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R-020-204.32

**INCLUSION OF TRASH COMPACTOR PROCEDURE IN REMOVAL
ACTION NUMBER 9**

06/27/96

**DOE-1053-96
DOE-FN EPAS
42
PROCEDURE**

7722



Department of Energy

**Ohio Field Office
Fernald Area Office**

P. O. Box 538705
Cincinnati, Ohio 45253-8705
(513) 648-3155



JUN 27 1996

DOE-1053-96

**Mr. James A. Saric, Remedial Project Director
U.S. Environmental Protection Agency
Region V - SRF-5J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590**

**Mr. Tom Schneider, Project Manager
Ohio Environmental Protection Agency
401 East 5th Street
Dayton, Ohio 45402-2911**

Dear Mr. Saric and Mr. Schneider:

INCLUSION OF TRASH COMPACTOR PROCEDURE IN REMOVAL ACTION NUMBER 9

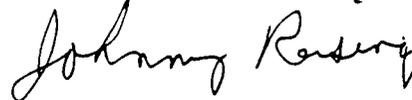
Enclosed is the Fernald Environmental Management Project's (FEMP) Plant 8 Supercompactor Operations Procedure (8C-610) for inclusion in Removal Action (RA) Number 9. This procedure is used in conjunction with and will eventually replace the trash baler operation procedure, SOP-20-C-923, which was previously submitted to the U.S. Environmental Protection Agency (U.S. EPA) as part of the RA Number 9 update.

The Supercompactor in Plant 8 became operational in August 1995 under the terms and conditions of the Ohio Environmental Protection Agency (OEPA), Permit-to-Operate, Page 227. Therefore, it complies with permit stipulations for High-Efficiency Particulate Air (HEPA) filtration and radionuclide and particulate monitoring. To ensure that no prohibited items such as Resource Conservation and Recovery Act (RCRA) waste and asbestos materials are compacted, wastes are segregated prior to entering the compactor according to procedure. All other compactible low-level radioactive wastes, specifically, those generated from RA Number 9 operations, can be handled in the compactor in compliance with permit and procedure specifications.

The FEMP and the Department of Energy proposed to submit project-specific updates to RA Number 9 procedures to the EPAs, which proved to be more effective and streamlined process than submitting updates annually.

If there are any questions concerning this matter, please contact John Trygier at (513) 648-3154.

Sincerely,



Johnny W. Reising
Fernald Remedial Action
Project Manager

FN:Trygier

Enclosure: As Stated

cc w/enc:

R. L. Nace, EM-423/GTN
G. Jablonowski, USEPA-V, 5HRE-8J
Manager, TPSS/DERR, OEPA-Columbus
F. Bell, ATSDR
D. S. Ward, GeoTrans
R. Vandegrift, ODOH
S. McLellan, PRC
T. Hagen, FERMCO/65-2
J. Harmon, FERMCO/90
AR Coordinator/78

cc w/o enc:

S. Beckman, FERMCO/65-2
E. Fisher, FERMCO/65-2
G. Hazelwood, FERMCO/66
C. Little, FERMCO/2
T. Walsh, FERMCO65-2

Fernald Environmental Management Project Fernald Environmental Restoration Management Corp. REMEDATION SUPPORT OPERATIONS DOCUMENT SYSTEM		Page 1 of 40 Revision No. 1 Revision Date: 02-12-96
REMEDATION SUPPORT OPERATIONS PROCEDURE	Plant 8 Supercompactor Operation	08-C-610
		TECHNICAL PROCEDURE
(Signature on File) Authorization: G. Hazlewood Waste Programs Project Mgmt. Mar.	Supersedes: 08-C-610 Dated: 10-20-94	Issue Date: 06-05-95

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1.0 PURPOSE

- 1.1 The purpose of this document is to provide instructions for compacting contaminated trash for off-site disposal.

2.0 SCOPE

- 2.1 This procedure applies to the Container Products Corporation Model B-400 Supercompactor (Compactor) located in Plant 8 of the Fernald Environmental Management Project (FEMP).

3.0 APPLICABLE DOCUMENTS

3.1 Source Documents

- 3.1.1 D10-00-020. "Remediation Support Operations Division Document System"

3.2 Reference Documents

- 3.2.1 QP 12.03. "Certification of Waste Package Examination, and Sealing for Off-Site Shipments"
- 3.2.2 OP-0004. "FERMCO Lockout/Tagout (Hazardous Energy and Material Control) Procedure"
- 3.2.3 DOE Order 5480.11, "Radiation Protection for Occupational Workers"
- 3.2.4 NVO-325, "Nevada Test Site Defense Waste Acceptance Criteria, Certification, and Transfer Requirements"
- 3.2.5 20-C-902, "Inspecting and Operating Liquid Propane Gas (LPG) Powered Handstackers and Tuggers"
- 3.2.6 10 CFR 835. "Occupational Radiation Protection"
- 3.2.7 PT-0007, "Packaging Low-Level Radioactive Waste (LLRW) in Metal Boxes for Shipment to NTS or DOE-NU"
- 3.2.8 PT-0009, "Contaminated Trash Dumpsters"

4.0 DEFINITIONS

- 4.1 Compactor Container - A specially designed shipping container intended for use within FERMCO's Trash Compactor.
- 4.2 Compactor Control Panel - Mobile control panel located on the west side of the Compactor (See Figure 1).
- 4.3 Contaminated Material - A substance containing radioactive constituents that are above the limit for unrestricted release (1,000 dpm/100 cm²).
- 4.4 Contaminated Trash Dumpster - Secured container for the collection of contaminated trash located throughout the controlled area. The dumpster's are gray in color with a rounded top and a locked door on each end (two doors).

4.0 DEFINITIONS (cont.)

- 4.5 Contaminated Trash Generator - Any person that has a TLD and works within the controlled area, or will access the controlled area periodically to perform their duties.
- 4.6 Derived Air Concentration (DAC) - The concentration of a radionuclide in air, that, if breathed over the period of a work year, would result in the annual limit on intake for that radionuclide being reached. The DAC is obtained by dividing the ALI by the volume of air breathed by an average worker during a working year (2400 m³).
- 4.7 Feed Conveyor - A hinged steel belt conveyor which transports material from the outside receiving bin to the Sorting Conveyor.
- 4.8 Feed Conveyor Control Panel - Control panel located on the Conveyor Operator platform adjacent to where the Feed Conveyor dumps onto the Sorting Conveyor (See Figure 2).
- 4.9 Operation Mode - The Compactor is equipped with two modes of operation in which the individual hydraulic cylinders can be used separately or in unison with each other at any time.
- 4.10 Prohibited Items - Items prohibited from the contaminated trash waste stream either because they are prohibited from burial at Nevada Test Site (NTS) or they are considered Non-Compactible by the Compactor operation. A sample is shown in "Prohibited Items and Non-Compactibles" (See Table 1).
- 4.11 RAM - Compactor pressure plate and associated hydraulic system.
- 4.12 Retention Rack - Each compactor box is designed to hold two retention racks which lock into place within the container to prevent material spring back.
- 4.13 Sorting Conveyor - An enclosed belt conveyor sorting system equipped with two glove box ports for inspection of feed material.
- 4.14 Sorting Conveyor Control Panel - Control panel located on the Conveyor Operator platform between glove box ports (See Figure 3).

5.0 RESPONSIBILITIES

5.1 Line Supervisors are responsible for the following:

- 5.1.1 Ensuring personnel are qualified per the established training requirements identified by the Department Manager.
- 5.1.2 Maintaining training records of personnel operating the Compactor.
- 5.1.3 Contacting Radiological Control to determine any special Personal Protective Equipment (PPE) requirements for handling contaminated trash not addressed in the area Radiological Work Permit (RWP).

5.0 RESPONSIBILITIES (cont.)

- 5.1.4 Ensuring the Compactor operation schedule meets the disposal demands of contaminated trash generation.
- 5.1.5 Responding to incorrect instrument reading or alarm beyond scope of Operator troubleshooting, by notifying Maintenance for repair.
- 5.2 **Compactor/Conveyor Operators** are responsible for the following:
 - 5.2.1 Complying with this procedure.
 - 5.2.2 Wearing PPE as prescribed by the area RWP or additional requirements as determined by the Supervisor.
- 5.3 **Waste Programs Management** is responsible for the following:
 - 5.3.1 Periodically updating the prohibited items list posted on each contaminated trash dumpster and the compactor, and taking appropriate action if prohibited items are found.
 - 5.3.2 Communicating to the appropriate generator, Facility Owner and handler, the proper disposal alternative for any prohibited items.
- 5.4 **Motor Vehicle Operators (MVO's)** (Fork Truck and Dumpster Truck Operators) are responsible for complying with this procedure.
- 5.5 **Quality Assurance (QA)** is responsible for the following:
 - 5.5.1 Evaluating the "Trash Compactor Operation Log" (See Attachment B) and documentation from the Waste Package Certifiers (pre-compacted trash inspection) and the dumpster inspections.
 - 5.5.2 Issuing Observation, Surveillance and Non-Conformance Reports when appropriate.
- 5.6 **Quality Assurance Waste Package Certifiers** are responsible for the overview of Compactor operations and documenting prohibited items segregated according to QP 12.03.

6.0 GENERAL

- 6.1 Warnings, Cautions, and Notes shall precede the Step, Sub-Step, Section, Sub-Section, or Item to which they apply.

7.0 HEALTH AND SAFETY REQUIREMENTS

- 7.1 A defined safety system is not involved.
- 7.2 Safety glasses with side shields shall be worn at all times unless other protection is specified by the Supervisor, Safety and Health (S&H), or posted signs.
- 7.3 Leather-palm gloves shall be worn when loading or conveying trash, and when segregating prohibited items.

7.0 HEALTH AND SAFETY REQUIREMENTS (cont.)

- 7.4 When making adjustments or cleaning the Compactor, electrical power shall be shut off per OP-0004, "FERMCO Lockout/Tagout (Hazardous Energy and Material Control) Procedure".
- 7.5 Respiratory protection provided by the Supervisor shall be worn when specified by Safety and Health (S&H), the Supervisor, or posted signs.
- 7.6 Personnel shall stand clear of the Feed Conveyor bin while dumpsters are being emptied.
- 7.7 Any circumstance which could have resulted in an intake of radioactive materials by inhalation, ingestion, or absorption shall immediately be reported to a Supervisor. The Supervisor shall immediately report the circumstance of possible radioactive materials intake to S&H Radiological Control Department for evaluation. When the suspect isotope is uranium, the involved personnel shall report to the Urine Sampling Station at the end of their shift to complete and Incident Investigation Report (IIR) (Form No. FS-F-1458), and submit an incident urine sample. When the suspect isotope is other than uranium, the involved personnel shall report to the Dosimetry Section of the Radiological Control Department for further determination of actions. Employees are responsible for complying with additional requirements as specified by the Radiological Control Department.
- 7.8 Any situation which could have resulted in the inhalation, ingestion, or absorption of a hazardous materials shall immediately be reported to a Supervisor or to the Assistant Emergency Duty Officer (AEDO), who will immediately report the circumstances to Medical and Industrial Hygiene. The involved personnel shall be directed by the Supervisor or AEDO as to when and where to report for medical evaluation, completion of an Incident Investigation Report (IIR) (Form No. FS-F-1458), and submitting bioassay samples (e.g. blood, urine). Employees are responsible for complying with any additional requirements as specified by S&H.
- 7.9 Ambient airborne radioactivity concentrations shall be limited to 10 percent of the Derived Air Concentration (DAC) for the isotope concern (Uranium-238) as prescribed by 10 CFR 835, "Occupational Radiation Protection".
- 7.10 There are four (4) fixed General Area (GA) sampling pumps installed in the Compactor work area. Radiological Control Technicians (RCTs) shall take samples as specified by Rad Engineering.
- 7.11 Personnel are required to comply with FERMCO Work Permit to access the area.

8.0 PROCEDURE

8.1 Pre-Operational Inspection

SUPERVISOR/COMPACTOR OPERATOR

- 8.1.1 Perform walk-down of Feed Conveyor and receiving bin to ensure materials not authorized to be in the contaminated trash waste stream are not in the receiving bin or on the Feed Conveyor.

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3.0 PROCEDURE (cont.)3.1 Pre-Operational Inspection (cont.)SUPERVISOR/COMPACTOR OPERATOR (cont.)

- 8.1.2 Ensure the Feed Conveyor can be operated free of obstructions.
- 8.1.3 Inspect the Sorting Conveyor and glove boxes for any signs of damage to belt, doors, glove-box, gloves, etc.
- 8.1.4 Inspect the following areas for general housekeeping:
- A. Feed Conveyor
 - B. Sorting Conveyor
 - C. Compactor.
- 8.1.5 Check for any potential hazards (such as tripping).
- 8.2 System Start-up :

COMPACTOR OPERATOR**WARNING**

The Power Selector Switch does not lock out power to the internal components inside the control panel enclosure. Lock out power to the system prior to entering any electrical enclosure in accordance with OP-0004, "FERMCO Lockout/Tagout (Hazard Energy and Material Control) Procedure". Failure to do so can cause serious injury or death.

NOTE: Prior to operating equipment, Operators shall be familiar with the "Compactor Control Panel" (See Figure 1), the "Feed Conveyor Control Panel" (See Figure 2), and the "Sorting Conveyor Control Panel" (See Figure 3) which detail all controls, indicators, and gauges for the Compactor, Feed Conveyor, and Sorting Conveyor respectively.

- 8.2.1 Energize the compactor by turning the TRASH COMPACTOR DISCONNECT Switch to the ON Position.
- 8.2.2 Energize the Compactor Control Panel by inserting the system key into the POWER Switch and turning the key clockwise to the ON Position.
- 8.2.3 Ensure the system exhaust fan is operating by the audible sound of the fan rotating, as well as readings registered on PHOTOHELIC and MAGNEHELIC DIFFERENTIAL PRESSURE Gauges on the Compactor Control Panel.
- 8.2.4 IF exhaust fan is not operating, THEN notify Compactor Supervisor.

8.0 PROCEDURE (cont.)**8.2 System Start-up (cont.)****COMPACTOR OPERATOR (cont.)**

NOTE: The compactor's hydraulic unit is equipped with a clear column located on the west side of the hydraulic fluid tank which allows for inspection of fluid level, clarity, and temperature.

8.2.5 Start the hydraulic pump motor prior to ram activation by depressing the green PUMP START Pushbutton on the Compactor Control Panel.

8.2.6 At start-up, ensure the compactor hydraulic fluid temperature reading on the compactor hydraulic unit is greater than -12°C (11°F).

NOTE: Hydraulic fluid temperature reading shall be within the range of 27°C to 62°C (80°F to 143°F) during operation.

8.2.7 IF hydraulic fluid temperature is not within specified range, THEN notify Compactor Supervisor.

CONVEYOR OPERATOR

8.2.8 Energize the Feed Conveyor at the FEED CONVEYOR DISCONNECT Switch located on the north end of the Conveyor Operator platform by turning to the ON position.

8.2.9 Energize the Sorting System at the SORTING SYSTEM DISCONNECT Switch located on the east side of the Conveyor Operator platform by turning to the ON position.

COMPACTOR OPERATOR

8.2.10 Prepare each empty compactor by adding one layer of absorbent pad.

NOTE 1: As a daily check, the weight of the container and contents remaining in the compactor at the end of each shift is recorded and then compared to the weight recorded for the same container and contents at the beginning of the next shift.

NOTE 2: IF at the end of the shift, there is no container in the compactor, THEN an empty container shall be used as the daily scale check weight.

8.2.11 IF a container remained in the compactor from the previous shift, THEN do the following:

A. Weigh the container in the compactor and record the weight on the "Scale Check Log" (See Attachment D).

B. Compare this weight to that which was obtained for the same container at the end of the previous shift and recorded on the Scale Check Log.

8.0 PROCEDURE (cont.)8.2 System Start-up (cont.)**COMPACTOR OPERATOR** (cont.)

- C. IF these weights differ by six lbs..
THEN notify the Supervisor to contact the Maintenance Scale Shop.

- 8.2.12 IF there is no container in the compaction chamber.
THEN load a container by retracting the compactor ram and opening chamber doors as follows:

NOTE: The amber FULL Compactor Indicators will go out, and the red LEFT CYLINDER UP and RIGHT CYLINDER UP Indicators will illuminate.

- A. Depress and hold the black RAM ENABLE and the amber UNISON UP Pushbuttons simultaneously to cause the ram to move upward.
- B. Maintain pressure on the RAM ENABLE and UNISON UP Pushbuttons until the green LEFT CYLINDER RETRACTOR and RIGHT CYLINDER RETRACTOR Indicators illuminate.
- C. Ensure the three second audible alarm sounds. Both chamber doors electrically unlock and a green CHAMBER ACCESSIBLE Indicator illuminates.
- D. Release the RAM ENABLE and UNISON UP Pushbuttons.
- E. Open both upper and lower chamber doors and install ram locking pins.

MOTOR VEHICLE OPERATOR

- 8.2.13 Use a forked vehicle to place an empty compactor container into the compaction chamber.
- 8.2.14 Ensure the container is fully inserted and is resting on the floor of the compaction chamber.

COMPACTOR OPERATOR

NOTE: Wood blocks measuring 4" X 6" X 46 3/4" have been fabricated for the operation to minimize box bulging during compaction. These blocks are placed under the box while in the compaction chamber where truck forks are inserted for transportation.

- 8.2.15 Install wood block supports under box prior to compaction.
- 8.2.16 Remove locking pins from ram and place them in Ram Pin Stowage receptacles located on the compactor's south side.
- 8.2.17 Close and latch lower chamber access door.
- 8.2.18 Close and latch upper chamber access door.

8.0 PROCEDURE (cont.)8.2 System Start-up (cont.)**COMPACTOR OPERATOR** (cont.)

- 8.2.19 Record the Date/Time, Operator Initials, Container Number, and the compactor control panel ELAPSED HOURS Meter Reading on the "Supercompactor Waste Throughput Logsheet" (See Attachment A).

8.3 Trash Receiving**MOTOR VEHICLE OPERATOR**

- 8.3.1 Notify Conveyor Operators that a dumpster is being prepared for dumping by sounding the dumpster truck horn.
- 8.3.2 Position dumpster for dumping into Feed Conveyor receiving bin.
- 8.3.3 Empty dumpster contents into receiving bin.

CONVEYOR OPERATOR

- 8.3.4 WHEN the dumpster has been dumped,
THEN check dumpster to ensure all trash has been deposited into the bin.

WARNING

Do not step onto Feed Conveyor while dislodging or inspecting dumpster trash to prevent possible serious injury.

- 8.3.5 IF trash remains inside dumpster,
THEN use a rake to pull material from dumpster into bin while standing on east end Operator platform and wearing required PPE.
- 8.3.6 Inspect bagged trash and complete Part I of the "Trash Compactor Operation Log" (See Attachment B).
- 8.3.7 IF a trash bag is not labeled,
THEN indicate this on the Trash Compactor Operation Log.
AND examine bag closely during sorting.
- 8.3.8 Notify the inside Conveyor Operator that material is ready to be transported to Sorting Conveyor.

8.0 PROCEDURE (cont.)8.4 Trash Conveying - Feed Conveyor to Sorting ConveyorCONVEYOR OPERATOR (cont.)CAUTION

Ensure that the Sorting Conveyor carriage is fully retracted and in the home position prior to transferring trash on to the Sorting Conveyor to prevent jam up.

- 8.4.1 Convey material from Feed Conveyor receiving bin to Sort Conveyor by pressing Black FORWARD Pushbutton on Feed Conveyor Control Panel.
- 8.4.2 Allow one lot of two to four trash bags to drop onto the Sorting Conveyor from the Feed Conveyor.
- 8.4.3 Convey entire lot of two to four trash bags into enclosed glove box area by turning the BELT Selector Switch FORWARD on the "Sorting Conveyor Control Panel" (See Figure 3).
- 8.4.4 IF bag is too large to fit through the charge door,
THEN do the following:
- A. Turn the BELT Selector Switch to the OFF Position on the Sorting Conveyor Control Panel.
 - B. Open gate at north end of sorting conveyor on Operator Platform.
 - C. Push the lodged bags through the charge door opening.
 - D. WHEN lodged bags have been cleared through charge door,
THEN close and lock gate.
- 8.4.5 Convey remaining bags into glove box by turning BELT Selector Switch to FORWARD on the Sorting Conveyor Control Panel.

8.5 Trash Sorting

NOTE : Trash which has been previously controlled, certified, or otherwise verified by QA to contain no prohibited items may bypass hand sorting at the compactor and be directly compacted. This trash must be marked with a "QA Compactor Sticker" (See Figure 5) initiated by either the RTR Technician or Waste Certification Official (WCO), which shall be removed at the compactor prior to processing.

- 8.5.1 Ensure upper and lower compactor chamber doors are closed.
- 8.5.2 Insert hands into glove box to begin opening trash bags for sorting.

8.0 **PROCEDURE** (cont.)8.5 Trash Sorting (cont.)**CONVEYOR OPERATOR** (cont.)**WARNING**

Operators shall use caution against cutting glove box gloves and hands with utility knives.

- 8.5.3 Cut open trash bags by using the utility knives provided within glove boxes.

CAUTION

This compactor should not be used in any way to compact or attempt to compact solids (such as metal or wood). Attempting to compact solids may cause compactor and container damage.

- 8.5.4 Sort through loose material for prohibited items identified on "Prohibited Items and Non-Compactibles" list (See Table 1) located next to glove box ports.

- 8.5.5 IF prohibited items are found,
THEN remove items as follows:

- A. Discard prohibited item through reject door.
- B. Complete Part II of the Trash Compactor Operation Log.

SUPERVISOR

- C. Upon receipt of the Trash Compactor Operation Log, notify Dumpster/Facility Owners and Waste Programs Management of prohibited items found.
- D. Complete Part III of the Trash Compactor Operation Log.
- E. IF determined by the Supervisor,
THEN notify Waste Program Management in the event of the following:
 - 1. Serious violation or,
 - 2. If more than 10 percent of the dumpster contents are prohibited items.
- F. In the event of reoccurring violations, notify QA to issue Deviation Reports or Corrective Action Reports.
- G. IF prohibited items are suspected of being highly contaminated,
THEN contact Radiological Control.

8.0 PROCEDURE (cont.)8.6 Trash Conveying - Sorting Conveyor to Compactor Box**CONVEYOR OPERATOR****CAUTION**

Ensure opening to compactor chamber is clear prior to advancing Sorting Conveyor carriage into chamber.

- 8.6.1 Fully extend the Sorting Conveyor carriage into the compaction chamber by depressing the toe of the CARRIAGE foot pedal located below the Sorting Conveyor Control Panel until the CARR. FWD. indicator illuminates.
- 8.6.2 Dump material into the compactor box located in the compaction chamber by turn the BELT Selector Switch on the Sorting Conveyor Control Panel to FWD.
- 8.6.3 Retract the Sorting Conveyor carriage as needed to evenly dump material into compactor box by depressing the heel of the CARRIAGE foot pedal located below the Sorting Conveyor Control Panel.
- 8.6.4 Fully retract the Sorting Conveyor into home position by depressing the heel of the CARRIAGE foot pedal located below the Sorting Conveyor Control Panel until the CARR. HOME indicator illuminates.
- 8.6.5 Repeat 8.3 through 8.6 as needed, until compactor box is full of loose trash and requires compaction.

8.7 Trash Compaction - Unison Mode**COMPACTOR OPERATOR**

NOTE: This section addresses the Unison Operation Mode. 8.8 refers to the Separate Mode, for compaction in addition to that achieved by the Unison Mode.

CAUTION

In the event the amber RAM OUT OF LEVEL Indicator illuminates, refer to 8.12 for ram out of level recovery.

- 8.7.1 Inspect compaction chamber to ensure trash is evenly distributed and chamber is clear for compaction.

8.0 PROCEDURE (cont.)

8.7 Trash Compaction - UNISON Mode (cont.)

COMPACTOR OPERATOR (cont.)

WARNING

Beware of pinch points when opening or closing compactor chamber doors. Use only the handles provided.

- 8.7.2 Open upper and lower compaction chamber doors and remove ram locking pins from ram.
- 8.7.3 Place pins in RAM PIN STOWAGE Receptacles located on the south side of compactor.
- 8.7.4 Close and latch lower compaction chamber door.
- 8.7.5 Close and latch upper compaction chamber door.

WARNING

To prevent possible serious injury or death while the compactor is in operation, do not attempt to enter the compaction chamber.

- 8.7.6 Activate the ram by performing the following:
 - A. Ensure compactor control power is on by verifying that the system key inserted in the POWER SELECTOR Switch is turned to the ON Position on the Compactor Control Panel.
 - B. Select UNISON OPERATION Mode by turning the RAM MODE SELECTOR Switch to UNISON at the Compactor Control Panel.
 - C. Depress and hold the black RAM ENABLE and the amber UNISON DOWN Pushbuttons simultaneously at the Compactor Control Panel and the ram will begin to move downward. Both chamber doors will electrically lock.
 - D. Verify the three second audible alarm sounds, indicating initiation of the compaction process.
 - E. Ensure the red LEFT CYLINDER DOWN and RIGHT CYLINDER DOWN Indicators illuminate.
 - F. Maintain pressure on the UNISON DOWN and RAM ENABLE Pushbuttons until the amber LEFT CYLINDER FULL COMPACTION and RIGHT CYLINDER FULL COMPACTION Indicators illuminate.

8.0 PROCEDURE (cont.)8.7 Trash Compaction - UNISON Mode (cont.)COMPACTOR OPERATOR (cont.)

NOTE: For compaction in addition to that which is achieved in the UNISON Mode, the Operator may refer to 8.8 to operate the ram in the SEPARATE Mode at this time.

8.7.7 To retract ram, perform the following:

- A. Depress and hold the black RAM ENABLE and the amber UNISON UP Pushbuttons simultaneously to cause the ram to move upward.
- B. The amber FULL COMPACTION Indicators will go out, and red LEFT CYLINDER UP and RIGHT CYLINDER UP Indicators will illuminate.
- C. Maintain pressure on the RAM ENABLE and UNISON UP Pushbuttons until the green LEFT CYLINDER RETRACTED and RIGHT CYLINDER RETRACTED Indicators illuminate.
- D. Ensure the three second audible alarm sounds, indicating completion of compaction process; both chamber doors electrically unlock and a green CHAMBER ACCESSIBLE Indicator illuminates.

8.7.8 IF additional material is to be compacted,
THEN repeat 8.3 through 8.7.7.

8.7.9 WHEN compacted material in the container reaches half-full level,
THEN install anti-spring-back retention rack into box as follows:

- A. IF not fully retracted,
THEN bring ram to full up position as detailed in 8.7.7.
- B. Open both upper and lower chamber doors and install ram locking pins.
- C. Install a retention rack in container guide channels with rack locking tabs facing down.
- D. Remove ram locking pins and place in RAM PIN STOWAGE Receptacles located on south side of compactor.
- E. Close and latch lower compactor chamber door.
- F. Close and latch upper compactor chamber door.

CAUTION

Anti-spring-back retention rack should be installed using COMPACTOR UNISON Mode only. Deviation can cause serious equipment damage.

8.7.10 Follow 8.7.6 through 8.7.7 to compress retention rack to full compaction pressure, using Unison Mode.

8.0 PROCEDURE (cont.)**8.7 Trash Compaction - UNISON Mode (cont.)****COMPACTOR OPERATOR (cont.)**

- 8.7.11 IF additional material is to be compacted,
THEN repeat 8.3 through 8.7.7.

NOTE: Scale shall read no greater than 7,500 lbs., allowing for weight of final retention rack, lid, and bolts.

- 8.7.12 Ensure compaction ram and ejection ram are in full retracted position to weigh container.

- 8.7.13 Periodically, weigh container to ensure weight does not exceed 7,500 lbs. as follows:

- A. Press and hold the red WEIGH CONTAINER Pushbutton on the Compactor Control Panel.
- B. Maintain pressure on the red WEIGH CONTAINER Pushbutton until reading on WEIGHING INDICATOR DISPLAY levels out or becomes constant (this is container weight).
- C. Release WEIGH CONTAINER Pushbutton.

- 8.7.14 WHEN container full level nears three inches from top of container,
THEN repeat 8.7.9 through 8.7.10 to install final retention rack.

- 8.7.15 Fully retract compactor ram until green LEFT CYLINDER RETRACTED, RIGHT CYLINDER RETRACTED and CHAMBER ACCESSIBLE Indicators illuminate.

- 8.7.16 Open both upper and lower chamber doors and install ram locking pins.

8.8 Trash Compaction - SEPARATE Mode**CONVEYOR OPERATOR****WARNING**

To prevent possible serious injury or death while the compactor is in operation, do not attempt to enter the compaction chamber.

CAUTION

SEPARATE Mode should not be used to compact trash at any time after a retention rack has been loaded into a container. Doing so can cause serious equipment or container damage.

- 8.8.1 Ensure that the ram has been fully compacted in the UNISON Mode.

- 8.8.2 Select the SEPARATE Operation Mode by turning the RAM MODE Selector Switch clockwise to SEPARATE at the Compactor Control Panel.

3.0 **PROCEDURE** (cont.)3.8 **Trash Compaction - SEPARATE Mode** (cont.)3.8.1 **CONVEYOR OPERATOR** (cont.)

3.8.3 Perform the following to activate ram in the SEPARATE Mode:

- A. Depress and hold either amber SEPARATE LEFT DOWN or amber SEPARATE RIGHT DOWN (Operator choice) Pushbutton in conjunction with black RAM ENABLE Pushbutton on the Compactor Control Panel.

NOTE: The ram will begin to move downward and the selected cylinder red CYLINDER DOWN Indicator will illuminate.

- B. Ensure chamber doors will electrically lock and a three second audible alarm will sound, indicating the beginning of compaction process.

CAUTION

In the event the amber RAM OUT OF LEVEL Indicator blinks and the hydraulic pump shuts down, proceed to 8.12 for ram out of level recovery.

- C. Maintain pressure on SEPARATE DOWN and RAM ENABLE Pushbuttons until selected cylinder's amber CYLINDER FULL COMPACTION Indicator illuminates, or amber RAM OUT OF LEVEL Indicator illuminates.

3.8.4 Extend opposite cylinder by depressing Amber SEPARATE DOWN Pushbutton in conjunction with RAM ENABLE on the Compactor Control Panel.

NOTE : Either cylinder may be retracted by depressing and holding the amber SEPARATE UP Pushbutton in conjunction with the RAM ENABLE located on the Compactor Control Panel.

3.8.6 Perform the following to retract ram:

- A. Select the UNISON Operation Mode by turning RAM MODE Selector Switch counterclockwise to UNISON at the Compactor Control Panel.

NOTE: The Amber FULL COMPACTION Indicators will go out, and the two Red LEFT CYLINDER UP and RIGHT CYLINDER UP Indicators will illuminate.

- B. Depress and hold Black RAM ENABLE and Amber UNISON UP Pushbuttons simultaneously and ram will begin to move upward.

- C. Maintain pressure on RAM ENABLE and UNISON UP Pushbuttons until two Green LEFT CYLINDER RETRACTED and RIGHT CYLINDER RETRACTED Indicators illuminate.

8.0 **PROCEDURE** (cont.)8.8 Trash Compaction - SEPARATE Mode (cont.)**CONVEYOR OPERATOR** (cont.)

D. Ensure the following:

1. Both chamber doors electrically unlock.
2. A three second alarm sounds indicating compaction process complete.
3. The green CHAMBER ACCESSIBLE Indicator illuminates.

8.9 Ejecting the Container**COMPACTOR OPERATOR**

8.9.1 Record the containers weight on the Supercompactor Waste Throughput Logsheets as follows:

- A. Ensure the compaction ram and ejection ram are fully retracted
- B. Press and hold the red WEIGH CONTAINER Pushbutton on the Compactor Control Panel
- D. WHEN the WEIGHING INDICATOR DISPLAY reading stabilizes, THEN record the reading on the Supercompactor Waste Throughput Logsheets Weight Reading column.
- E. Release the WEIGH CONTAINER Pushbutton.

8.9.2 Fully open both upper and lower chamber doors.

- A. Verify ram is fully retracted and install ram locking pins into slots below retracted ram.

MOTOR VEHICLE OPERATOR**CAUTION**

Use extreme caution not to damage the filled compactor box when removing it from the compactor.

- 8.9.3 Place a forked vehicle in front of container, so forks are positioned to slide under container.

8.0 PROCEDURE (cont.)8.9 Ejecting the Container (cont.)**COMPACTOR OPERATOR**

- 8.9.4 Depress amber EJECT RAM OUT Pushbutton on the Compactor Control Panel and maintain pressure until ram is fully extended and container is positioned for removal.
- 8.9.5 Release the EJECT RAM OUT Pushbutton. The ejection ram will retract automatically and the indicator light on the pushbutton will go out.

MOTOR VEHICLE OPERATOR

- 8.9.6 Secure container on forked vehicle and tilt it away from compactor.
- 8.9.7 Back vehicle away from compactor and place container on level ground.

8.10 Container Closure**SUPERVISOR**

- 8.10.1 Perform a visual inspection of loaded container for possible damage which may have occurred during loading.
- 8.10.2 IF container appears damaged, THEN notify shipping personnel in Plant 1.

CONVEYOR OPERATOR

- 8.10.3 Install container neoprene gasket with adhesive side down and remove protective paper from the top of the neoprene gasket.

MOTOR VEHICLE OPERATOR

- 8.10.4 Use forked vehicle to position container lid on compactor container.

CONVEYOR OPERATOR

- 8.10.5 Install four corner container lid bolts and nuts, and tighten.

MOTOR VEHICLE OPERATOR

- 8.10.6 Use a forked vehicle to remove container to designated shipping preparation area.

8.11 System Shut-down**COMPACTOR OPERATOR**

- 8.11.1 Complete the "Differential Pressure Inspection Log" (See Attachment C) prior to shutdown.

8.0 PROCEDURE (cont.)**8.11 System Shut-down** (cont.)**COMPACTOR OPERATOR** (cont.)

NOTE 1: As a daily check, the weight of the container and contents remaining in the compactor at the end of each shift is recorded and then compared to the weight recorded for the same container and contents at the beginning of the next shift.

NOTE 2: If at the end of the shift, there is no container in the compactor, an empty container shall be used as the daily scale check weight.

8.11.2 At the end of each shift, weight the container remaining in the compactor per 8.7.12 and record the weight on the Scale Check Log.

8.11.3 Press the EMERGENCY STOP Mushroom Pushbutton located on the Compactor Control Panel to shut off the hydraulic pump.

8.11.4 De-energize the Compactor Control Panel by turning the system key inserted in the POWER Selector Switch located on the Compactor Control Panel to the OFF Position.

CAUTION

If ram locking pins are left in place for an extended period of time, the system may "sag", making removal of pins difficult.

8.11.5 De-energize the compactor at TRASH COMPACTOR DISCONNECT Switch located on west side of compactor by turning to OFF Position.

8.11.6 Complete the "Item Production/Certification Identification" 1945-XX card (See Figure 4).

NOTE: The Compactor Operator shall sign 1945XX as Generator.

8.11.7 Give completed 1945XX and Trash Compactor Operation Log to Supervisor.

CONVEYOR OPERATOR

8.11.8 De-energize Feed Conveyor at FEED CONVEYOR DISCONNECT Switch located on north end of Conveyor Operator Platform by turning to the OFF position.

8.11.9 De-energize Sorting Conveyor at SORTING SYSTEM DISCONNECT Switch located on west side of Conveyor Operator Platform by turning to the OFF position.

8.11.10 Sort through prohibited items collected in reject bin below Sorting Conveyor reject doors as needed.

8.0 PROCEDURE (cont.)8.11 System Shut-down (cont.)**CONVEYOR OPERATOR** (cont.)**WARNING**

Wear leather palmed gloves when segregating prohibited items to prevent possible injury.

NOTE: The four prohibited material drums are labeled GLASS, AEROSOL CANS, FREE LIQUIDS, and WOOD, METAL, MISC.

8.11.11 Segregate prohibited items and place them into one of the appropriate four receptacles located adjacent to the reject bin.

8.11.12 Clean the sorting conveyor housing and compactor of any loose trash.

8.12 Ram Out of Level Shutdown Recovery**COMPACTOR OPERATOR****CAUTION 1**

A ram out of level occurrence can cause container damage if not corrected.

CAUTION 2

At no other time shall the small Red Pushbutton 'R' on the Dual Level Counter be used other than following this resetting procedure. Doing so can cause serious equipment damage.

NOTE: The compactor control system has a fail safe back-up device, the Dual Level Counter, programmed to shut down the hydraulic system in the event the main control system malfunctions and allows the ram to become out of level.

8.12.1 Press the small Red 'R' Pushbutton on the counter unit to reset display to 0 and enable the hydraulic power unit to be restarted.

8.12.2 Press Green PUMP START Pushbutton on Compactor Control Panel.

8.12.3 Turn RAM MODE Selector Switch to UNISON on Compactor Control Panel.

WARNING

While compactor is in operation, do not attempt to enter compaction chamber to prevent possible injury or death.

8.12.4 Ensure both chamber doors are closed and latched.

3.0 PROCEDURE (cont.)

3.12 Ram Out of Level Shutdown Recovery (cont.)

COMPACTOR OPERATOR (cont.)

- 8.12.5 Press and hold Black RAM ENABLE and Amber UNISON UP Pushbuttons simultaneously.
- 8.12.6 Maintain pressure on RAM ENABLE and UNISON UP Pushbuttons until the two (2) Green LEFT CYLINDER RETRACTED and RIGHT CYLINDER RETRACTED Indicators illuminate.
- 8.12.7 IF the unit shuts down again prior to both Green CYLINDER RETRACTED Indicators illuminating,
THEN repeat 8.12.1 through 8.12.7 until both CYLINDER RETRACTED Indicators have illuminated.

3.13 Extended Period Compaction

NOTE: When material remains in compaction chamber at the time of equipment shut down, the ram can be left fully extended to achieve maximum compaction and deplete material spring-back.

- 8.13.1 Compact materials in accordance with 8.7.6.
- 8.13.2 Following the last cycle, while ram is fully extended under full compaction, turn system key inserted in the POWER Selector Switch to the OFF Position on the Compactor Control Panel.

3.14 Ram Retraction from Extended Period Compaction

- 8.14.1 Apply power to the unit by turning system key inserted in POWER Selector Switch to ON Position on the Compactor Control Panel. The Amber RAM OUT OF LEVEL Indicator will flash intermittently.
- 8.14.2 Apply power to the hydraulic unit by pressing Green PUMP START Pushbutton on the Compactor Control Panel.
- 8.14.3 Turn the RAM MODE Selector Switch to UNISON Position at the Compactor Control Panel.
- 8.14.4 Depress Amber UNISON UP Pushbutton at the Compactor Control Panel until ram has fully retracted and Green LEFT CYLINDER RETRACTED and RIGHT CYLINDER RETRACTED Indicators illuminate. An audible alarm sounds, indicating ram has fully retracted.

8.0 **PROCEDURE** (cont.)8.15 Weekly Scale Check

NOTE: A weekly scale check using the compactor test weight is required to ensure compactor scale accuracy according to FERMCO Maintenance Scale Shop requirements.

COMPACTOR/CONVEYOR OPERATOR

- 8.15.1 Every fifth day of operation, according to the Scale Check Log, insert the compactor scale test weight located at the equipment into the compact chamber.
- 8.15.2 Weigh test weight per 8.7.12 and record weight indicator display on the Scale Test Log.
- 8.15.3 Compare this weight against that which is stenciled on the test weight.
- 8.15.4 IF these weights differ by six lbs.
THEN notify the Supervisor to contact the Maintenance Department.

8.16 Troubleshooting**OPERATOR**

- 8.16.1 IF a problem is encountered with any equipment associated with the compactor operation,
THEN perform a visual inspection of the equipment for obvious solutions to the problem not requiring maintenance support.
- 8.16.2 Address any indicator, alarm, instrument, or gauge reading which appears to indicate an abnormal or out-of specification condition which is outside the scope of Operator troubleshooting as follows:
- A. Stop the operation, equipment, or procedure.
 - B. Place the system, equipment, or facility in a safe operating condition.
 - C. Notify the Supervisor.

SUPERVISOR

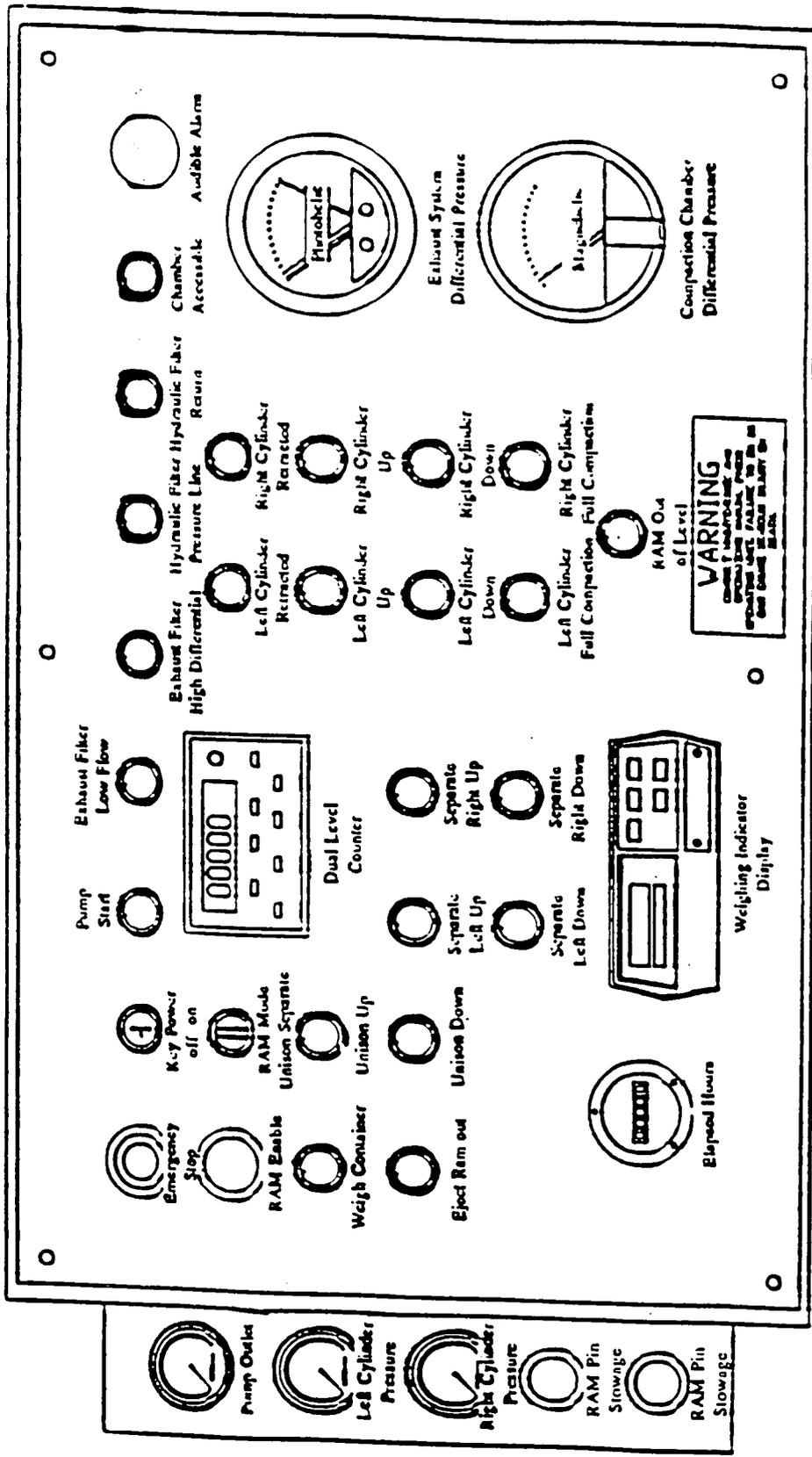
- 8.16.3 Notify Maintenance for repairs.

NTS WASTE STREAM ONLO-00000007 CONTAMINATED TRASH
PROHIBITED ITEMS AND NONCOMPACTIBLES

PROHIBITED ITEMS	EXAMPLES	EXEMPTIONS	WHERE TO GO	NUMBER TO CALL
Asbestos Containing Material	Transite, Pipe Insulation, Floor Tile	.....	.....	Waste Planning (X5684)
Batteries	Auto, Ni-Cad Rechargeable, Lithium or Mercury	Non-rechargeable dry-cell alkaline	Plant 6	RSO Maintenance (X4507)
Compressed Gases and Aerosol Cans (unpunctured)	Spray Paint, Deodorant Cans, Spray Disinfectant Cleaner, WD-40, Propane	.....	Plant 1	Waste Operations (X5689)
Glass	Bottles, Jars, Light bulbs	Pieces less than 2" in length	Plant 1	Waste Operations (X5689)
Lead-bearing Material	Lead metal, Pipe dope, Lead flashing, Oil filters	.....	Satellite Accum. Areas	RSO Maintenance (X4507)
Liquids	Water, Coffee, Ice, Pop, Soaked cloth, paper, etc.	.....	Sink, Sump	.....
Metal	Tools, scrap metal	Pieces less than 2" in length or Compactible wire, cable	Plant 1	Waste Operations (X5689)
Mercury-bearing Material	Switches, Vacuum Pumps	.....	Satellite Accum. Areas	RSO Maintenance (X4507)
Particulate	Ashes, Dust, Pad Sweepings	Volumes less than 1/2 gal. per trash bag 30 gal. or greater	.....	Waste Planning (X5662)
Filters	HHPA, Vacuum cleaner bags/filters, oil filters	Auto, Respirator, General use air filters	Plant 1	Waste Operations (X5689)
Oil/Solvent Soaked Rags	Oil, Kerosene, Toluene, Acetone	.....	Satellite Accum. Areas	RSO Maintenance (X4507)
Cans containing prohibited item residue	Paint cans Oil cans	.....	Plant 1	Waste Operations (X5689)
PPE specifically restricted by a Work Plan	Thorium project anti-C's	.....	Plant 1	Waste Operations (X5689)
Uncontaminated Trash	Green bagged office trash, paper, non-radioactive trash	.....	.....	Waste Planning (X5662)
Wood	Pallets, lumber	1. Less than 1 foot in length and 2. Free of creosote, residue, stains, lead based paint	Plant 1	Waste Operations (X5689)

Prohibited items should be disposed of at the location listed above, through the appropriate point of contact. For any questions, contact Waste Programs Management at X4606.

COMPACTOR CONTROL PANEL



COMPACTOR CONTROL PANEL
Figure 1 (Sheet 1 of 5)

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COMPACTOR CONTROLS

1. **EMERGENCY STOP (RED MUSHROOM PUSHBUTTON)**
Immediately halts operation of the compactor. Does not de-energize control power. To operate depress with palm of hand.
2. **POWER SWITCH (SELECTOR SWITCH)**
Energizes control power to the console. Insert the system key and turn clockwise. To de-energize control power, turn the key counterclockwise. Remove key as means of locking out control power to the compactor.
3. **PUMP START (GREEN PUSHBUTTON/INDICATOR)**
Starts the hydraulic pump motor. Depress pushbutton and integral green indicator lights, indicating motor is operating. To stop the pump, press the EMERGENCY STOP Pushbutton.
4. **EXHAUST FILTER LOW FLOW (RED INDICATOR)**
Indicates the exhaust airflow from the chamber is inadequate. A continuous audible alarm will sound. If the chamber access doors are closed, they will lock at that time. De-energize the KEY POWER Selector Switch and correct the airflow problem.
5. **EXHAUST FILTER HIGH DIFFERENTIAL (RED INDICATOR)**
Indicates the exhaust system pre-filters and/or HEPA filters should be changed. In this condition, no other alarm will be energized.
6. **HYDRAULIC FILTER PRESSURE LINE (BLUE INDICATOR)**
Indicates the hydraulic system pressure line filters should be serviced. In this condition, no other device or alarm will be energized.
7. **HYDRAULIC FILTER RETURN (BLUE INDICATOR)**
Indicates the hydraulic system return line filter requires servicing. In this condition, no other devices or alarms will be energized.
8. **CHAMBER ACCESSIBLE (GREEN INDICATOR)**
Indicates the chamber access doors are electrically unlocked and accessible.
9. **RAM ENABLE (BLACK PUSHBUTTON)**
A safety device to energize all compaction ram controls. Used in conjunction with the following controls:

Unison Up
Unison Down
Left Up
Left Down
Right Up
Right Down

COMPACTOR CONTROLS (cont.)

10. RAM MODE (SELECTOR SWITCH)
Selects the mode of ram operation. In the Unison Mode, the UNISON UP and UNISON DOWN Pushbuttons operate the compaction ram by moving the left and right hydraulic cylinders in unison.

In the Separate Mode, the LEFT UP, LEFT DOWN, RIGHT UP and RIGHT DOWN Pushbuttons operate the compaction ram by moving the left and right hydraulic cylinder independent of each other. It should be noted that each cylinder will move only one inch independent of the other, prior to stopping automatically, even though the Up or Down Pushbutton remains depressed. At that time, the Amber OUT OF LEVEL indicator will light and the opposite cylinder may be moved in the sample direction. (See 8.6)
11. UNISON UP (AMBER PUSHBUTTON/INDICATOR)
Simultaneously retracts both ram cylinders. Can only be used with the RAM MODE Selector Switch in the UNISON position.
12. UNISON DOWN (AMBER PUSHBUTTON/INDICATOR)
Moves both ram cylinders down simultaneously. Can only be used with the RAM MODE Selector Switch in the UNISON Position.
13. SEPARATE LEFT UP (AMBER PUSHBUTTON/INDICATOR)
Retracts the left ram cylinder. The amber light in the pushbutton indicates that the left cylinder can be operated or moved downward. Can only be used with the RAM MODE Selector Switch in the SEPARATE Position.
14. SEPARATE LEFT DOWN (AMBER PUSHBUTTON/INDICATOR)
Moves the left ram cylinder down. The amber light in the pushbutton indicates that the right cylinder can be operated or moved downward. Can only be used with the RAM MODE Selector Switch in the SEPARATE Position.
15. SEPARATE RIGHT UP (AMBER PUSHBUTTON/INDICATOR)
Retracts the right ram cylinder. The amber light in the pushbutton indicates that the left cylinder can be operated or moved upward. Only used with RAM MODE Selector Switch in the SEPARATE Position.
16. SEPARATE RIGHT DOWN (AMBER PUSHBUTTON/INDICATOR)
Move the right ram cylinder down. The amber light in the pushbutton indicates that the right cylinder can be operated or moved downward. Only used with the RAM MODE Selector Switch in the SEPARATE Position.
17. WEIGHT CONTAINER (BLACK PUSHBUTTON)
Energizes the compactor scale load cells in the floor of the compaction chamber. The load cells rise to lift the container, thus weighing it. The red light in the pushbutton indicates the load cells are in the raised position. When released, the load cells automatically retract, lowering the container back to the compactor floor. Only used when the compaction ram is fully retracted.

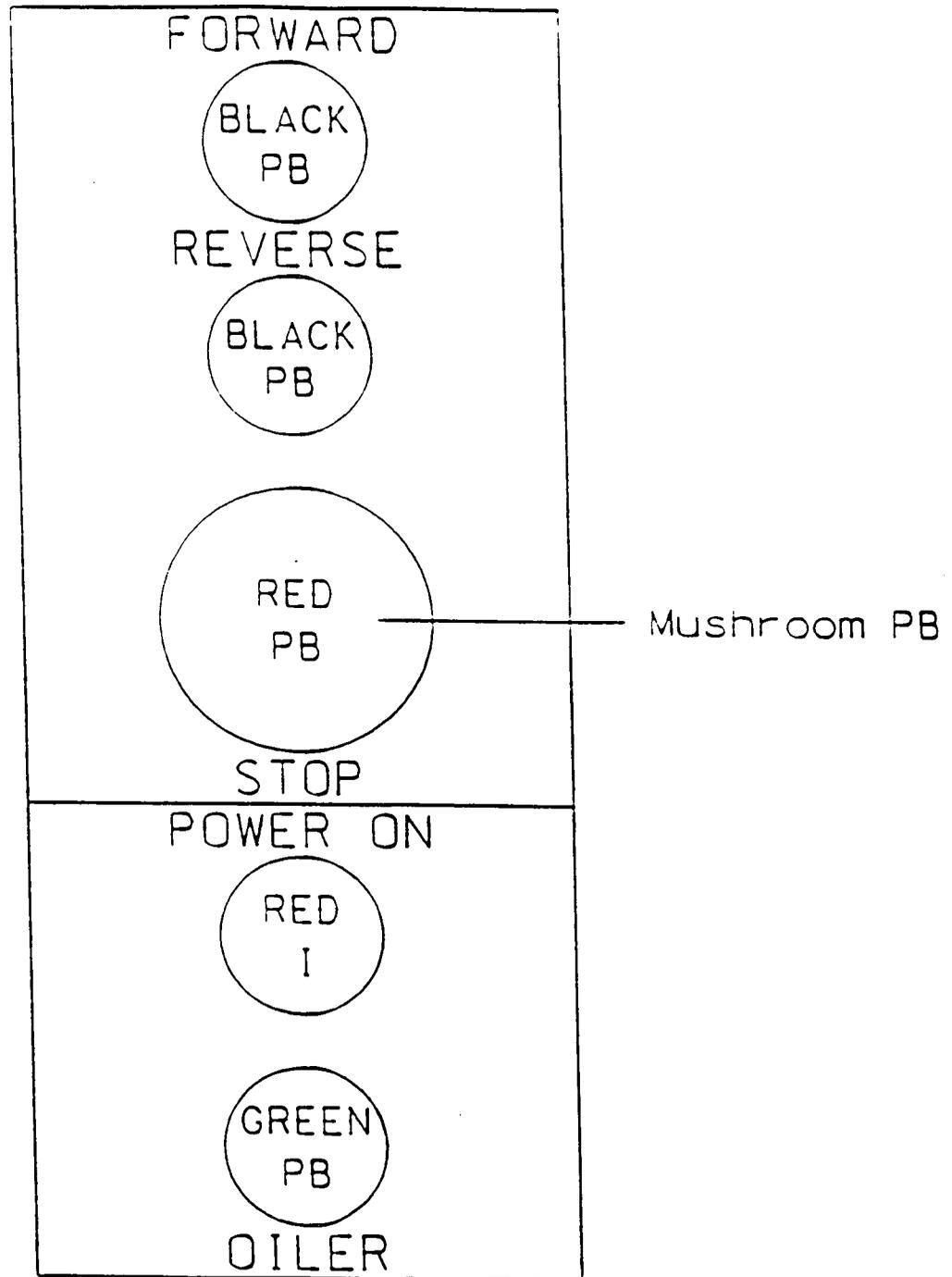
: COMPACTOR CONTROLS (cont.)

18. EJECT RAM OUT (YELLOW PUSHBUTTON/INDICATOR)
Extends the ejection ram, which pushed the container into a handling position for removal from the compaction chamber. The amber light in the pushbutton indicates the ejection ram is fully or partially extended, or not fully retracted. Only used when both chamber access doors are open and the compaction ram is full retracted.
19. LEFT CYLINDER RETRACTED (GREEN INDICATOR)
Indicates the left ram cylinder is full retracted.
20. LEFT CYLINDER MOVING UP (RED INDICATOR)
Indicates the left ram cylinder is moving upward. If the ram stops, the indicator goes out.
21. LEFT CYLINDER MOVING DOWN (RED INDICATOR)
Indicates the left ram cylinder is moving down. If the ram stops, the indicator goes out.
22. LEFT CYLINDER FULL COMPACTION (AMBER INDICATOR)
Indicates the left cylinder is fully extended or is exerting maximum force.
23. RIGHT CYLINDER MOVING UP (GREEN INDICATOR)
Indicates the right ram cylinder is fully retracted when lit.
24. RIGHT CYLINDER MOVING UP (RED INDICATOR)
Indicates the right ram cylinder is moving down when lit. If the ram stops, the indicator goes out.
25. RIGHT CYLINDER MOVING DOWN (RED INDICATOR)
Indicates the right ram cylinder is moving down when lit. If the ram stops, the light goes out.
26. RIGHT CYLINDER FULL COMPACTION (AMBER INDICATOR)
Indicates the right cylinder is fully extended or is exerting maximum force.
27. RAM OUT OF LEVEL (AMBER BLINKING INDICATOR)
Indicates the ram is out of level, exceeding the maximum tolerance programmed into the system. When this happens with the ram mode Selector Switch in the Unison mode, the ram will stop automatically and can be operated in the Separat mode of operation.
28. DUAL LEVEL COUNTER
A backup safety device to the main control system, programmed to monitor and display the difference of position in counts between the left and right ram cylinders. Each count indicates the cylinders are out of level .004". Thus if the counter displays "250", the RAM is out of level one (1) inch across its length. The unit is programmed to shut down the hydraulic system if the maximum out of level tolerance is reached or exceeded.

COMPACTOR CONTROLS (cont.)

29. ELAPSED HOURS METER
Used for periodic maintenance scheduling. Displays elapsed hours of operation of the hydraulic power unit.
30. WEIGHING INDICATOR DISPLAY
Displays the weight of the container once the WEIGH CONTAINER Pushbutton has been pressed.
31. EXHAUST SYSTEM DIFFERENTIAL PRESSURE GAUGE
Displays the differential pressure across the exhaust filters. Sets the low flow alarm and height differential alarm.
32. COMPACTION CHAMBER DIFFERENTIAL PRESSURE GAUGE
Displays the pressure differential between the compaction chamber interior and exterior in static pressure.
33. PUMP OUTLET PRESSURE GAUGE
Displays the hydraulic pump output pressure in PSI.
34. LEFT CYLINDER PRESSURE GAUGE
Displays the hydraulic pressure delivered to the left ram cylinder in PSI on down stroke.
35. RIGHT CYLINDER PRESSURE GAUGE
Displays the hydraulic pressure delivered to the right ram cylinder in PSI on down stroke.
36. RAM PIN STOWAGE
Used to stow the ram locking pins when not in use.

FEED CONVEYOR CONTROL PANEL



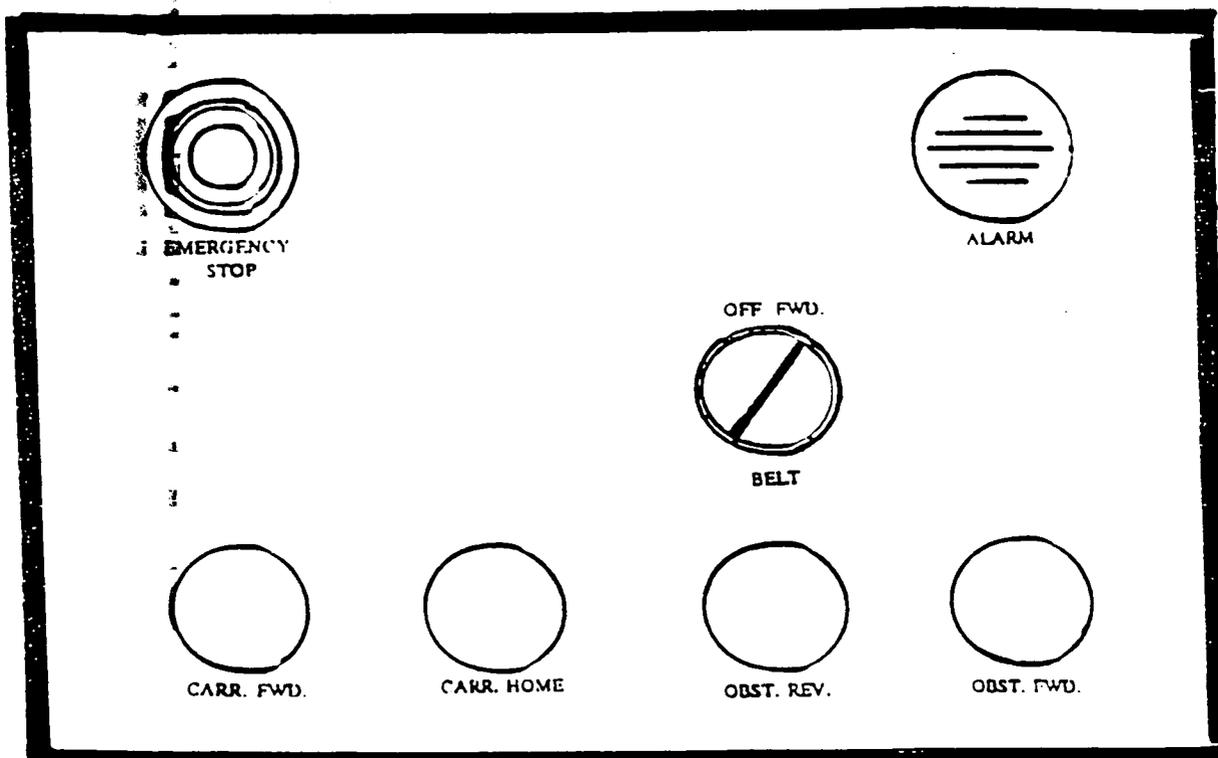
FEED CONVEYOR CONTROL PANEL

PB=Push Button
I=Indicator

FEED CONVEYOR CONTROLS

1. **FORWARD (BLACK PUSHBUTTON)**
Advances the Feed Conveyor to convey material from the receiving bin to the storage conveyor.
2. **REVERSE (BLACK PUSHBUTTON)**
Reverses the Feed Conveyor toward the receiving bin.
3. **STOP (RED MUSHROOM PUSHBUTTON)**
Immediately halts operation of the Feed Conveyor Does not de-energize control power. Activate with palm of hand.
4. **POWER (RED INDICATOR)**
Indicates the control panel is energized.
5. **OIL (GREEN PUSHBUTTON)**
Applies oil to the conveyor belt.

SORTING CONVEYOR CONTROL PANEL



SORTING CONVEYOR CONTROL PANEL
Figure 3 (Sheet 1 of 2)

000034

SORTING CONVEYOR CONTROLS

1. EMERGENCY STOP (GREEN PUSHBUTTON)
Immediately halts operation of the Sorting Conveyor. Does not de-energize control power. Depress with palm of hand.
2. BELT (SELECTOR SWITCH)
Controls the forward movement of the Sorting Conveyor belt. To advance the conveyor, turn switch clockwise to the FWD position. To stop the conveyor, turn switch counterclockwise to the OFF position.
3. CARR. FWD. (WHITE INDICATOR)
Indicates conveyor carriage is extended into the compaction chamber.
4. CARR. HOME (WHITE INDICATOR)
Indicates conveyor carriage is retracted towards home position.
5. OBST. FWD. (RED INDICATOR)
Indicates Sorting Conveyor carriage is obstructed while being advanced.
6. OBST. REV. (RED INDICATOR)
Indicates Sorting Conveyor carriage is obstructed while being retracted.
7. CARRIAGE (FOOT PEDAL)
Controls the movement of the Sorting Conveyor carriage in and out of the compaction chamber. To extend the conveyor carriage, depress toe of foot pedal. To retract conveyor carriage, depress heel of foot pedal.

CARD 65-1 ITEM PRODUCTION/CERTIFICATION/IDENTIFICATION

INV. NO.:

P. O. NO.	SOURCE	CLASS	MATERIAL TYPE	LOT SEQUENCE NO.	DATE			SHIFT	BADGE NO.	CONT. NO.	SERIAL NO.
					MO	DAY	YEAR				
SEAL NUMBER		SEAL DATE		PACKAGE PHYSICAL CERTIFICATION			PLANT	PROD. MBA	REF NO.		
		MONTH | DAY | YEAR		YES NO							
				EMPTY CONTAINER AT START							
				RUST HOLES OR DENTS							
				MATERIAL IS AS CODED			DCAR	SURV. NO.	GROSS WEIGHT		
				PROHIBITED MATERIALS							
				LIQUIDS IN CONTAINER							
				MINIMUM OF VOID SPACE							
PACKAGE TYPE				PACKAGE SECURED					TARE WEIGHT		
PACKAGE SIZE				DRAIN PLUG SECURED							
PROJECT				OVERPACK							
				REPACK					NET WEIGHT		

GENERATOR SIGNATURE
FS-F-1945-1 (REV. 11/20/82)

SUPERVISOR SIGNATURE DATE

EXAMPLE OF
ITEM PRODUCTION/CERTIFICATION/IDENTIFICATION
FS-F-1945-XX
Figure 4

000036

ACCEPTED BY QA FOR
IMMEDIATE COMPACTION

Control No.

NO HAND SORTING REQUIRED

QA SIGNATURE DATE

EXAMPLE OF
QA Compaction Sticker
Form FS-F-4448
Figure 5

000037

RECORD OF ISSUE/REVISIONS

<u>DATE</u>	<u>REV. NO.</u>	<u>DESCRIPTION AND AUTHORITY</u>
10-20-94	0	Procedure required for preparing LLRW off-site shipment documentation per Request No. P94-0311, initiated by D. Russell.
06-05-95	0	Reissue procedure to comply with current program requirements and to conform to the established document format, per Request No. P95-0198, initiated by D. Russell.
02-12-96	1	Procedure revised to incorporate operational changes and format changes to comply with program requirements per request No. P95-0435, initiated by D. Russell

000042