

Exhibit C.13 – RH-TRU Hot Cell Equipment Upgrades

NOTE: The projects in this exhibit are currently not included in the base scope but may be ordered pursuant to Section I.81, Changes Clause.

	Facility	System	Description	Justification
PBS-0013				
1	CPP-666	FDP Cell Master Slave Manipulators	Procure 6 master slave manipulators (FY13) and install air manifolds to support new manipulators. Manipulators are critical spares used for replacement of existing manipulators in cell main operating area.	End of Service Life and Obsolete – Manipulator failures will directly impact waste processing operations schedule in CPP-666.
2	CPP-666	Waste Load Out Master Slave Manipulators	Procure 3 master slave manipulators (FY13) and install air manifolds to support new manipulators. Manipulators are critical spares used for replacement of existing manipulators in waste load-out area.	End of Service Life and Obsolete – Manipulator failures will directly impact waste processing operations schedule in CPP-666.
3	CPP-666	FDP Cell Crane Replacement Motors and Control Upgrades	Procure and install new electrical control system, motor controllers, and drive components for FDP cell crane.	End of Service Life – Existing motors and controls are obsolete. Crane failure will directly impact waste processing operations schedule in CPP-666.
4	CPP-666	FDP Cell Master Slave Manipulators Spare Parts	Procure critical spare parts for existing manipulators such as Boots, retrofitted controllers, hands, grips etc.. Incorporated with Modification 241	Critical spare parts for existing installed equipment. Lack of spare parts will could directly impact waste processing operations schedule in CPP-666.
5	CPP-666	FDP Cell	Install new portable power distribution board supporting electrical service to in-cell equipment.	End of Service Life. Equipment failure would directly impact waste processing operations schedule in CPP-666.
6	CPP-666	FDP Cell	Remove the old abandoned crane system electrical control wiring.	Equipment Obsolete. The old radio control system wiring was abandon in place. The zone and anti-collision systems have been disabled due to intermittent failures. This causes many hours of trouble shooting to find problems as the as-built drawings are non-existent. This activity would remove the old

				wiring and clean up the control cabinets.
7	CPP-666	FDP Cell	Procure and install remote camera/video system upgrade in FDP Cell.	Existing equipment is at end of service life due to deterioration from radiation exposure. Camera system failure will directly impact process operations schedule in CPP-666.
8	CPP-666	FDP Cell Master Slave Manipulators	Procure 11 master slave manipulators (FY14) and install air manifolds to support new manipulators. Manipulators are critical spares used for replacement of existing manipulators in cell main operating area.	End of Service Life and Obsolete – Manipulator failures will directly impact waste processing operations schedule in CPP-666.
9	CPP-666	Waste Load Out Master Slave Manipulators	Procure 3 master slave manipulators (FY14) and install air manifolds to support new manipulators. Manipulators are critical spares used for replacement of existing manipulators in waste load-out area.	End of Service Life and Obsolete – Manipulator failures will directly impact waste processing operations schedule in CPP-666.
10	CPP-666	FDP Cell PaR	Procure and install PaR master slave M3000. This scope removes the existing PaR Manipulator and installs a new one (M3000) with trolley onto the existing bridge and run ways.	End of Service Life. Obsolete – No spare parts available. PaR failure will directly impact waste processing operations schedule in CPP-666.
11	CPP-659	Argon Repackaging System	Fabricate and install an argon repackaging and immersion testing system in the Decontamination Hot Cell at CPP-659 to allow repackaging of reactive waste. This modification may also include Permit and Authorization Basis modifications.	This will allow repackaging of Lot 2 waste in CPP-659 if the facility is deemed appropriate for that work.