PROCEDURE: BPW-4 11e.(2) Incoming Waste Unloading and Handling

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PURPOSE: Incorporate changes from the CAP and annual review

SUBMITTED BY: Curtis Kirk

Curtis R. Kirk
Signature

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Date

FORWARDED:

ACTING
Site Manager

12-16-96
Date

Site Radiation Safety Officer

Date

Quality Assurance Officer

Date

CONCURRENCE:

N/A DH

10/9/96
Date

REVIEW:

Corporate Radiation Safety Officer

Date

APPROVAL:

Project Manager/Operations Director

Date

A. PURPOSE:

~~A. PURPOSE:~~ This procedure is designed to; provide a consistent method for unloading and handling 11e.(2) incoming ~~shipment wastes, to~~ shipment wastes; ensure the waste is handled in accordance with regulatory requirements, ~~and to~~; and contain spills of radioactive material during unloading and transportation operation~~s~~. This procedure also aids in ensuring that the incoming ~~incoming~~ shipment wastes are handled such that the natural soils and/or ground-water are not contaminated with waste material ~~nor~~and so that uncontrolled release of contaminated material be~~is~~ not allowed outside of Envirocare~~'~~s Restricted Areas.

B. REFERENCES OR AUTHORITY:

1. 11e.(2) Radioactive Material License SMC-1559, ~~dated 11/19/93, as amended~~;as amended
2. Application for Radioactive Material License SMC-1559, ~~dated 12/23/91, as amended~~;as amended
3. Envirocare of Utah, Inc. Quality Assurance Manual;, as revised
4. 40 CFR 261;
5. ~~10 CFR 20.1902~~;, as amended
5. 10 CFR 20.1902, as amended
6. Ground Water Quality Discharge Permit ~~#UGW450005, dated 9/10/93, as amended~~; UGW450005, as amended
7. Envirocare of Utah, Inc. Construction QA/QC Manual;, as revised
8. Envirocare of Utah, Inc. Operating Procedures Manual;, as revised
9. Waste Management Plan-, as revised

C. PRECAUTIONS AND LIMITATIONS:

1. Any waste which is determined to be a hazardous waste or to exceed the restrictions of ~~references 1 or 6, Table 3~~,References 1 or 6 (Table 3) shall not be unloaded or handled in the 11e.(2) Waste Management Facility. Such waste must be handled and disposed of elsewhere in compliance with all other applicable regulations, or returned to its place of origin. If a disposed waste is discovered to be a hazardous waste or to exceed the limits of rReference 1 or 6, Envirocare must follow the Contingency Plan for Non-Conforming Results in reference step D.6 of reference 9Reference 8, BPW-3.

2. Incoming- shipments are checked for the presence of free liquids in accordance with reference 9Reference 8, BPW-2 and BPW-3. If a shipment arrives at the site and is observed to contain free liquids or fails the Paint Liquid Filter Test (PFLT), it will not be accepted for storage or disposal.

3. Rail cars or trucks which have external exposure rates greater than 5 mrem/hr at 30 cm; and which cannot be disposed of within 24 hours, will be posted as a Radiation Area, in compliance with

rReference 5, until disposed. This includes roping off, or otherwise segregating, the shipment to control access to the radiation area.

4. All workers, other than truck drivers in closed trucks, involved in unloading or disposal of waste which has been identified as a Radiation Area will be required to wear appropriate respiratory protection while managing the waste. For those tasks determined to require the use of respirators, half-face respirators will be provided with a minimum protection factor of 10 against airborne particulate activity. Full-face respirators will also be provided (if needed) with a minimum protection factor of 50.

5. Any waste material spilled shall be immediately recovered and replaced within contained management. For spills greater than 100 Kg (220 lbs.), the spill must be reported to the NRC, Utah Division of Radiation Control, and the Utah Division of Water Quality within 48 hours of discovery. A follow-up written report of the spill shall be provided to these regulatory agencies within five working days of discovery of the spill. If a spill occurs within the truck staging area of the Truck Unloading Facility, ~~then follow-up clean-up,~~following cleanup the truck staging area will be radiologically surveyed to ensure that all spilled material has been removed.

6. Bulk waste which is accepted for management may not remain in a facility transport vehicle any longer than necessary. This includes overnight, during the lunch period, or ~~to await~~while awaiting a delayed shift change. The same applies to buckets of earth-moving equipment or any open containers outside of approved storage areas.

7. Bulk wastes at the Rail Car Rollover Facility must be taken to the 11e.(2) Disposal Cell for disposal placement as soon as possible or within 24 hours after the most recent rail car or shipment has been unloaded. Bulk waste from only one generator and one waste type may be managed at any time at the Rail Car Rollover Facility.

8. Wastes in containers may not remain at the Rail Car Rollover Facility, the Truck Unloading Facility, or the concrete decontamination wash-down pads for longer than 48 hours unless additional time is approved by the Executive Secretary of the Radiation Control Board. Waste which does not meet the waste acceptance criteria may remain in the Truck Unloading Facility until the problem is resolved.

9. Containers will be moved within the Container Storage Pad by forklift, dump trucks, flatbed trailers, or other means. Rock trucks or other transport vehicles, which by virtue of their potential axle weight may damage the asphalt surface, will not be allowed on the Container Storage Pad.

10. Containers will be transported in a manner to prevent rupture or release. Containers should be transported as close to the ground as practical to minimize the distance a container would fall in the

event of an accident. Containers will be moved only after it has been assured that the lids, covers, etc. have been replaced and the containers are in a closed, tight condition.

11. Vehicles ~~and waste conveyance~~ and waste conveyance drivers shall adhere to all signs, warnings, and postings for traffic management when transporting waste within the Restricted Area. ~~Anyone observed intentionally or deliberately violating posted warnings shall be subject to disciplinary action as deemed appropriate by the Site Manager.~~

12. The truck staging area of the Truck Unloading Facility shall be surveyed weekly when in use. As a precaution, the portion of equipment used to reach across and move containers over the "hot line" shall be radiologically surveyed daily and/or prior to use.

13. Bulk ~~shipments~~ **may not** be unloaded at the Truck Unloading Facility, LARW Container Storage or Bulk Transfer Area. ~~Conversely, cardboard boxes and bags meeting the criteria of strong, tight containers~~ **are allowed** to be unloaded at these facilities. However, management of 11e.(2) material in containers at the LARW Container Storage and Bulk Transfer Areas will be limited to transfer between vehicles.

14. Containers of 11e.(2) material may not be opened or set on the ground during the transfer at the LARW Container Storage and Bulk Transfer Areas.

15. The gates accessing the Truck Unloading Facility staging area will remain locked when not in operation. When the gates are open, a ~~Radiation Monitor~~ I will monitor access to ensure security of the Restricted Area. Although the restricted portion of the unloading area (the hot side) is considered ~~a part of Envirocare~~part of Envirocare's Restricted Area with controlled access, the truck staging area will not be a part of the Restricted Area.

16. Any facilities used for both 11e.(2) and LARW waste management (listed in D.1 abovebelow) must be cleaned before management of the other waste type (e.g., if 11e.(2) waste was managed last at a facility, the facility involved must be cleaned before management of LARW waste).

D. GENERAL INSTRUCTIONS:

1. This procedure applies to all 11e.(2) waste material received for management at Envirocare's South Clive Disposal Facility. Except during transport, wastes will be managed at the following waste management facilities:

a. 11e.(2) Disposal Cells;
b. Container Storage Pad;
~~c. Bulk Storage Pad;~~
~~d. Truck Unloading Facility;~~

~~e. Rail Car Rollover Facility;~~
~~c. Bulk Storage Pad~~ RE-CONTAINER AND BULK TRANSFER AREA (CONTAINER TRANSFERS)
d. Truck Unloading Facility
e. Rail Car Rollover Facility
f. Decontamination Wash-Down Pads; ~~and~~;
g. Mixed Waste Facility Run-Off Control Pond;
f. LARW Facility Runoff Control Pond

2. Upon ~~waste acceptance, it~~acceptance, waste is managed as "bulk" or "containerized" waste material. Bulk waste materials are unloaded directly into the 11e.(2) Disposal Cells for placement or at the Rail Car Rollover Facility. Bulk waste unloaded at the Rail Car Rollover Facility is then taken to the 11e.(2) Disposal Cells for disposal placement. Bulk wastes may not be unloaded or handled at the Truck Unloading Facility, LARW Container Storage Pad, or LARW Bulk Transfer Area. The following types of bulk shipments may be received at the South Clive Site:

a. Gondola Rail Cars;
b. Intermodals;
~~c. Dump Truck Loads;~~
~~d. End Dump Transports.~~
c. Dump Truck Loads
d. End Dump Transports

3. 11e.(2) waste material in containers will ~~either be unloaded~~be unloaded; directly onto the 11e.(2) Disposal Cells for placement;, at the LARW Container Storage or Bulk Transfer Areas for management;, at the Truck Unloading Facility, ~~or~~, or at the Rail Car Rollover Pad. The following types of strong and tight containers may be received at the South Clive Site by highway or rail shipment or may be used by Envirocare to containerize bulk wastes:

a. 96 ft^3 B-25 boxes;
b. 48 ft^3 B-12 boxes;
~~c. 50 and 55 gallon drums;~~
~~d. over-pack drums;~~
~~e. various sizes of poly bags;~~
~~f. 20 yd^3 Seavans, and;~~
~~g. other strong and tight containers.~~
c. 50 and 55 gallon drums
d. over-pack drums
e. various sizes of polyethylene bags
f. 20 yd^3 Seavans
g. other strong and tight containers

4. Prior to managing 11e.(2) wastes at any facilities listed in D.1 above, Envirocare will clean the area ~~of LARW waste material until the residue of LARW material has been removed~~to remove LARW waste residue from the surface area of the facility, as determined by a qualified Radiation ~~Technician~~ Health Physics Specialist. The material removed will be managed as LARW waste ~~material~~ as outlined in ~~reference 9~~Reference 8, RW-4.

5. If any of the facilities listed in D.1 above have been used for management of 11e.(2) material, the facilities must be cleaned of 11e.(2) material under the same limitations as D.4 above for LARW waste removal. Waste material removed will be managed as described in section E.4 of this procedure.

6. Brooms, shovels, loaders, or other appropriate means will be used for cleaning until the material residue ~~of the material~~ has been removed from the surface area of the facility, as determined by a qualified ~~Radiation Technician~~Health Physics Specialist.

7. Equipment and vehicles which are used for management of 11e.(2) waste will be cleaned of any loose material before being used for 11e.(2) management and before being placed into LARW waste management. Portions of equipment which carry the waste, ~~i.e.~~ (i.e., the buckets and beds,) will be cleaned to a limit of 500 grams per square foot average, with a maximum limit of 100 lbs. of waste total over the entire piece of equipment, as determined by a qualified ~~Radiation Technician. This process~~Health Physics Specialist. This task may be performed at the facility being used for 11e.(2) waste management, the administration decontamination facility, or the 11e.(2) facility for 11e.(2) material removal~~,~~; and in locations specified in ~~reference 9 RW-4~~Reference 8, RW-4, D.1 for LARW material.

8. If waste from shipments identified as Radiation Areas, ~~(~~as defined in C.3 above~~, are)~~ is to be placed in storage for longer than 10 days, ~~they~~it must be covered with an additional six inches of low activity waste or clean fill material to reduce gamma exposure and radon emissions.

9. Water generated from the management of 11e.(2) wastes in LARW facilities will be managed as follows:

a. Minimize the co-mmingling of decontamination water between the LARW and 11e.(2) waste shipments by emptying the decontamination water tanks before initiation ~~of~~ng decontamination of 11e.(2) waste shipment vehicles and again before ~~recommending~~ decontamination of LARW waste shipment vehicles.

b. Water removed from the decontamination facility that is contaminated with 11e.(2) wastes may be used either upon the 11e.(2) facility for engineering purposes or disposed of at the Mixed Waste Facility Run-Off Control Pond.

c. The same water vehicle may be used for both LARW and 11e.(2) decontamination water management if the vehicle has the required labels and is pumped empty between water types.

E. OPERATING INSTRUCTIONS:

1. Waste containers are unloaded and handled at South Clive Site facilities in accordance with ~~r~~Reference 1. Container shipments are unloaded by one of the following methods:

a. Unloading containers from rail cars at the Container Storage and Bulk Transfer Pads~~:~~:

1) ~~-~~ Upon acceptance for management, as signified by the ~~ARCS Coordinator signing the applicable shipment's EC-18, the ARCS Coordinator~~Shipping and Receiving Manager (SRM) signing the applicable shipment's EC-18, the SRM or Site Manager will direct that specific rail cars may be moved into Envirocare~~'~~'s Restricted Area for unloading and handling.

2) A locomotive is used to move the rail cars into position next to the Container ~~or Bulk Storage Pads~~Storage Pad or LARW Container Bulk Transfer Pad.

3) Ensure the storage pad has been cleaned according to General Instruction D.4 of this procedure (if applicable).

4) Use a crane, forklift, or backhoe to unload the containers from the rail cars onto the Container ~~or Bulk Storage Pads~~Storage Pad or LARW Container Bulk Transfer Pad for transfer.

5) ~~Record the specific~~ Record the time and date of unloading on the Work ~~Permit for the particular~~EC-18 for that shipment. REMOVE

b. Unloading containers from trucks at the Container Storage Pads, the Rail Car Rollover Pad, or directly onto the 11e.(2) Disposal Cells~~:~~:

1) Upon acceptance for management, as signified by the ARCS ~~Coordinator~~SRM signing the applicable shipment's ~~EC-18, the ARCS Coordinator~~'s EC-18, the SRM or Site Manager will direct that specific trucks may be moved to the proper area for unloading and handling.

2) Trucks delivering containerized waste are escorted to the unloading location.

3) ____Use a crane, forklift, or other equipment to unload containers from trucks onto the Rail Car Rollover Pad, Container Storage Pad, or Bulk Transfer Pad for management, or directly onto the 11e.(2) Disposal Cells for placement.

Note: Ensure that the sampling requirements have been met or that the designated Disposal Cell has had an elevational survey completed in accordance with rReference 7 prior to placing the waste in the 11e.(2) Disposal Cell.

4) ~~Record the specific~~ Record the time and date of unloading on the EC-18 for the ~~particular~~at shipment.

c. Unloading containers from trucks at the Truck Unloading Facility:

1) ____The Truck Unloading Facility is used for unloading and as a staging area for waste inspection, waste sampling, and non-bulk waste transfer in a manner which eliminates the need for decontamination of highway shipment vehicles.

2) ____Delivery trucks are moved into the truck staging area for review of the manifest and shipping papers, survey of the freight containers, smear testing of the external surfaces of the freight container, and ~~the~~ visual inspection of the freight containers and packages for physical integrity and/or for signs of visible material on the exterior or loose in the conveyance.

3) ____If otherwise acceptable, trucks are then unloaded by:

-* ____container movement across the hot line from the sides or end of the trucks by cranes, backhoes used as a crane, forklifts, or other methods while the unloading equipment remains inside the Restricted Area.

-* ____container movement from the end of closed trucks or trailers by forklift or other equipment, where the unloading equipment enters the bed of the truck during unloading.

-* ____container movement directly onto the Restricted Area of the Truck Unloading Facility to await sampling, or onto trucks for management or for disposal in the 11e.(2) Disposal ~~Cells~~. For shipments destined to be off-loaded directly onto an embankment disposal cell, a qualified QC Technician must inspect the ~~shipment while still in the container~~ for volume and debris estimates as outlined in step E.2 of procedure BPW-5. Otherwise, the volume estimation must be based upon the manifested volume.

Note: Ensure the sampling requirements have been met or that the designated Disposal Cell has had an elevational survey completed in accordance with rReference 7 prior to placing the waste in the 11e.(2) Disposal Cell.

4) ~~Record the specific~~ Record the time and date of unloading on the EC-18 for the ~~particularat~~ shipment.

5) ____After unloading, shipments which require sampling remain in the Restricted Area of the Truck Unloading Facility until sampling and testing are complete. The delivery trucks are released and allowed to leave the truck staging area ~~to allow other trucks to be unloaded~~.:

~~-t*~~ The portion of the delivery truck used to transport the waste is surveyed prior to release in accordance with ~~reference 9~~Reference 8, AC-4. Enter the release information on the EC-18 for the~~at~~ shipment. If these ~~areas are less than~~results are below the release limits, the truck will be released without further decontamination or survey.

~~-t*~~ Trucks which fail to meet the applicable release limits are moved within the Restricted Area for decontamination and are then fully released in accordance with pProcedure AC-4 of this manual.

6) ____Inspect and sample the waste shipment in accordance with ~~reference~~ 9Reference 8, BPW-3.

7) ~~-~~ ____Upon acceptance for management, as signified by the ~~ARCS Coordinator~~SRM signing the applicable shipment's ~~EC-18 upon report from the Laboratory of the waste shipment's acceptability~~, the ARCS Coordinator's EC-18, the SRM or Site Manager will direct that the waste be moved to the 11e.(2) Disposal Cells, the LARW Container Storage or Bulk Transfer Pads ~~for transfer~~, or the shipment may remain in the Truck Unloading Facility for no ~~greater~~more than 48 hours.

8) ____Wastes determined to be unacceptable must remain in the Truck Unloading Facility until the acceptance problems are resolved or the shipment is reloaded onto a delivery truck for return. The ~~ARCS Coordinator~~SRM or Site RSO will contact Envirocare Business Development via a Problem Report (EC-2700~~2~~) concerning the unacceptable shipment. ~~Business Development will notify the generator, NRC, and the Utah Division of Radiation Control for ~~tion~~~~See the Envirocare Problem Reporting Plan for details.

2. Bulk shipments are unloaded and handled at the South Clive Site in accordance with ~~ref~~Reference 1. Bulk shipments are unloaded by one of the following methods:

a. Unloading rail cars at the Rail Car Rollover Facility:

1) Upon acceptance for management, as signified by the ~~ARCS Coordinator~~SRM signing the applicable shipment's ~~EC-18, the ARCS Coordinator~~'s EC-18, the SRM or Site Manager will direct that specific rail cars may be moved into the ~~Envirocare~~ Restricted Area for unloading and handling.

2) ~~Prior to unloading the rail cars, the lids if used, are removed. Use the spreader bars immediately behind the entrance gate~~ Rail car lids, if used, are removed prior to unloading. Use spreader bars and a crane or forklift to remove the lids.

3) ~~Once the requirement of General Instruction~~ Once D.4 above is satisfied, a locomotive moves the rail cars into the Rollover Facility one at a time.

4) The Rail Car Rollover Facility operator ensures everyone is clear of the rollover and of the concrete pad beneath the rollover and that all personnel in the vicinity have been informed of the upcoming rollover event.

5) The cars are unloaded by locking the rail cars into the Rail Car Rollover Facility and rolling the rail cars over. The waste material then falls beneath the rollover onto the concrete pad.

6) When the Facility operator indicates an all clear condition, a backhoe or front-end loader then loads the waste into dump trucks or Rock trucks which haul the waste directly to the 11e.(2) Disposal Cells. Material that is dumped by the rollover may also be containerized for storage.

Note: Ensure the sampling requirements have been met or that the designated Disposal Cell has had an elevational survey completed in accordance with rReference 7 prior to placing the waste in the 11e.(2) Disposal Cell.

7) ~~Record the specific~~ Record the time and date of disposal on the ~~Work Permit for the particular~~EC-18 for that shipment.

b. Unloading of Bulk Shipments by Dump Trucks or End Dumps:

1) Upon acceptance for management, as signified by the ~~ARCS Coordinator~~SRM signing the applicable shipment~~'s EC-18, the ARCS Coordinator~~'s EC-18, the SRM or Site Manager will direct that specific trucks may be moved into the Envirocare Restricted Area for unloading and handling.

2) ~~Dump t~~Dump Trucks or End Dumps bringing waste to the facility should either be unloaded directly onto the 11e.(2) Disposal Cells, or Rail Car Rollover Pad for management.

3) Trucks delivering bulk wastes should be escorted to the unloading location.

4) ~~Record the specific~~ Record the time and date of unloading on the EC-18 for the ~~particular~~at shipment.

3. Wastes are stored in accordance with the requirements specified for containerized waste storage in ~~r~~References 1, 8, and 9.

F. QUALITY CONTROL:

1. QC Process Control:

2. Sample Control: None

3. Data Control:

   a. Placement of waste material is controlled by use of Form EC-18 to record the date and time of unloading for management, the date and time of waste disposal, and the location of placement.

   b. Records ~~are maintained~~ of the daily Health Physics Department facility inspections are maintained in accordance with ~~reference 9~~Reference 8, ADMIN-3.

4. Audit Requirements:

   a. Daily: The South Clive Site Health Physics Department conducts daily inspections of the facility to ensure the ~~r~~Reference 1 requirements are complied with.

   b. Semi-annually~~, t~~: The QA Officer will coordinate a comprehensive audit of waste handling and unloading operations.

BPW-4 11e.(2) INCOMING WASTE UNLOADING AND HANDLING

A. PURPOSE: This procedure is designed to provide a consistent method for unloading and handling 11e.(2) incoming-shipment wastes, to ensure the waste is handled in accordance with regulatory requirements, and to contain spills of radioactive material during unloading and transportation operation. This procedure also aids in ensuring that the incoming-shipment wastes are handled such that the natural soils and/or ground water are not contaminated with waste material nor that uncontrolled release of contaminated material be allowed outside of Envirocare's Restricted Areas.

B. REFERENCES OR AUTHORITY:

1. 11e.(2) Radioactive Material License SMC-1559, dated 11/19/93;
2. Application for Radioactive Material License SMC-1559, dated 12/23/91, as amended;
3. Envirocare of Utah, Inc - Quality Assurance Manual;
4. 40 CFR 261;
5. 10 CFR 20.1902;
6. Ground Water Quality Discharge Permit #UGW450005, dated 9/10/93; and,
7. Envirocare Construction QA/QC Manual.

C. PRECAUTIONS AND LIMITATIONS:

1. Any waste which is determined to be a hazardous waste or to exceed the restrictions of references 1 or 6, Table 3, shall not be unloaded or handled in the 11e.(2) Waste Management Facility. Such waste must be handled and disposed of elsewhere in compliance with all other applicable regulations, or returned to its place of origin. If a disposed waste is discovered to be a hazardous waste or to exceed the limits of reference 1 or 6, Envirocare must follow the Contingency Plan for Non-Conforming Results in reference step D.6 of OP Manual Procedure BPW-3.

2. Incoming-shipments are checked for the presence of free liquids in accordance with OP Manual procedures BPW-2 and BPW-3. If a shipment arrives at the site and is observed to contain free liquids or fails the Paint Liquid Filter Test (PFLT), it will not be accepted for storage or disposal.

3. Rail cars or trucks containing more than 1,000 pCi/g of any radionuclide, or which have a gamma dose rate measured at 1 meter from any surface of 5 rem per hour will be considered **"high activity shipments."** Such rail cars or trucks will be identified on arrival by placing a "Caution, Radiation Area" sign on each side of the waste conveyance, as described in reference 5. If there will be a delay of more than 24 hours in emptying the shipment, it will be roped off, or otherwise segregated, to control access to the radiation area around the shipment.

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4. All workers, other than truck drivers in closed trucks, involved in unloading or disposal of **high activity waste** will be required to wear full-face respirators that provide a respiratory intake protection factor of 50.

5. Any waste material spilled shall be immediately recovered and replaced within contained management. For spills outside of contained management greater than 100 Kg (220 lbs.), the spill must be reported to the NRC, Utah Division of Radiation Control, and the Utah Division of Water Quality within 48 hours of discovery. A follow-up written report of the spill shall be provided to these regulatory agencies within five working days of discovery of the spill. If a spill occurs within the truck staging area of the Truck Unloading Facility, then follow-up clean-up, the truck staging area will be radiologically surveyed to ensure that all spilled material has been removed.

6. Bulk waste which is accepted for management may not remain in a facility transport vehicle any longer than necessary. This includes overnight, during the lunch period, or to await a delayed shift change. The same applies to buckets of earth-moving equipment or any open containers outside of approved storage areas.

7. Bulk wastes at the Rail Car Rollover Facility must be taken to the 11e.(2) Disposal Cell for disposal placement as soon as possible or within 24 hours after the most recent rail car or shipment has been unloaded. Bulk waste from only one generator and one waste type may be managed at a time at the Rail Car Rollover Facility.

8. Wastes in containers may not remain at the Rail Car Rollover Facility, the Truck Unloading Facility, or the concrete decontamination wash-down pads for longer than 48 hours unless additional time is approved by the Executive Secretary of the Radiation Control Board. Waste which does not meet the waste acceptance criteria may remain in the Truck Unloading Facility until the problem is resolved.

9. Containers will be moved within the Container Storage Pad or Truck Unloading Facility by forklift, dump trucks, flatbed trailers, or other means. Rock trucks or other transport vehicles, which by virtue of their potential axle weight may damage the asphalt surface, will not be allowed on the Container Storage Pad.

10. Containers will be transported in a manner to prevent rupture or release. Containers should be transported as close to the ground as practical to minimize the distance a container would fall in the event of an accident. Containers will be moved only after it has been assured that the lids, covers, etc. have been replaced and the containers are in a closed, tight condition.

11. Vehicles and waste conveyances shall adhere to all signs, warnings, and postings for traffic management when transporting waste within the Restricted Area. Anyone observed

intentionally or deliberately violating posted warnings shall be subject to disciplinary action as deemed appropriate by the Site Manager.

12. The truck staging area of the Truck Unloading Facility shall be surveyed weekly when in use. As a precaution, the portion of equipment used to reach across and move containers over the "hot line" shall be radiologically surveyed daily and/or prior to use.

13. Bulk shipments **may not** be unloaded at the Truck Unloading Facility. Conversely, cardboard boxes and bags meeting the criteria of strong, tight containers **are allowed** to be unloaded at the Truck Unloading Facility.

14. The gates accessing the Truck Unloading Facility staging area will remain locked when not in operation. When the gates are open, a Radiation Monitor-I will monitor access to ensure security of the Restricted Area. Although the radiation restricted portion of the unloading area (the hot side) is considered a part of Envirocare's Restricted Area with controlled access, the truck staging area will not be a part of the radiation Restricted Area.

15. Any facilities used for both 11e.(2) and LARW waste management (listed in D.1 above) must be cleaned before management of the other waste type (e.g. if 11e.(2) waste was managed last at a facility, the facility involved must be cleaned before management of LARW waste).

D. GENERAL INSTRUCTIONS:

1. This procedure applies to all 11e.(2) waste material received for management at Envirocare's Clive Site Disposal Facility. Except during transport, wastes will be managed at the following waste management facilities:

a. 11e.(2) Disposal Cells;
b. Container Storage Pad (for transfer);
c. Bulk Storage Pad (for transfer);
d. Truck Unloading Facility;
e. Rail Car Rollover Facility;
f. Decontamination Wash-Down Pads; and,
g. Mixed Waste Facility Run-Off Control Pond.

2. Upon waste acceptance, it is managed as "bulk" or "containerized" waste material. Bulk waste materials are unloaded directly into the 11e.(2) Disposal Cells for placement, or at the Rail Car Rollover Facility. Bulk waste unloaded at the Rail Car Rollover Facility may be taken to the 11e.(2) Disposal Cells for disposal placement, the Bulk Storage Pad for transfer, or may be placed into containers for management on the Container Storage Pad. Bulk waste unloaded at the Bulk Storage Pad may be taken to the 11e.(2) Disposal Cells for disposal placement or storage, or may be placed into containers for management on the Container

BPW-4 11e.(2) INCOMING WASTE UNLOADING AND HANDLING

Storage Pad. Bulk wastes may not be unloaded or handled at the Truck Unloading Facility. The following types of bulk shipments may be received at the Clive Site:

a. Gondola Rail Cars;
b. Dump Truck Loads;
c. Intermodals; and,
d. End Dump Transports.

3. 11e.(2) waste material in containers will either be unloaded directly onto the 11e.(2) Disposal Cells for placement, the Container Storage Pad for management, or the Truck Unloading Facility or Rail Car Rollover Pad for interim storage of less than 48 hours duration. The following types of strong and tight containers may be received at the Clive Site by highway or rail shipment or may be used by Envirocare to containerize bulk wastes:

a. 96 ft^3 B-25 boxes;
b. 48 ft^3 B-12 boxes;
c. 50 and 55 gallon drums;
d. over-pack drums;
e. various sizes of poly bags;
f. 20 yd^3 Seavans; and,
g. other strong and tight containers.

4. Prior to managing 11e.(2) wastes at any of the facilities listed in D.1 above, Envirocare will clean the area of LARW waste material until the residue of LARW material has been removed from the surface area of the facility, as determined by a qualified Radiation Technician. The material removed will be managed as LARW waste material as outlined in OP Manual Procedure RW-4.

5. If any of the facilities listed in D.1 above have been used for management of 11e.(2) material, the facilities must be cleaned of 11e.(2) material under the same limitations as D.4 above for LARW waste removal. Waste material removed will be managed as described in section E.4 of this procedure.

6. Brooms, shovels, loaders, or other appropriate means will be used for cleaning until the residue of the material has been removed from the surface area of the facility, as determined by a qualified Radiation Technician.

7. Equipment and vehicles which are used for management of 11e.(2) waste will be cleaned of any loose material before being used for 11e.(2) management and before being placed into LARW waste management. Portions of equipment which carry the waste, i.e. the buckets and beds, will be cleaned to a limit of 500 grams per square foot average, as determined by a qualified Radiation Technician. This process may be performed at the facility being used for 11e.(2) waste management, the administration decontamination facility, or the

11e.(2) facility for 11e.(2) material removal, and in locations specified in OP Manual Procedure RW-4 D.1 for LARW material.

8. If "**high activity wastes**", as defined in C.3 above, are to be placed in the storage area, they must be covered with an additional six inches of low activity waste or clean fill material to reduce gamma exposure and radon emissions.

9. Water generated from the management of 11e.(2) wastes in LARW facilities will be managed as follows:

a. Minimize the co-mingling of decontamination water between the LARW and 11e.(2) waste shipments by emptying the decontamination water tanks before initiation of decontamination of 11e.(2) waste shipment vehicles and again before recommending decontamination of LARW waste shipment vehicles.

b. Water removed from the decontamination facility that is contaminated with 11e.92) wastes may be used either upon the 11e.(2) facility for engineering purposes or disposed of at the Mixed Waste Facility Run-Off Control Pond.

c. The same water vehicle may be used for both LARW and 11e.(2) decontamination water management if the vehicle has the required labels and is pumped empty between water types.

E. OPERATING INSTRUCTIONS:

1. Waste containers are unloaded and handled at Clive Site facilities in accordance with reference 1. Container shipments are unloaded by one of the following methods:

a. Unloading containers from rail cars at the Container Bulk Storage Pads.

1) Upon acceptance for management, as signified by the ARCS Coordinator signing the applicable shipment's EC-18, the ARCS Coordinator or Site Manager will direct that specific rail cars may be moved into Envirocare's Restricted Area for unloading and handling.

2) A locomotive is used to move the rail cars into position next to the Container or Bulk Storage Pads.

3) Ensure the storage pad has been cleaned according to General Instruction D.4 of this procedure (if applicable).

4) Use a crane, forklift, or backhoe to unload the containers from the rail cars onto the Container or Bulk Storage Pads for transfer.

5) Record the specific time and date of unloading on the Work Permit for the particular shipment.

b. **Unloading containers from trucks at the Container Storage Pads, the Rail Car Rollover Pad, or directly onto the 11e.(2) Disposal Cells.**

1) Upon acceptance for management, as signified by the ARCS Coordinator signing the applicable shipment's EC-18, the ARCS Coordinator or Site Manager will direct that specific trucks may be moved to the proper area for unloading and handling.

2) Trucks delivering containerized waste are escorted to the unloading location.

3) Use a crane, forklift, or other equipment to unload containers from trucks onto the Rail Car Rollover Pad for interim storage of less than 48 hours, onto the Container Storage Pad for management, or directly onto the 11e.(2) Disposal Cells for placement. For shipments destined to be off-loaded directly onto an embankment disposal cell, a qualified QC Technician must inspect the shipment while still in the container for volume and debris estimates as outlined in step E.2 of procedure BPW-5. Otherwise, the volume estimation must be based upon the manifested volume. Ensure General Instruction D.4 has been satisfied.

Note: Ensure the sampling requirements have been met or that the designated Disposal Cell has had an elevational survey completed in accordance with reference 7 prior to placing the waste in the 11e.(2) Disposal Cell. Ensure the QC Technicians have determined the amount of debris fill needed (if any) prior to placement of the waste material into a disposal cell.

4) Record the specific time and date of unloading on the Work Permit for the particular shipment.

c. **Unloading containers from trucks at the Truck Unloading Facility.**

1) The Truck Unloading Facility is used for unloading and as a staging area for waste inspection, waste sampling, and non-bulk waste transfer in a manner which eliminates the need for decontamination of highway shipment vehicles.

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2) Delivery trucks are moved into the truck staging area for review of the manifest and shipping papers, survey of the freight containers, smear testing of the external surfaces of the freight container, and the visual inspection of the freight containers and packages for physical integrity and/or for signs of visible material on the exterior or loose in the conveyance.

3) If otherwise acceptable, trucks are then unloaded by:

- container movement across the hot line from the sides or end of the trucks by cranes, backhoes used as a crane, forklifts, or other methods while the unloading equipment remains inside the Restricted Area.

- container movement from the ends of closed trucks or trailers by forklift or other equipment, where the unloading equipment enters the bed of the truck during unloading.

- container movement directly onto the Restricted Area of the Truck Unloading Facility to await sampling, or onto trucks for management or for disposal in the 11e.(2) Disposal Cells. For shipments destined to be off-loaded directly onto an embankment disposal cell, a qualified QC Technician must inspect the shipment while still in the container for volume and debris estimates as outlined in step E.2 of procedure BPW-5. Otherwise, the volume estimation must be based upon the manifested volume.

Note: Ensure the sampling requirements have been met or that the designated Disposal Cell has had an elevational survey completed in accordance with reference 7 prior to placing the waste in the 11e.(2) Disposal Cell. Ensure the QC Technicians have determined the amount of debris fill needed (if any) prior to placement of the waste material into a disposal cell.

4) Record the specific time and date of unloading on the Work Permit for the particular shipment.

5) After unloading, shipments which require sampling remain in the Restricted Area of the Truck Unloading Facility until sampling and testing are complete. The delivery trucks are released and allowed to leave the truck staging area to allow other trucks to be unloaded.

- the portion of the delivery truck used to transport the waste is surveyed prior to release in accordance with OP Manual procedure AC-4. Enter

the release information on the EC-18 for the shipment. If these areas are less than the release limits, the truck will be released without further decontamination or survey.

- trucks which fail to meet the applicable release limits are moved within the Restricted Area for decontamination and are then fully released in accordance with procedure AC-4 of this manual.

6) Inspect and sample the waste shipment in accordance with OP Manual procedure BPW-3.

7) Upon acceptance for management, as signified by the ARCS Coordinator signing the applicable shipment's EC-18 upon report from the Laboratory of the waste shipment's acceptability, the ARCS Coordinator or Site Manager will direct that the waste be moved to the 11e.(2) Disposal Cells, the Container Storage Pad, or the shipment may remain in the Truck Unloading Facility for no greater than 48 hours.

8) Wastes determined to be unacceptable must remain in the Truck Unloading Facility until the acceptance problems are resolved or the shipment is reloaded onto a delivery truck for return. The ARCS Coordinator or Site RSO will contact Envirocare Business Development via Problem Report (EC-2700) concerning the unacceptable shipment. Business Development will notify the generator, NRC, and the Utah Division of Radiation Control for resolution.

2. Bulk shipments are unloaded and handled at the Clive Site in accordance with ref. 1. Bulk shipments are unloaded by one of the following methods:

a. Unloading rail cars at the Rail Car Rollover Facility.

1) Upon acceptance for management, as signified by the ARCS Coordinator signing the applicable shipment's EC-18, the ARCS Coordinator or Site Manager will direct that specific rail cars may be moved into the Envirocare Restricted Area for unloading and handling.

2) Prior to unloading the rail cars, the lids if used, are removed. Use the spreader bars immediately behind the entrance gate and a crane or forklift to remove the lids.

3) Once the requirement of General Instruction D.4 above is satisfied, a locomotive moves the rail cars into the Rollover Facility one at a time.

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4) The Rail Car Rollover Facility operator ensures everyone is clear of the rollover and of the concrete pad beneath the rollover and that all personnel in the vicinity have been informed of the upcoming rollover event.

5) The cars are unloaded by locking the rail cars into the Rail Car Rollover Facility and rolling the rail cars over. The waste material then falls beneath the rollover onto the concrete pad.

6) When the Facility operator indicates an all clear condition, a backhoe or front-end loader then loads the waste into dump trucks or Rock trucks which haul the waste directly to the 11e.(2) Disposal Cells. Material that is dumped by the rollover may also be containerized for storage.

Note: Ensure the sampling requirements have been met or that the designated Disposal Cell has had an elevational survey completed in accordance with reference 7 prior to placing the waste in the 11e.(2) Disposal Cell. Ensure the QC Technicians have determined the amount of debris fill needed (if any) prior to placement of the waste material into a disposal cell.

7) Record the specific time and date of disposal on the Work Permit for the particular shipment.

b. Unloading rail cars at the Bulk Storage Pad.

1) Upon acceptance for management, as signified by the ARCS Coordinator signing the applicable shipment's EC-18, the ARCS Coordinator or Site Manager will direct that specific rail cars may be moved into the Envirocare Restricted Area for unloading and handling.

2) A locomotive moves the rail cars adjacent to the Bulk Storage Pad.

3) Prior to unloading the rail cars, the lids are removed. Use the spreader bars immediately behind the entrance gate and a crane or forklift to remove the lids.

4) Using care not to spill waste material, the rail cars are unloaded by backhoe into trucks which haul the waste to the 11e.(2) Disposal Cells, or into containers for management. If waste material is spilled outside the Bulk Storage Pad, it shall be immediately reclaimed in accordance with Precaution and Limitation 5.

Note: Ensure the sampling requirements have been met or that the designated Disposal Cell has had an elevational survey completed in accordance with reference 7 prior to placing the waste in the 11e.(2) Disposal Cell. Ensure the QC

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Technicians have determined the amount of debris fill needed (if any) prior to placement of the waste material into a disposal cell.

5) Record the specific time and date of unloading on the Work Permit for the particular shipment.

c. **Unloading of Bulk Shipments by Dump Trucks or End Dumps.**

1) Upon acceptance for management, as signified by the ARCS Coordinator signing the applicable shipment's EC-18, the ARCS Coordinator or Site Manager will direct that specific trucks may be moved into the Envirocare Restricted Area for unloading and handling.

2) Dump trucks or End Dumps bringing waste to the facility should either be unloaded directly onto the 11e.(2) Disposal Cells, or Rail Car Rollover Pad for management.

3) Trucks delivering bulk wastes should be escorted to the unloading location.

4) For shipments off-loaded directly onto an embankment disposal cell, a qualified QC Technician must inspect the shipment while still in the container for volume and debris estimates. Otherwise, the volume estimation must be based upon the manifested volume.

5) Record the specific time and date of unloading on the Work Permit for the particular shipment.

3. Wastes are stored in accordance with the requirements specified for containerized waste storage in reference 1 and OP Manual procedure BPW-6.

F. QUALITY CONTROL:

1. Sample Control: None

2. Data Control:

a. Placement of waste material is controlled by use of Form EC-18 to record the date and time of unloading for management, the date and time of waste disposal, and the location of placement.

b. Records are maintained of the daily Health Physics Department facility inspections in accordance with OP Manual procedure ADMIN-3.

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3. Audit Requirements:

   a. The Clive Site Health Physics Department conducts daily inspections of the facility to ensure the reference 1 requirements are complied with.

   b. Semi-annually, the QA Officer will coordinate a comprehensive audit of waste handling and unloading operations.