

12/21/2005

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EFFECTIVE DATE	PCN NO.	REV. NO.	DESCRIPTION
03-23-05	2	1	<p>Changes to: (1) Section 1.4.3, <i>Silo 3 Material Retrieval and Packaging Activities</i>, to describe the in-line automatic samplers installed above Packaging Stations A and B; (2) Section 10.4, <i>Derivation of Safety Basis Requirements</i>, to make text consistent with PR-3; (3) Appendix B, under <i>Executive Summary</i>, and Sections B-3.2.3 and B-3.3, to change facility designation from Radiological to Less Than Nuclear; (4) Section, B-4.0, <i>Final Hazard Category</i>, to clarify purpose of Appendix G, and to change facility designation from Radiological to Less Than Nuclear; (5) Appendix F (FHA), on Pages 8, 16, 18, and 21, to remove the word "DELETION" left over from a previous PCN; (6) Appendix G, <i>Accident Analysis</i>, under Section G-2.3, <i>Common Assumptions</i>, to explain the calculated bulk density of 73 lb/ft³ used in EBA-4; (7) Section G-3.4, <i>EBA-4: Breach of Full Package</i>, to discuss the calculated bulk density of 73 lb/ft³; (8) Table G.3-4, <i>Breach of a Full Package Scenario Results</i>, to provide new dose values; (9) Section G-3.7, <i>EBA-7: ISO Penetrated</i>, to clarify ISO staging; (10) Table G.4-1, <i>Dose for Comparison to Emergency Guideline</i>, to provide new dose values for EBA-4; (11) Table G.4-2, <i>Dose for Comparison to Emergency Guideline Using Conservative Assumptions</i>, to provide new dose values for EBA-4; (12) App. G, Att. 4, <i>EBA-4 Spreadsheet, EBA-4 Solids Release</i>, to provide new dose values based on calculated bulk density of 73 lb/ft³.</p>
04-15-05	3	1	<p>Changes to: (1) Section 1.4.3, <i>Silo 3 Material Retrieval and Packaging Activities</i>, under <i>Preliminary Pneumatic Retrieval and Equipment Installation</i>, to make past tense and to delete references to vacuum wand boots; and under <i>Routine Pneumatic Retrieval</i>, to delete discussions of vacuum wand boots; (2) Table 10-1, <i>Silo 3 System Safety Requirements</i>, to delete PR-4 regarding the flexible boots on the vacuum wands per DCN 40430-JEG-277 and DCN 40430-JEG-278; (3) Section 10.4, <i>Derivation of Safety Basis Requirements and Process Requirements</i>, to explain deletion of PR-4.</p>

EFFECTIVE DATE	PCN NO.	REV. NO.	DESCRIPTION
05-24-05	4	1	Change to: (1) Section 16.0, <i>Emergency Response Plan</i> , to reflect replacement of landline phones with cell phones, elimination of the Communications Center, and clarification of Silos Project rally points; (2) Appendix F, <i>Fire Hazards Analysis</i> , to reflect replacement of land line phones with cell phones, and the replacement of the Savannah Communications Center monitoring system with local Protected Premises alarms.
07-07-05	5	1	Change to: (1) Section 10.3, <i>Silos Project Technical Safety Requirement (TSR)</i> , to specify new maximum values for area live loads and concentrated live loads; (2) Section 16.0 <i>Emergency Response Plan</i> , to change location of Rally Point 10; (3) Section 20, <i>References</i> , to update reference information for the OU4 TSR document.
08-31-05	6	1	Change to: (1) Section 1.4.3, <i>Silo 3 Material Retrieval and Packaging Activities</i> , to clarify that remote retrieval may require personnel entry into the Silo.
09/22/05	7	1	Change to (1) Section 7.0 <i>Hazards Assessment</i> to add Task 17, "Personnel Entry into Silo for excavator maintenance, ramp installation, material retrieval, etc", (2) Section 9.0 <i>Hazards Control Matrix</i> Table 9-1, to revise Task 15 "Cutting a Hole in the Silo 3 Wall Structure" to reflect current documentation (3) Section 9.0 <i>Hazards Control Matrix</i> Table 9-1, to add hazards from new Task 17. (4) Appendix A Section A-1.1, <i>Scope</i> , to clarify that Appendix A does not address wall cutting and personnel entry, these hazards are addressed in the OWI and in Section 9.
12/07/05	8	1	Change to (1) Sections 1.4, 1.4.1, 1.4.3, to add manual direct loading to descriptions, (2) Section 7.0 <i>Hazards Assessment</i> to add Task 18, "Direct Manual Loading Tasks (material retrieval and movement, bag placement, sampling, surveying)", (3) Section 9.0 <i>Hazards Control Matrix</i> Table 9-1, to add hazards from new Task 18, (4) Section 10.2, Table 10-1, <i>Silo 3 System Safety Requirements</i> , added PR-9 requiring HVAC and PVS for direct loading, (5) Appendix A, Table A.3-4 <i>Matrix of Tasks</i> , and Table A.4-1 <i>Final Hazard Assessment</i> to address Task 18, (6) Appendix D, added Section D-5.4 and Table 5-2 to address Direct Manual Loading, (7) Appendix F, (8) Appendix G, Section G-2.0 <i>Accident Analysis Methods</i> to discuss direct manual loading potential accidents, (9) Appendix H, Sections H-2.0 <i>General Description</i> and H-5.1 <i>Engineering Controls</i> , to add manual direct loading and delete obsolete portions.
12/21/05	9	1	Change to (1) Section 1.4.3, to clarify manual direct loading

The filled containers will be moved into the excavator maintenance room for closure of the two inner liners, and decontamination of the container and loading frame. The container, still in the loading frame, will be transported through the Direct Loadout Connector Building into the Cargo Bay. There the container will be lifted out of the frame using the bridge crane, the outer layer sealed, and the package placed on a skid. All movements of containers and frames in the Excavator Building and in the Direct Loadout Connector Building will be accomplished through use of a battery powered forktruck. No liquid additives will be added to the material unless required for dust control.

The containers and frames to be used will be the same 96 cubic foot, double layer, coated woven polypropylene soft-sided packages, with two 6-mil poly liners rather than the 30-mil PVC inner liner. The change in the liner thickness does not prevent the package from meeting the requirements for an IP-2 container. There is a small inventory of bags that are not IP-2 rated. If any of these non IP-2 bags are used, or if any of the approved IP-2 containers fail to meet specs after loading/sealing, then the shipping ISO will be a certified IP-2 rated container.

During material loading into the containers, one operator will be inside the front-end loader; otherwise the excavator room will be unoccupied. To minimize airborne contamination, loading will occur in a ventilated containment enclosure. Approximately three other operators will be in PPE stationed inside the excavator maintenance room for immediate entry into the excavator room or silo, if needed. The outer roll-up door may be positioned slightly opened, or other means may be employed, to maximize airflow velocity into the maintenance bay. This action will take place prior to opening the inner roll-up door. The empty soft-sided container inside a loading frame will be moved into a ventilated Filling Station inside the Excavator Room using the electric fork truck. Once inside the Filling Station, the rear doors on the Filling Station will be closed and the inner roll-up door will be closed.

After the container is filled, the inner roll-up door will be opened, the Filling Station doors will be opened and an operator will perform gross cleanup of the frame. The container will be moved out of the Filling Station to the full container preparation area in the Excavator Service Room and another empty container placed into the Filling Station. Once in the full container preparation area, a sample will be obtained and the two inner liners will be closed, followed by final decontamination of the container and frame.

The containers will then be lifted out of the frame, RCT's will perform a swipe and dose rate survey, and the containers will be placed in the sealand package for shipment. The sealand package will then be closed, surveyed, and staged for shipment.

Various combinations for material retrieval will be utilized as needed. For example, the Bobcat Loader may be used in a fashion similar to the excavator, to transfer material to the conveyor system for loading by the original packaging station. Manual manipulation of the pneumatic retrieval vacuum wand by an operator may take place inside the silo.

PCN8

PCN9

On-site Transportation and Staging

The on-site transportation process will be the same used for all FCP operations. The Silo 3 waste shippers will become part of the Silo 3 Project. Silo 3 waste material will be transported to an off-site disposal facility by truck. IP-2 containers of Silo 3 material may need to be moved, by forklift, on a pallet to other areas of the site for various activities such as assay.

Prior to shipping, trucks will be staged. Staging consists of container management, which includes completion of shipping paperwork for waste disposition. Containers meet DOT requirements for shipping and will be handled in accordance with DOT shipping requirements. Between 15 and 20 trucks will leave the site weekly. This is similar to other off-site shipment schedules prior to this project. Because there may be delays in shipping, plans are being developed and evaluated to stage ISOs on site beyond the time period needed to complete shipping paperwork. If the entire Silo 3 contents need to be staged, as many as 273 ISOs (each containing 7 or 8 filled IP-2 containers) could be staged on site.

Staging is assumed to be in an outdoor location. Maximum duration for staging will be administratively controlled as six months. In addition to the ISA pad, staging areas include, but are not limited to, the former site of Silo 4 (now demolished), the area south of Silo 1, the silos lay-down area along the entry road, and various other on-site areas. All areas where Silo 3 material will be loaded and staged pending the completion of shipment will be within the site fence and provided with appropriate levels of security and lighting. FCP Security monitors site access by using stationary posts and walking/driving/perimeter patrols on a 24-hour basis.