded to the PGDP D&R Transportation Manager:

Transportation Manager

Four Rivers Nuclear Partnership, LLC.,

P. O. Box 369

Kevil, KY 42053

NOTE:
49 *CFR* 171.16(d) lists exceptions from DOT reporting.

Update the report within 1 year of the date of occurrence, if one was required to be completed, whenever:

- A death results from injury caused by a Hazardous Material;
- There was a misidentification of the HM or package information on a prior incident report;
- Damage, loss, or related cost that was not known when the initial incident report was filed becomes known; or
- Damage, loss, or related cost changes by $25,000 or more, or 10% of the prior total estimate, whichever is greater.

Appendix E – Emergency Response Plan for Transportation of Hazardous Materials from D&R Contractor at the PGDP (Continued)

Contact Information

Transportation

270-558-4854

Waste & Materials

270-441-5068

Safety

Nuclear - 270-441-6182

Industrial - 270-441-6224

DOE Field Office

270-441-6820

270-441-6808

Swift & Staley Security

270-441-5248

Health Physics

Radiation Protection Manager - 270-441-5092

Paducah Plant Shift Superintendent 24-hr Phone # - 270-441-6211

24-hour State/Tribal points of contacts maintained at:

http://www.em.doe.gov/Transportation/TEPP_Home.aspx

Appendix F – Guidelines for Loading and Securing Shipments

Loading/Securement Guidance for Van Shipments

Tips for Successful Loading/Securement

1. **All drum bolts and bungs shall be properly tightened.**
2. **All drums shall have TIDs affixed precluding entry into the container unless the TID is broken.**
3. **If required by the receiving facility, drums shall be palletized and banded to facilitate offloading and handling.**
4. **If not palletized, drums should be nested with all drums touching other drums, van walls, toe boards, or straps at three points.**
5. **When nested, smaller drums (5 – 30 gallons) should be nested between any larger drums in the shipment to limit their movement.**
6. **All toe boards (2 x 4s), when installed, are nailed down firmly.**
7. **Blocking bars and straps shall be in contact with the drums they are meant to secure.**
8. **Straps may need to be attached to strap brackets prior to loading the last row of drums to ensure the bracket can be reached.**
9. **There shall be no loose items remaining in the van (blocking bars, straps, chains, board, etc.) after loading is complete.**
10. **Questions regarding loading and securement can be address by contacting Tim Fralix (5025), LaChelle Telfair (5310), or Regina Pea (5544).**

.

Appendix F – Guidelines for Loading and Securing Shipments (Continued)

Loading/Securement Guidance for Flatbed Shipments

Tips for Successful Loading/Securement

1. **All container closures properly secured and tightened.**
2. **All containers shall have TIDs affixed precluding entry into the container unless the TID is broken.**
3. **Drums should be palletized and banded to their pallets if shipped in open van.**
4. **At least 60% of the weight of the cargo should be loaded on the front half of the trailer. In no case should a greater percentage of the load be on the rear half of the trailer.**
5. **Inspect straps chains and tensioning devices prior to use.**
6. **All Toe boards (2 X 4s) are nailed down firmly.**
7. **Secure container with straps, chains, and/or tensioning devices to minimize horizontal and vertical movement of the cargo.**
8. **Final load securement should prevent movement of more than 1/2 inch in any direction during normal transportation (travel over potholes, bumps, vibration, etc.**
9. **Use tarps to cover loads when needed to protect the cargo from the adverse effects of weather.**
10. **Questions regarding loading and securement can be address by contacting Tim Fralix (5025), LaChelle Telfair (5310), or Regina Pea (5544).**

Appendix G – TSDF Waste Receipt Acknowledgement Requirements

Shipping Documents	Regulatory Reference	Receipt Requirements
Certificate of Disposal-Hazardous Waste	40 *CFR* parts 700-789	Generator should receive the Certificate of Disposal within 1 Year of receipt by the TSDF, except for PCB shipments, then 13 months.
Signed Uniform Hazardous Waste Manifest EPA FORM 8700-22	40 *CFR* 264.71	30 days after the delivery. An electronic copy of the signed UHWM may be credited toward the 35 day return requirement if the original is not received first; however the original will also be stamped with the date of its receipt and placed in file with the electronic copy. Whichever is received first, whether it is the original or the electronic, will be credited toward the 35 day returned requirement and logged in the Shipping Database for tracking purposes.
Signed Asbestos Waste Shipment Record	40 *CFR* 61	30 days after the delivery.
Signed NRC 540 Form for LLRW	10 *CFR* 20, Appendix G	Acknowledge receipt of the waste from the shipper within one week of receipt by returning a signed copy of NRC Form 540.
Signed Bill of Lading		No requirement for return.
NRC/DOE 741 Form		Must be returned - no time requirement specified.

Appendix H – Off-site Shipment File Table of Contents Guidance

Each Off-site Shipment File Table of Contents identifies the documentation included in the file as an aid to validating the completeness of the file and aiding retrieval of documentation should it be required for assessment or audit. The Table of Contents is developed and included at the initiation of the shipment file and verified complete prior to transmission of the shipment file as a record.

The Table of contents may be customized, as necessary based on the specifics of each shipment but should include the following information, sections and documents, as applicable:

Shipment Information: Shipment Number; Uniform Hazardous Waste Manifest Number; Receiving TSDF; Waste Containers Included; Waste Category of shipment (LLW, MLLW, TSCA, RCRA, TSCA/LLW, Universal)

Section A

- Nuclear Criticality Safety Characterization Form (If applicable)
- Pre-Transportation Checklist (CP3-WM-3015-F02)
- CO/TIO/OPSEC Form

Section B - Surveys

- Characterization Survey or Data Sheet for Waste (If applicable)
- Incoming Vehicle Survey
- Incoming Container Survey (If applicable)
- Pre-Shipment Survey for Container(s) (Verified for Each Container)
- Radioactive Shipment Survey (on Outbound Conveyance and Container(s)
- 3 Meter Survey of Container Contents (LSA/SCO Only)

Section C

- Vehicle Inspection/Load Arrangement/Securement
- Hazardous Materials Checklist and Peer Review
- TSDF Advanced Approval (applicable based on TSDF)
- Loading Guidance Diagram

Section D

- Straight Bill of Lading with attachment
- UHWM (RCRA or TSCA) with attachment
- NRC 540/541/542 Forms (LLW,MLLW,TSCA/LLW)
- DOE/NRC 741 Form and Tally Sheet
- Asbestos Waste Notification/Shipment Record (If applicable)
- SNM Exemption Form (If applicable)
- 5-Day Advanced Shipment Notification Form (If applicable)
- Additional information Attachment (If applicable)
- LDR Form (If applicable for RCRA)
- Isotope Report Forms
- Certificate of Disposition (once provided by the TSDF)

Section E – Carrier Information

- Exclusive Use Form (if shipped exclusive use)
- Emergency Response Form

Section F – Characterization Document

- DOT Calculation Sheet

Section G – NNSS Specific Documentation (if shipping to NNSS)

Continued on Next Page

Appendix H – Off-site Shipment File Table of Contents Guidance (continued)

Additional information will be needed for shipments to the Nevada Nuclear Security Site using CP3-WM-0707, NNSS Specific Waste Characterization Profiling Packaging, and Shipping. This information is included in the appropriate section of the Table of Contents as applicable:

- Paducah Project Weight Record
- Weight Ticket(s), if applicable
- Waste Item Container Log (for each container)
- NCR Closure Documentation (If NCRs were identified for containers or other items)
- Receipt Inspection and Certificate of Compliance for each container
- Current Motor Carrier Due Diligence Worksheet completed by NNSS RWAP
- Due Diligence day of shipment follow up review documentation
- Package Shipment and Disposal Request
- WCO/AWCO Certification Statement
- CP3-QA-2501-F01 - Pre-Transportation Container Inspection Checklist (for each container)
- CP3-QA-2501-F02 - WCO/AWCO Certification of NNSS Shipment
- CP3-QA-2501-F03 - Waste Certification Inspection Checklist (for each container)
- Document Acknowledgement Form
- NNSS NM Authorization to Ship
- Package Certification Label for each container (copy)
- HAZTRAK Notification
- NNSS Advanced Shipment Notification
- NNSS Barcode for each container (copy)
- NNSS Specific Exclusive Use or Dedicated Service Instructions
- NNSS Driver's Route/Shipment Information w/map
- NNSS Prohibited Items List
- Transporting Rad Waste to the NNSS w/C-127 Blackout Dates

Appendix I – Form CP3-WM-3028-F02 – Hazardous Material Checklist and Peer Review

CP3-WM-3028-F02

Hazardous Material Checklist and Peer Review

For waste shipments or other non-excepted highway or rail shipments.

Shipment Date: _____

Shipment #: _____

UHWM #: _____

Truck #: _____ Trailer / Railcar #: _____

Checklist Instructions for sections:

1. Information inside brackets is a check mark or "X" to identify whether completed satisfactorily (SAT), or not applicable (N/A) to the shipment.
2. Transportation Specialist and Peer Reviewer/Reviewer Signatures confirm all items in the section have been marked SAT or NA and attesting that the items have been accomplished with any required documentation, and verified to be accurately completed.
3. If item number is N/A'd, then no additional information is expected on lines or in brackets for that item or sub-items.
4. In the post shipment section: If any item is initialed other than the Transportation specialist then add item number and print name in comments.
5. This form can be typed or handwritten except signatures, initials, and signature dates.
6. Certain steps require additional instruction and are noted in that step. The additional instruction only applies to that step.
7. Forms identified as applicable to the shipment but completed or signed on the day of shipment signatures may be marked SAT in pre-shipment activities (except as indicated) once prepared and ready for final completion on the day of shipment.
8. Section I: VEHICLE, DRIVE INSPECTION and LOAD SECUREMENT only has to be documented one time per conveyance. Copies will be made to put with all shipping packages for document control purposes.

I. Pre-Shipment Activities

A SHIPPING PAPER PRE-REQUISITES

SAT	N/A		
[ ]	[ ]	**A1**	Waste Characterization Validation (i.e., Compare data for consistency, verify volumes and weights, SCO limits, type of waste (RAD, Mixed, Non-RAD), profile)
[ ]	[ ]	**A2**	Generate calculations in Master Rad Calc Sheet (verify and identify packaging, waste class, exceeding any limits, etc.)(verify most current version)
		A2.1	Is the Package Bulk per 49 *CFR* 171.8 or TSCA (circle yes or no)
		A2.2	Is the Package Radioactive (circle yes or no)
		A2.3	Is the Package a Mixed Waste (circle yes or no)
		A2.4	Is the Package Hazardous (circle yes or no)
		A2.5	Does the Package contain PCBs (circle yes or no)
		A2.6	Does the Package contain friable Asbestos (circle yes or no)
		A2.7	Does the Package require a UHWM (circle yes or no)
		A2.8	Check CP3-WM-3028-F01 Request for Transport (circle yes or no)
[ ]	[ ]	**A3**	Approved Profile
[ ]	[ ]	**A4**	Back-up characterization documents
[ ]	[ ]	**A5**	RADCON Trailer Receipt Survey
[ ]	[ ]	**A6**	Pre-shipment surveys on containers
[ ]	[ ]	**A7**	Documentation of compliance with LSA/SCO doserate limit (49 CFR 173.427 (a)(1)) (not to exceed 1 rem/h at 3 meters) (Radiation Survey Documentation or alternative evaluation documentation reviewed approved by project Radiation Protection Manager required)
[ ]	[ ]	**A8**	Visually inspect containers to verify container ID numbers, weights, volumes, type of container, hazardous labels if possible. (Containers with potential fissile are "live loaded" and cannot be inspected until day of shipment)
[ ]	[ ]	**A9**	NNSS Only: Current Motor Carrier due diligence worksheet completed by NNSS RWAP.
[ ]	[ ]	**A10**	Due Diligence follow up review complete.
[ ]	[ ]	**A11**	Motor carrier selected is on the current approved MCEP list.
[ ]	[ ]	**A12**	Schedule conveyance.

Section A Items verified complete or deficiencies identified_____ Peer Checker/Reviewer Initials

B SHIPPING PAPER REQUIREMENTS

SAT	N/A		
		B1	**All Shipment Documents (Manifests and BOL)**
[ ]	[ ]	**B1.1**	UN/NA Identification Number, Proper Shipping Name, Hazard Class/Division Number, Packing Group if applicable
[ ]	[ ]	**B1.2**	Total Quantity of Material, in addition to Number and Type of Packaging
[ ]	[ ]	**B1.3**	Emergency Contact Phone number (highlighted) and Emergency Response Information
[ ]	[ ]	**B1.4**	Page of Pages, *for multi-page shipping papers*
[ ]	[ ]	**B1.5**	"Waste" for RCRA regulated material unless it appears as part of the PSN e.g. Hazardous Waste n.o.s.
[ ]	[ ]	**B1.6**	(Technical names) for "G" designations in Column 1 of HM Table - includes n.o.s. proper shipping names
[ ]	[ ]	**B1.7**	Substance(s) with Lowest RQ(s) must be identified on Manifest (2 maximum)
[ ]	[ ]	**B1.8**	"Marine Pollutant" and constituent in ( ), for bulk shipments only
[ ]	[ ]	**B1.9**	(Hazardous substance names) per 172.101 appendix if not contained in proper shipping names
[ ]	[ ]	**B1.10**	Physical & Chemical Form, *if not special form*
[ ]	[ ]	**B1.11**	"Highway Route Controlled Quantity"
[ ]	[ ]	**B1.12**	Transport Index_____, Yellow-II or Yellow-III (circle one)
[ ]	[ ]	**B1.13**	Criticality Safety Index if Fissile in proper shipping name
[ ]	[ ]	**B1.14**	Fissile or Fissile Excepted (circle one), if applicable (must be fissile excepted/non-fissile for LSA/SCO materials and Ltd Qty)

EXAMPLE

Appendix I – Form CP3-WM-3028-F02 – Hazardous Material Checklist and Peer Review (Continued)

CP3-WM-3028-F02

Hazardous Material Checklist and Peer Review

For waste shipments or other non-excepted highway or rail shipments.

(Continued)

Shipment # _____

SAT	N/A			
[ ]	[ ]		**B1.15**	"Limited Quantity of Radioactive Material" for subsidiary Class 7
[ ]	[ ]		**B1.16**	"LSA-I," "LSA-II", "LSA-III", "SCO-I", "SCO-II" group notation (circle as applicable)
[ ]	[ ]		**B1.17**	(EPA waste identification numbers)
		B2		**540/541 manifest** (Additional information)
[ ]	[ ]		**B2.1**	"RQ" (RQ before the Basic Description)
[ ]	[ ]		**B2.2**	Shipper's Certification statement, as applicable
[ ]	[ ]		**B2.3**	Radionuclides listed. (The 95% and 1% rules can be used)
		B3		**UHWM-Uniform Hazardous Waste Manifest** (required for TSCA / RCRA containers)
[ ]	[ ]		**B3.1**	UHWM Number: _____
[ ]	[ ]		**B3.2**	Additional Attachments (Type and # of pages)_____
[ ]	[ ]		**B3.3**	"X" or "RQ" for hazardous waste (circle as applicable)
[ ]	[ ]		**B3.4**	PCB Additional Attachment (Required for UHWM for PCBs)
[ ]	[ ]		**B3.5**	Radionuclides listed
		B4		**Bill of Lading**
[ ]	[ ]		**B4.1**	Exemptions "DOT-E-exemption #"
[ ]	[ ]		**B4.2**	"X" or "RQ" for hazardous waste
[ ]	[ ]		**B4.3**	ERG No(s) _____
[ ]	[ ]		**B4.4**	Additional Information Attachment
[ ]	[ ]		**B4.5**	PCB Additional Attachment
[ ]	[ ]		**B4.6**	Destination TID numbers (TID numbers will be listed in day of shipment section)
[ ]	[ ]		**B4.7**	"Shipment Contains Oil" (see 130.11 for applicability)**(*Note Special Provisions 1-6 and 13 in Column 7 of 172.101)**
[ ]	[ ]		**B4.8**	**Maximum** Activity per **Package** *(in SI units)*
[ ]	[ ]		**B4.9**	Radionuclides listed
[ ]	[ ]		**B4.10**	"Exclusive Use"/"Dedicated Service" Instructions
[ ]	[ ]		**B4.11**	NNSS Only: Additional "Exclusive Use"/"Dedicated Service" Instructions
		B5		**Additional Documentation/Miscellaneous**
[ ]	[ ]		**B5.1**	"Exclusive Use" / "Dedicated Service" Instructions
[ ]	[ ]		**B5.2**	Prior to loading, determine waste compatability for Separate and Segregate table (49CFR177.848)
[ ]	[ ]			**B5.2.1** Segregated container documented on load out / securement diagram.
[ ]	[ ]			**B5.2.2** Provide diagram to waste management.
[ ]	[ ]		**B5.3**	Pre-Transportation Checklist (non-NNSS or NNSS as applicable)
[ ]	[ ]		**B5.4**	NNSS Only: Receipt inspection w/CoC, WICL (Waste Item Container Log Sheet), WCIC (Waste Certification Inspection Checklist), copy of Barcode(s) and PCLs (Package Certification Labels)
[ ]	[ ]		**B5.5**	Shipment ID approval from waste facility
[ ]	[ ]		**B5.6**	Isotopic Report Form
[ ]	[ ]		**B5.7**	Kentucky ACM Form (Notification / Shipment Record)
[ ]	[ ]		**B5.8**	Authorization to Ship Nuclear Materials to NNSS
[ ]	[ ]		**B5.9**	DOE Concurrence Documentation for "Free Release" of the Container(s)
[ ]	[ ]		**B5.10**	DOE Order 460.2 Notification to consignee for fissile or greater than Type A quantities of radioactive material, or PIH gases
[ ]	[ ]		**B5.11**	LDR for RCRA waste shipments is complete, signed, and State Manifest field is marked N/A
[ ]	[ ]		**B5.12**	Signed Tally Out
[ ]	[ ]		**B5.13**	741 documents for accountability requested

Section B Items verified complete or deficiencies identified_____ Peer Checker/Reviewer Initials

C PACKAGING

SAT	N/A		
[ ]	[ ]	**C1**	Verify waste packaged in appropriate and DOT approved package.
[ ]	[ ]	**C2**	Certificate of Compliance and testing data for NRC Type A packages
[ ]	[ ]	**C3**	Special Form Certification ***for special form radioactive packages***
[ ]	[ ]	**C4**	Packages have been procured per NNSS requirements *for shipments to NNSS*
[ ]	[ ]	**C5**	Security paperwork provided to SST as applicable for sensitive shipments prior to ship date.

Section C Items verified complete or deficiencies identified_____ Peer Checker/Reviewer Initials

D MARKING / LABELING

SAT	N/A	D1		
				NON-BULK PACKAGE MARKING / LABELING
[ ]	[ ]		**D1.1**	Primary Hazard Label (s): _____
[ ]	[ ]		**D1.2**	Subsidiary Hazard Label (s): _____
[ ]	[ ]		**D1.3**	Radioactive Labels - Verify Nuclides, Dose Rates, Activity, and Transportation Index (TI)
[ ]	[ ]		**D1.4**	FISSILE Label including Criticality Safety Index (CSI)
[ ]	[ ]		**D1.5**	Proper Shipping Name, UN/NA Identification Number
[ ]	[ ]		**D1.6**	Technical name not required for labpacks per 173.12 unless also an RQ
[ ]	[ ]		**D1.7**	"EMPTY" Label
[ ]	[ ]		**D1.8**	"RQ"
[ ]	[ ]		**D1.9**	Special Permit/Exemption packaging(s): "DOT-SP-####" or "DOT-E-####" if issued prior to October 1, 2007

EXAMPLE

Appendix I – Form CP3-WM-3028-F02 – Hazardous Material Checklist and Peer Review (Continued)

CP3-WM-3028-F02

Hazardous Material Checklist and Peer Review

For waste shipments or other non-excepted highway or rail shipments.

(Continued)

Shipment # _____

SAT	N/A		
[ ]	[ ]	**D1.10**	Consignee's Name & Address
[ ]	[ ]	**D1.11**	Gross Weight.
[ ]	[ ]	**D1.12**	"TYPE A", "TYPE B", "TYPE IP-1", "TYPE IP-2", TYPE IP-3", *for radioactive material packages, as appropriate*
[ ]	[ ]	**D1.13**	"RADIOACTIVE-LSA"/"RADIOACTIVE-SCO" (Circle appropriately)
[ ]	[ ]	**D1.14**	Package Certification Number, for radioactive material packages for IP-II, IP-III, "Type A", "Type B"
[ ]	[ ]	**D1.15**	Package Orientation Arrows, *for liquids in inner packaging(s)* on two opposing sides
[ ]	[ ]	**D1.16**	Bar Codes on 2 opposite sides (drums - top and sides)/ Package Certification Labels on 1 Side *for NNSS shipments*
[ ]	[ ]	**D1.17**	"Inside Containers Comply with Prescribed Specifications," *for overpacked gas cylinders*
[ ]	[ ]	**D1.18**	TSCA PCB Marking (for actual or source concentration greater than or equal to 50 PPM)
[ ]	[ ]	**D1.19**	Hazardous Waste Markings ("Hazardous Waste", Warning Statement, Generator's Name and Address, and EPA Waste ID Number)
[ ]	[ ]	**D1.20**	"DANGER" Asbestos Warning and Generator's Name and Address for packages containing Regulated ACM
[ ]	[ ]	**D1.21**	"Radioactive" on inner package or outer if no inner container, *for Limited Quantity Class 7*
[ ]	[ ]	**D1.22**	Waste Class Markings for NRC Regulated TSDFs:
[ ]	[ ]	**D1.23**	"DANGER Contaminated with Beryllium" warning for packages containing regulated beryllium contamination or beryllium compounds
[ ]	[ ]	**D1.24**	Marine Pollutant, if applicable (100mm x 100mm minimum size)
[ ]	[ ]	**D1.25**	Other markings or labels: _____
SAT	**N/A**	**D2**	**BULK PACKAGE MARKING / LABELING**
[ ]	[ ]	**D2.1**	Orange panel on opposing sides with appropriate number in accordance with 49 CFR 172.332. Number: _____
[ ]	[ ]	**D2.2**	NNSS only: Barcodes on 2 opposite sides / Package Certification Labels on 1 side.
[ ]	[ ]	**D2.3**	Portable tanks marked with proper shipping name on 2 opposing sides, and marked with the Owner or Lessee's Name
[ ]	[ ]	**D2.4**	"RADIOACTIVE-LSA"/"RADIOACTIVE-SCO"
[ ]	[ ]	**D2.5**	"EMPTY" Label
[ ]	[ ]	**D2.6**	"RQ"
[ ]	[ ]	**D2.7**	Exemption Packages DOT-EXXX
[ ]	[ ]	**D2.8**	TSCA PCB *Marking (for actual or source concentration greater than or equal to 50 PPM)*
[ ]	[ ]	**D2.9**	Marine Pollutant (250mm x 250mm minimum size)
[ ]	[ ]	**D2.10**	"DO NOT HUMP" on Bulk Containers shipped via Rail (i.e. Intermodals, Gondolas)
[ ]	[ ]	**D2.11**	For Clive shipments Class AU, apply to two opposites of package(s) not including bottom.
[ ]	[ ]	**D2.12**	Other markings or labels: _____

Section D Items verified complete or deficiencies identified_____ Peer Checker/Reviewer Initials

E PLACARDING

SAT	N/A		
[ ]	[ ]	**E1**	Primary: Radioactive 7
[ ]	[ ]	**E2**	Primary Other:_____
[ ]	[ ]	**E3**	Subsidiary (List): _____
[ ]	[ ]	**E4**	Placard visible from all four sides per 49 CFR 172.516

Section E Items verified complete or deficiencies identified_____ Peer Checker/Reviewer Initials

DEFICIENCIES AND CORRECTIVE ACTIONS TAKEN (INCLUDE ITEM #):

_____

_____

_____ _____ _____ _____

Transportation Specialist Date Peer Checker/Reviewer Date

II. Shipment Activities

Day of shipment (some of the items can be done prior to day of).

F PAPERWORK AND MISCELLANEOUS

SAT	N/A		
[ ]	[ ]	**F1**	All documentation checked throughout for consistency (shipment ID, container ID, activities, weights, volumes, etc.)
[ ]	[ ]	**F2**	Shipper Signature and/or Generator Signature on behalf of FRNP (ensure correct text is used in Block #14)
[ ]	[ ]	**F3**	Shipper signs the Manifests and documents.

SAT	NA	
[ ]	[ ]	540 LLW Manifest
[ ]	[ ]	Hazardous Waste Manifest and continuation pages (if there are continuation pages)
[ ]	[ ]	Bill of Lading
[ ]	[ ]	Asbestos Waste Shipment Record
[ ]	[ ]	Other: _____

[ ]	[ ]	**F4**	Tender Number referenced on Bill of Lading
[ ]	[ ]	**F5**	Instructions for Maintenance of "Exclusive Use Shipments" / "Dedicated Service"
[ ]	[ ]	**F6**	SNM Exemption Form approval for shipments to EnergySolutions in Clive, UT (Can be signed prior to shipment date)

EXAMPLE

Appendix I – Form CP3-WM-3028-F02 – Hazardous Material Checklist and Peer Review (Continued)

CP3-WM-3028-F02

Hazardous Material Checklist and Peer Review

For waste shipments or other non-excepted highway or rail shipments.

(Continued)

Shipment # _____

SAT N/A

[ ] [ ] **F7** 5 Day Advanced Notification approval for shipments to EnergySolutions in Clive, UT
[ ] [ ] **F8** 540/541 Uploaded into portal for shipments to EnergySolutions and WCS
[ ] [ ] **F9** Over weight / Over dimension permits
[ ] [ ] **F10** Security's Seals applied and documented on bill of lading for classified, UCNI, and ECI per Swift and Staley Transportation Security Plan (SSI.SEC-0099)
[ ] [ ] **F11** Security Briefings performed for classified waste transport.
[ ] [ ] **F12** Photographs taken of loaded and secured transport.
[ ] [ ] **F13** RADCON surveys on outbound transport unit / DOT surveys
[ ] [ ] **F14** NRC Manifest #540/541 for radioactive waste shipment to commercial facilities
[ ] [ ] **F15** NNSS Only: WCO / AWCO Certification of NNSS Shipments
[ ] [ ] **F16** NNSS Only: Waste Certification Statement (signed by WCO / AWCO)
[ ] [ ] **F17** 741 Documents for Accountability of Special Nuclear Materials
[ ] [ ] **F18** "Nuclear Materials Tally-Out Sheet" must be submitted to NMC&A personnel no later than date of shipment.
[ ] [ ] **F19** Shipment notification to NNSS (must send PS&DR Text Files (for NNSS)
[ ] [ ] **F20** Ensure HAZTRAK entries have been completed and verified. (for NNSS)
[ ] [ ] **F21** Written Justification or Management Approval Statement for use of other than the low-cost carrier or mode of
[ ] [ ] **F22** TID numbers listed for all container(s) loaded on flatbed. (Attach an additional page if necessary)
[ ] [ ] **F23** TID numbers on enclosed trailer listed from the time containers are loaded to arriving at intended destination. (Attach an additional page if necessary)
[ ] [ ] **F24** Driver has signed correct fields on all shipping documentation (including Continuation Pages on HW Manifest)
[ ] [ ] **F25** Driver briefing to include destination, contents, ERG, and if applicable "Exclusive Use"/ "Dedicated Service" instructions at a minimum.
[ ] [ ] **F26** Confirm Van TIDs with the driver.
[ ] [ ] **F27** **Driver packet prepared and given to driver. Packet includes:**
[ ] [ ] **F27.1** Signed 540 with 541
[ ] [ ] **F27.2** Signed UHWM with Attachment
[ ] [ ] **F27.3** Signed BOL with Attachment
[ ] [ ] **F27.4** Kentucky ACM Form
[ ] [ ] **F27.5** 1 set of "Exclusive Use" and / or "Dedicated Service" instructions per conveyance
[ ] [ ] **F27.6** 1 of each ERG with proper shipping name(s) for each conveyance.
[ ] [ ] **F27.7** 1 set of extra placards and labels for conveyance.
[ ] [ ] **F27.8** 1 copy of Section K (VEHICLE, DRIVE INSPECTION and LOAD SECUREMENT) per conveyance
[ ] [ ] **F27.9** NNSS Only: 1 set of additional "Exclusive Use" and / or "Dedicated Service" instructions per conveyance.
[ ] [ ] **F27.10** NNSS Only: Waste Certification Statement (signed by WCO / AWCO)
[ ] [ ] **F27.11** NNSS Only: Extra Barcodes and PCLs
[ ] [ ] **F27.12** Other: _____

Section F Items verified complete or deficiencies identified_____ Peer Checker/Reviewer Initials

G FOR RCRA WASTE AND/OR REGULATED PCB SHIPMENTS

SAT N/A

[ ] [ ] **G1** EPA ID number for Generator *(or facility ID number)*
[ ] [ ] **G2** EPA ID Number for Transporter
[ ] [ ] **G3** EPA ID Number for TSDRF
[ ] [ ] **G4** "Alternate TSDRF, return to Generator" statement

Section G Items verified complete or deficiencies identified_____ Peer Checker/Reviewer Initials

DEFICIENCIES AND CORRECTIVE ACTIONS TAKEN (INCLUDE ITEM #):

_____

_____

_____ _____ _____ _____
Transportation Specialist Date Peer Checker/Reviewer Date

H VEHICLE, DRIVE INSPECTION and LOAD SECUREMENT (this section only has to be completed once for each conveyance)

SAT N/A

[ ] [ ] **H1** Driver's Qualifications for T/L Shipments are on file and current prior to shipment departure
[ ] [ ] **H2** Driver Proof of Citizenship prior to arriving on Site for shipment
[ ] [ ] **H3** Driver Name # _____ State: ___ Expiration Date: _____
[ ] [ ] **H4** CDL Class Endorsements: _____ DOT Medical Expiration Date: _____
Truck #: _____ Trailer / Railcar #: _____
[ ] [ ] **H5** US DOT Number, City and State marking _____
[ ] [ ] **H6** DOT Annual Inspection (Tractor) _____
[ ] [ ] **H7** DOT Annual Inspection (Trailer) _____

SAT N/A

EXAMPLE

Appendix I – Form CP3-WM-3028-F02 – Hazardous Material Checklist and Peer Review (Continued)

CP3-WM-3028-F02

Hazardous Material Checklist and Peer Review

For waste shipments or other non-excepted highway or rail shipments.

(Continued)

Shipment #: _____

SAT N/A

[ ] [ ] **H8** Segregation and Separation of Hazardous Materials on conveyance evaluated and consistent with DOT per

[ ] [ ] **H9** No Out of Service Items for Tractor Trailers/ Vans (Equipment checked per 49 CFR 177.802)

SAT		SAT		SAT	
[ ]	Windows/Mirrors	[ ]	Triangles/Fire Extinguisher	[ ]	Wheels/tires/brakes
[ ]	Bumper/Reflectors	[ ]	Frame/Flooring	[ ]	Fifth wheel
[ ]	Steering wheel play	[ ]	Air horn/City horn	[ ]	Obstructive view (cluttered dash)
[ ]	Lights/ signals			[ ]	Wipers/defroster

*all flammable cargo tankers must be inspected by fire department prior to entering the secured access area

[ ] [ ] **H10** No Out of Service Items for Railcars (Equipment checked per 49 CFR 174.9, 215, 232)

SAT		SAT		SAT	
[ ]	Coupler	[ ]	Wheel & Axle Assembly	[ ]	Attachment Points or Tie Downs
[ ]	Suspension	[ ]	Frame & Undercarriage	[ ]	Brakes
[ ]	Sill Steps/Ladders			[ ]	Paint and Lettering

[ ] [ ] **H11** Cargo Tank Spec

[ ] [ ] **H12** Cargo Tank inspection and test dates current: _____

(Cargo tank test marking per 49CFR780.415 month/year as applicable: V=external visual, I=internal visual, K=leak test, T=thickness, P=pressure

[ ] [ ] **H13** Physically verify drivers license, endorsements, and if available, medical card (other than rail).

[ ] [ ] **H14** Packages / Containers secured per Federal Motor Carrier Safety Administration and 49 CFR 177.834 (highway) or 49

[ ] [ ] **H15** Load out / securement diagram (sketch) complete

[ ] [ ] **H16** Containers loaded on trailer / van are verified to be secure for mode(s) of transit.

Section G Items verified complete or deficiencies identified_____ Peer Checker/Reviewer Initials

DEFICIENCIES AND CORRECTIVE ACTIONS TAKEN (INCLUDE ITEM #):

_____

_____

_____ _____ _____ _____

Transportation Specialist Date Peer Checker/Reviewer Date

III. POST SHIPMENT

Initial	/	Date	
_____	/	_____	FPDP PSS Shipment Notification via email: pssinfo@ffspaducah.com (provide copies of Bills of Lading and ERG)
_____	/	_____	Verify that NRC form 741 to NNSS within one day of shipment (for NNSS)
_____	/	_____	Update HAZTRAK as needed. (for NNSS)
_____	/	_____	Post shipment notification to Radiological TSDF (non-NNSS) (must send 540/541 Text Files)
_____	/	_____	Follow-up call or e-mail within 1 day of ETA for Regulated PCB or Fissile Shipments to confirm delivery
_____	/	_____	Provide copy of shipping document and container list to Database Personnel
_____	/	_____	Log all information into Shipment and Manifest Logs to include any TSCA and / or RCRA.
_____	/	_____	Hazardous Waste Manifest received within 35 days of shipment and is signed with appropriate handling codes
_____	/	_____	Final Signed paperwork provided to Security as applicable
_____	/	_____	Verify 741 sent to NMMSS and received for SNM waste
_____	/	_____	Photos printed and placed in shipping package.

DEFICIENCIES, CORRECTIVE ACTIONS TAKEN (INCLUDE ITEM #), and COMMENTS:

_____

_____

_____ _____ _____ _____

Transportation Specialist Date Peer Checker/Reviewer Date

EXAMPLE

Appendix J – Form CP3-WM-3028-F03 – Justification for Use Other Than Low-Cost Carrier or Mode of Transportation as Required by DOE Order 420.2a, Att. 2, CRD, Para. 4.d.

Justification for Use of OTHER THAN Low-Cost Carrier or Mode of Transportation as Required by DOE Order 460.2A, Att. 2, CRD, Para. 4.d.

Purchase Request #: _____

The carrier utilized for this shipment, _____ was not the low-cost carrier.

The low-cost carrier was _____, and was not selected for this shipment due to the following: _____

The selection of a carrier, other than the low-cost carrier for this shipment is approved.

_____ _____
Transportation Manager or Designee Date

_____ _____
Procurement Manager or Designee Date

NOTE: 460.2A, Att. 2, CRD, Para. 4.d states, "When the contractor uses other than a low-cost carrier or mode of transportation, for any shipment other than overnight express, a written justification or management approval statement must be retained."

EXAMPLE

Appendix K – Form CP3-WM-3028-F04 – Hazardous Materials Incident/Accident Call-In Worksheet

Hazardous Materials Incident/Accident Call-In Worksheet

Information to be gathered during notification process.

Caller's Name: _____

Affiliation: _____

Caller's Call Back Number: (_____)_____

Date and Time of Event: _____ _____AM / PM

Bill of Lading Number: _____

Name of Carrier (Trucking Company): _____

Name of Driver: _____

Location of Event:

_____

Brief Description of Event:

_____

Injuries: _____

_____

On the Scene Responders: _____

_____

Environmental Releases: _____

_____

Protective Actions Recommended: _____

_____

DOT HM Involved: _____

FOR INFORMATION ONLY

CP3-WM-3028-F04 FR2

EXAMPLE