Appendix D

Piping List and Associated Equipment

Appendix D
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Tables D-1 through D-4 list the piping associated with Tanks WM-182 and WM-183, and describe past use, point of origin and termination, and function. Tables D-1 and D-2 list the piping that must be decontaminated for Hazardous Waste Management Act/Resource Conservation and Recovery Act closure for Tanks WM-182 and WM-183, respectively. Tables D-3 and D-4 list the piping that has hazardous waste for Tanks WM-182 and WM-183, respectively. These pipes will be taken out of service, but decontamination is unnecessary.

Table D-1. Piping requiring decontamination for Tank WM-182.

Number	Description	Point of Origin	Point of Termination	Material	Comments
2” PUA-652 [2” PWA-652]	Process waste	CPP-721 PIT, From Tank WM-382 through a 4” × 2” eccentric reducer attached to HE-WM-382	VES-WM-182	Schedule 40, seamless or welded, 347 SST or 304L SST	2” PUA-652 comes from Tank WM-382 and goes to a 4” × 2” eccentric reducer located inside CPP-721, then travels in a concrete encasement to CPP-782. After 2” PUA-652 penetrates CPP-782, it rises upward 1' and connects to VES-WM-182. ½” PUA-647 and ½” PUA-626 connect into the top of PUA-652 at WM-182.
½” PUA-626	Process drain	10” VGA-604	2” PUA-652	Schedule 40, seamless or welded, 347 SST or 304L SST	Ties into 2” PUA-652 prior to Tank WM-182.
1” PUA-643	Process drain	Trench for 10” VGA-604	North Sump SR-18 of CPP-782	Schedule 40, seamless or welded, 347 SST or 304L SST	Drain line for trench. Line 1” PUA-644 ties into this line prior to sump.
1” PUA-644	Process drain	Trench for 10” VGA-603	1” PUA-643	Schedule 40, seamless or welded, 347 SST or 304L SST	Drain line for trench. Line 1” PUA-645 ties into this line prior to 1” PUA-643.
1” PUA-645	Process drain	Trench for 2” PUA-652	1” PUA-644	Schedule 40, seamless or welded, 347 SST or 304L SST	Drain line for trench.
3” PUA-602 [PWA-602]	Process waste	Transition to 3” PUA-1030 w/in Valve Box DVB-WM-PW-A6	VES-WM-182	Schedule 40, seamless or welded, 347 SST or 304L SST	Pipeline begins in Valve Box A6 and passes through A5, where 3” PWA-610 connects to it before terminating in VES-WM-182.
3” PUA-601 [PWA-601] Abandoned	Process waste	DVB-WM-PL-A6, capped pipeline end	VES-WM-182	Schedule 40, seamless or welded, 347 SST or 304L SST	This line is capped inside Valve Box A6. 3” PWA-609 from Tank WM-183 is connected to this line in Valve Box A-5.
3” PUA-604 [PWA-604]	Process waste	1” CA-604 (southeast of concrete encasement and South of DVB-WM-PW-C6)	VES-WM-182	Schedule 40, seamless or welded, 347 SST or 304L SST	3” PUA-604 is a spare line that is capped and has a decon stub installed above grade level 1” CA-604 (southeast of VES-WM-182 and south of DVB-WM-PW-C6) to flush out pipe.
1” CA-604	Decontamination line	Above grade hose connection southeast of VES-WM-182	3” PUA-604		Connects to 3” PUA-604 thru Valve DCV-155.

Table D-1. (continued).

Number	Description	Point of Origin	Point of Termination	Material	Comments
3” PUA-621	Carries process waste from tank VES-WM-182 to VES-WM-183 in a concrete enclosure for overflow purposes	VES-WM-182	VES-WM-183	Schedule 40, seamless or welded, 347 SST or 304L SST	Pipeline encased in concrete as it leaves CPP-782. No valves, tees, etc. in this line. Line is encased in a concrete encasement.
3” PUA-620	Carries process waste from tank VES-WM-182 to VES-WM-183 in a concrete enclosure for overflow purposes	VES-WM-182	VES-WM-183	Schedule 40, seamless or welded, 347 SST or 304L SST	Pipeline encased in concrete as it leaves CPP-782. No valves, tees, etc. in this line. Line is encased in a concrete encasement.
2” PUA-1033 Encased in 4” pipe	Process waste	Inside VES-WM-182 (Tank Riser 19) Jet WM-582-1A	3” PUA-1033 in DVB-WM-PW-C2, PUV-WM-116	Schedule 40, seamless or welded, 347 SST or 304L SST	
2” PUA-1099 Encased in 4” pipe	Process waste	Inside VES-WM-182 (Tank Riser 20) Jet WM-582-1B	3” PUA-1033 in DVB-WM-PW-C2, PUV-WM-115	Schedule 40, seamless or welded, 347 SST or 304L SST	
1½” WS-A-601 to 630	Cooling solution supply	CPP-628 cooling solution supply manifold 6” WS-N-152735	VES-WM-182 cooling coils	Carbon steel in CPP-628, then changes to stainless steel to VES-WM-182	Supplies cooling solution to Tank WM-182.
1½” WR-A-601 to 630	Cooling solution return	VES-WM-182 cooling coils	CPP-628 cooling solution return manifold 6” WR-N-152735	Stainless steel from VES-WM-182, then changes to carbon steel in CPP-628	Returns cooling solution to CPP-628.
2” PU-A-624	Process waste	CPP-182 north sump SR-18	VES-WM-182	Schedule 40, seamless or welded, 347 SST	Connects to Jet-WM-530 at sump and routes to Tank WM-182.
2” PU-A-625	Process waste	CPP-182 North Sump SR 18	Jet-WM-530	Schedule 40, seamless or welded, 347 SST	Suction line from sump that connects to Jet-WM-530.
2” PU-A-622	Process waste	CPP-182 South Sump SR 19	VES-WM-182	Schedule 40, seamless or welded, 347 SST	Connects to Jet-WM-531 at sump and routes to Tank WM-182.
2” PU-A-623	Process waste	CPP-182 South Sump SR 19	Jet-WM-531	Schedule 40, seamless or welded, 347 SST	Suction line from sump that connects to Jet-WM-531.

Table D-1. (continued).

Number	Description	Point of Origin	Point of Termination	Material	Comments
1¼" PLA-104701 Encased in 3" pipe	Process drain	CPP-782 (sump riser 19), Jet WM-582-4	1½" PLA-104701 in DVB-WM-PW-C6, PLV-WM-1	Schedule 40, seamless or welded, 347 SST or 304L SST	1¼" PLA-104701 was installed after initial CPP-782 construction. 1¼" PLA-104701 is encased with a 3" pipe encasement.
1½" PU-A-xxx	Process waste	CPP-182 South Sump SR 19	Jet-WM-582-4	Schedule 40, seamless or welded, 347 SST	Suction line from sump that connects to Jet-WM-582-4.
1" PU-A-646	Process drain	Sump in pipe trench	CPP-782 South Sump SR 19	Schedule 40, seamless or welded, 347 SST	This line drains sump in pipe trench for line 3" PU-A-601, 602, 604.
½" CA-603/613	Decontamination line	Abovegrade connection	10" VG-A-604	Schedule 40, seamless or welded, 347 SST	Above-grade connection east of CPP-721 that can be used to decontaminate line 604.
10" VG-A-604	Vessel off-gas	VES-WM-182 center manway	HE-WM-382 in CPP-721	Schedule 40, seamless or welded, 347 SST	This line connects to the heat exchanger inside CPP-721.
1" PU-A-653	Process drain	Sump in pipe trench (*Note:* serves both tanks)	CPP-783 South Sump SR 21	Schedule 40, seamless or welded, 347 SST	This line drains sump in pipe trench for line 3" PU-A-605, 607, and 608.

Table D-2. Piping requiring decontamination for Tank WM-183.

Number	Description	Point of Origin	Point of Termination	Material	Comments
2” PUA-655 [2” PWA-655]	Process waste	CPP-722 PIT, from Tank WM-383 through a 4” × 2” eccentric reducer attached to HE-WM-383	VES-WM-183	Schedule 40, seamless or welded, 347 SST or 304L SST	2” PUA-655 comes from Tank WM-383 and goes to a 4” × 2” eccentric reducer located inside CPP-722, then travels in a concrete encasement to CPP-783 and connects to VES-WM-183. ½” PUA-656 and ½” PUA-627 connect into the top of 655 at Tank WM-183.
½” PUA-627	Process drain	10” VGA-601	2” PUA-655	Schedule 40, seamless or welded, 347 SST or 304L SST	Ties into 2” PUA-655 prior to Tank WM-183
1” PUA-648	Process drain	Trench for 10” VGA-602	CPP-783 North Sump SR-20 JET-WM-533	Schedule 40, seamless or welded, 347 SST or 304L SST	Drain line for trench. Line 1” PUA-650 ties into this line prior to sump.
1” PUA-650	Process drain	Trench for 10” VGA-601	1” PUA-648	Schedule 40, seamless or welded, 347 SST or 304L SST	Drain line for trench. Line 1” PUA-649 ties into this line prior to 1” PUA-648.
1” PUA-649	Process drain	Trench for 2” PUA-655	1” PUA-650	Schedule 40, seamless or welded, 347 SST or 304L SST	Drain line for trench.
3” PUA-609 [PWA-609] Abandoned	Process waste	3” PU-A-601 (abandoned) w/in Valve Box DVB-WM-PW-A5	VES-WM-183	Schedule 40, seamless or welded, 347 SST or 304L SST	Pipeline begins in Valve Box A5 as tie to 3” PUA-601 (through Valve PUV-WM-8) before terminating in VES-WM-183.
3” PUA-610 [PWA-610]	Process waste	3” PU-A-602 w/in Valve Box DVB-WM-PW-A5	VES-WM-183	Schedule 40, seamless or welded, 347 SST or 304L SST	Pipeline begins in Valve Box A5 as tie to 3” PUA-602 (through Valve PUV-WM-8) before terminating in VES-WM-183.
3” PUA-621	Process waste	VES-WM-182	VES-WM-183	Schedule 40, seamless or welded, 347 SST or 304L SST	No valves, tees, etc., in this line.
3” PUA-620	Process waste	VES-WM-182	VES-WM-183	Schedule 40, seamless or welded, 347 SST or 304L SST	No valves, tees, etc., in this line.
2” PUA-1098 Encased in 4” pipe	Process waste	Inside VES-WM-183 Tank Riser 13 Jet-WM-583-1A	3” PUA-1035 in DVB-WM-PW-C5, PUV-WM-122	Schedule 40, seamless or welded, 347 SST or 304L SST	Ties to 3” PUA-1035 in Valve Box C5.
2” PUA-1035 Encased in 4” pipe	Process waste	Inside VES-WM-183 Tank Riser 21 Jet-WM-583-1B	3” PUA-1035 in DVB-WM-PW-C5, PUV-WM-121	Schedule 40, seamless or welded, 347 SST or 304L SST	Ties to 3” PUA-1035 in Valve Box C5.

Table D-2. (continued).

Number	Description	Point of Origin	Point of Termination	Material	Comments
1½" WS-A-631 to A-660	Cooling solution supply	CPP-628 cooling solution supply manifold 6" WS-N-152736	VES-WM-183 cooling coils	Carbon steel in CPP-628, then changes to stainless steel to VES-WM-183	Supplies cooling solution to Tank WM-183.
1½" WR-A-631 to A-660	Cooling solution return	VES-WM-183 cooling coils	CPP-628 cooling solution return manifold 6" WR-N-152736	Stainless steel from VES-WM-183, then changes to carbon steel in CPP-628	Returns cooling solution to CPP-628.
1" PU-A-653	Process drain	Sump in pipe trench	CPP-783 South Sump SR 21	Schedule 40, seamless or welded, 347 SST	This line drains sump in pipe trench for line 3" PU-A-605, 607, and 608.
1" PU-A-654	Process drain	Trench sump east of DVB-WM-PL-A6	1" PU-A-653	Schedule 40, seamless or welded, 347 SST	This line drains sump in pipe trench for line 3" PU-A-609, -610, -1030, and –1005, and for Valve Boxes DVB-WM-PL-A5 and -A6. This line ties to 1" PU-A-653.
½" CN-614/619	Decontamination line	Abovegrade connection	10" VG-A-601	Schedule 40, seamless or welded, 347 SST	Abovegrade connection west of CPP-722 that can be used to decontaminate line 601.
10" VG-A-601	Vent off-gas	VES-WM-183 center manway	HE-WM-383 in CPP-722	Schedule 40, seamless or welded, 347 SST	This line connects to the heat exchanger inside CPP-722.
2" DC-N-605/609	Decontamination solution	Hose connect exterior of VES-WM-183 Tank Riser TR 53 thru DCV-WM-157	Tee to 12" access riser at TR 53	Stainless steel	605 is abovegrade, and 609 is belowgrade.
2" DC-N-606/610	Decontamination solution	Hose connect exterior of VES-WM-183 Tank Riser TR 13 thru DCV-WM-156	Tee to 12" access riser at TR 13	Stainless steel	606 is abovegrade, and 610 is belowgrade.
2" DC-N-607/611	Decontamination solution	Hose connect exterior of VES-WM-183 Tank Riser TR 21 thru DCV-WM-158	Tee to 12" access riser at TR 21	Stainless steel	607 is abovegrade, and 611 is belowgrade.
2" DC-N-608/612	Decontamination solution	Hose connect exterior of VES-WM-183 Tank Riser TR 54 thru DCV-WM-159	Tee to 12" access riser at TR 54	Stainless steel	608 is abovegrade, and 612 is belowgrade.
1½" SAMPLE	Sample line	Top inside of SR 20	CPP-783 North Sump	Stainless steel	Sample line for north sump.
1½" SAMPLE	Sample line	Top inside of SR 21	CPP-783 South Sump	Stainless steel	Sample line for south sump.

Table D-3. Tank WM-182 piping that will not require decontamination.

Number	Description	Point of Origin	Point of Termination	Material	Comments
½” PUA-647	Process drain	10” VGA-603	2” PUA-652	Schedule 40, seamless or welded, 347 SST or 304L SST	Ties into 2” PUA-652 prior to Tank WM 182. Supply side of vessel off-gas system.
¼” INST-643 to INST-646	Specific gravity indicator	VES-WM-182	CPP-628	Schedule 80, ASTM A312 TP 347 or 304L SST, seamless	Line exits top of tank on east side and routes to CPP-628.
¼” INST-647	Level alarm indicator (lower)	VES-WM-182	CPP-628	Schedule 80, ASTM A312 TP 347 or 304L SST, seamless	Line exits top of tank on east side and routes to CPP-628.
¼” INST-648	Level alarm indicator (middle)	VES-WM-182	CPP-628	Schedule 80, ASTM A312 TP 347 or 304L SST, seamless	Line exits top of tank on east side and routes to CPP-628.
¼” INST-649	Level alarm indicator (upper)	VES-WM-182	CPP-628	Schedule 80, ASTM A312 TP 347 or 304L SST, seamless	Line exits top of tank on east side and routes to CPP-628.
¼” INST-650	Pressure alarm indicator	VES-WM-182	CPP-628	Schedule 80, ASTM A312 TP 347 or 304L SST, seamless	Line exits top of tank on east side and routes to CPP-628.
¼” INST-651	Level alarm indicator	CPP-182 South Sump SR 19	CPP-628	Schedule 80, ASTM A312 TP 347 or 304L SST, seamless	Line runs from south sump and routes to CPP-628.
¼” INST-652	Level alarm indicator (spare)	CPP-182 South Sump SR 19	CPP-628	Schedule 80, ASTM A312 TP 347 or 304L SST, seamless	Line runs from south sump and routes to CPP-628.
¼” INST-653 to INST-657	Specific gravity indicator	VES-WM-182	CPP-628	Schedule 80, ASTM A312 TP 347 or 304L SST, seamless	Line exits top of tank on east side and routes to CPP-628.
¼” INST-658	Level alarm indicator (middle)	VES-WM-182	CPP-628	Schedule 80, ASTM A312 TP 347 or 304L SST, seamless	Line exits top of tank on east side and routes to CPP-628.
¼” INST-659	Level alarm indicator	CPP-182 North Sump SR 18	CPP-628	Schedule 80, ASTM A312 TP 347 or 304L SST, seamless	Line runs from north sump and routes to CPP-628.
¼” INST-660	Level alarm indicator	CPP-182 North Sump SR 18	CPP-628	Schedule 80, ASTM A312 TP 347 or 304L SST, seamless	Line runs from north sump and routes to CPP-628.

Table D-3. (continued).

Number	Description	Point of Origin	Point of Termination	Material	Comments
½” INST-T1	Temperature indicator line Thermowell	VES-WM-182 west side	TE-WM-182-1A at JB box in Vault 782 west side		½” conduit with wire inside goes from Tank WM-182 to JB box on west side, then all wires are in 1½” conduit to JB on east side of vault, then in 2” conduit that routes to CPP-628.
½” INST-T2	Temperature indicator line Thermowell	VES-WM-182 west side	TE-WM-182-2A at JB box in Vault 782 west side		½” conduit with wire inside goes from Tank WM-182 to JB box on west side, then all wires are in 1½” conduit to JB on east side of vault, then in 2” conduit that routes to CPP-628.
½” INST-T3	Temperature indicator line Thermowell	VES-WM-182 west side	TE-WM-182-3A at JB box in Vault 782 west side		½” conduit with wire inside goes from Tank WM-182 to JB box on west side, then all wires are in 1½” conduit to JB on east side of vault, then in 2” conduit that routes to CPP-628.
½” INST-T4	Temperature indicator line Thermowell	VES-WM-182 west side	TE-WM-182-4A at JB box in Vault 782 west side		½” conduit with wire inside goes from Tank WM-182 to JB box on west side, then all wires are in 1½” conduit to JB on east side of vault, then in 2” conduit that routes to CPP-628.
½” INST-T5	Temperature indicator line Thermowell	VES-WM-182 west side	TE-WM-182-5A at JB box in Vault 782 west side		½” conduit with wire inside goes from Tank WM-182 to JB box on west side, then all wires are in 1½” conduit to JB on east side of vault, then in 2” conduit that routes to CPP-628.
½” INST-T6	Temperature indicator line Thermowell	VES-WM-182 west side	TE-WM-182-6A at JB box in Vault 782 west side		½” conduit with wire inside goes from Tank WM-182 to JB box on west side, then all wires are in 1½” conduit to JB on east side of vault, then in 2” conduit that routes to CPP-628.
½” INST-T7	Temperature indicator line Thermowell	VES-WM-182 west side	TE-WM-182-7A at JB box in Vault 782 west side		½” conduit with wire inside goes from Tank WM-182 to JB box on west side, then all wires are in 1½” conduit to JB on east side of vault, then in 2” conduit that routes to CPP-628.
½” INST-T8	Temperature indicator line Thermowell	VES-WM-182 west side	TE-WM-182-8A at JB box in Vault 782 west side		½” conduit with wire inside goes from Tank WM-182 to JB box on west side, then all wires are in 1½” conduit to JB on east side of vault, then in 2” conduit that routes to CPP-628.
½” INST-T9	Temperature indicator line Thermowell	VES-WM-182 west side	TE-WM-182-9A at JB box in Vault 782 west side		½” conduit with wire inside goes from Tank WM-182 to JB box on west side, then all wires are in 1½” conduit to JB on east side of vault, then in 2” conduit that routes to CPP-628.

Table D-3. (continued).

Number	Description	Point of Origin	Point of Termination	Material	Comments
½” INST-T10	Temperature indicator line Thermowell	VES-WM-182 west side	TE-WM-182-10A at JB box in Vault 782 west side		½” conduit with wire inside goes from Tank WM-182 to JB box on west side, then all wires are in 1½” conduit to JB on east side of vault, then in 2” conduit that routes to CPP-628.
½” INST-T11	Temperature indicator line Thermowell	VES-WM-182 west side	TE-WM-182-11A at JB box in Vault 782 west side		½” conduit with wire inside goes from Tank WM-182 to JB box on west side, then all wires are in 1½” conduit to JB on east side of vault, then in 2” conduit that routes to CPP-628.
½” INST-T12	Temperature indicator line Thermowell	VES-WM-182 west side	TE-WM-182-12A at JB box in Vault 782 west side		½” conduit with wire inside goes from Tank WM-182 to JB box on west side, then all wires are in 1½” conduit to JB on east side of vault, then in 2” conduit that routes to CPP-628.
½” INST-T13	Temperature indicator line Thermowell	VES-WM-182 east side	TE-WM-182-1B at JB box in Vault 782 east side		½” conduit with wire inside goes from Tank WM-182 to JB box on east side, then all wires including west 12, are in 2” conduit that routes to CPP-628.
½” INST-T14	Temperature indicator line Thermowell	VES-WM-182 east side	TE-WM-182-2B at JB box in Vault 782 east side		½” conduit with wire inside goes from Tank WM-182 to JB box on east side, then all wires including west 12, are in 2” conduit that routes to CPP-628.
½” INST-T15	Temperature indicator line Thermowell	VES-WM-182 east side	TE-WM-182-3B at JB box in Vault 782 east side		½” conduit with wire inside goes from Tank WM-182 to JB box on east side, then all wires including west 12, are in 2” conduit that routes to CPP-628.
½” INST-T16	Temperature indicator line Thermowell	VES-WM-182 east side	TE-WM-182-4B at JB box in Vault 782 east side		½” conduit with wire inside goes from Tank WM-182 to JB box on east side, then all wires including west 12, are in 2” conduit that routes to CPP-628.
½” INST-T17	Temperature indicator line Thermowell	VES-WM-182 east side	TE-WM-182-5B at JB box in Vault 782 east side		½” conduit with wire inside goes from Tank WM-182 to JB box on east side, then all wires including west 12, are in 2” conduit that routes to CPP-628.
½” INST-T18	Temperature indicator line Thermowell	VES-WM-182 east side	TE-WM-182-6B at JB box in Vault 782 east side		½” conduit with wire inside goes from Tank WM-182 to JB box on east side, then all wires including west 12, are in 2” conduit that routes to CPP-628.

Table D-3. (continued).

Number	Description	Point of Origin	Point of Termination	Material	Comments
½” INST-T19	Temperature indicator line Thermowell	VES-WM-182 east side	TE-WM-182-7B at JB box in Vault 782 east side		½” conduit with wire inside goes from Tank WM-182 to JB box on east side, then all wires including west 12, are in 2” conduit that routes to CPP-628.
½” INST-T20	Temperature indicator line Thermowell	VES-WM-182 east side	TE-WM-182-8B at JB box in Vault 782 east side		½” conduit with wire inside goes from Tank WM-182 to JB box on east side, then all wires including west 12, are in 2” conduit that routes to CPP-628.
½” INST-T21	Temperature indicator line Thermowell	VES-WM-182 east side	TE-WM-182-9B at JB box in Vault 782 east side		½” conduit with wire inside goes from Tank WM-182 to JB box on east side, then all wires including west 12, are in 2” conduit that routes to CPP-628.
½” INST-T22	Temperature indicator line Thermowell	VES-WM-182 east side	TE-WM-182-10B at JB box in Vault 782 east side		½” conduit with wire inside goes from Tank WM-182 to JB box on east side, then all wires including west 12, are in 2” conduit that routes to CPP-628.
½” INST-T23	Temperature indicator line Thermowell	VES-WM-182 east side	TE-WM-182-11B at JB box in Vault 782 east side		½” conduit with wire inside goes from Tank WM-182 to JB box on east side, then all wires including west 12, are in 2” conduit that routes to CPP-628.
½” INST-T24	Temperature indicator line Thermowell	VES-WM-182 east side	TE-WM-182-12B at JB box in Vault 782 east side		½” conduit with wire inside goes from Tank WM-182 to JB box on east side, then all wires including west 12, are in 2” conduit that routes to CPP-628.
1½” HS-A-603	High-pressure steam	1½” HS-A-104718	CPP-782 North Sump SR 18	Schedule 40, seamless or welded, 347 SST	This line connects to 104718 at east outside wall of vault 782 and routes to north sump and connects to Jet WM-530. Steam supply line.
1½” HS-A-104718	High-pressure steam	Valve Box DVB-WM-C1	1½” HS-A-603	Schedule 40, seamless or welded, 347 SST	This line connects to 603 at east outside wall of vault 782. Steam supply line.
1½” HS-A-602	High-pressure steam	1½” HS-A-104719	CPP-782 South Sump SR 19	Schedule 40, seamless or welded, 347 SST	This line connects to 104719 at east outside wall of vault 782 and routes to north sump and connects to Jet WM-531. Steam supply line.
1½” HS-A-104719	High-pressure steam	Valve Box DVB-WM-C1	1½” HS-A-602	Schedule 40, seamless or welded, 347 SST	This line connects to 602 at east outside wall of vault 782. Steam supply line.
10” VG-A-603	Vent off-gas	VES-WM-182 center manway	10” VP-AR-153507 in CPP-721	Schedule 40, seamless or welded, 347 SST	This line connects to 153507 through valve PSV-WM-83 inside CPP-721. Air supply line.
1” HS-A-104723	High-pressure steam	Valve Box DVB-WM-C6 Valve HSV-WM-223	CPP-782 South Sump SR 19 Jet-WM-582-4	Schedule 40, seamless or welded, 347 SST	Steam supply line to south sump.

Table D-3. (continued).

Number	Description	Point of Origin	Point of Termination	Material	Comments
1” HS-A-1008	High-pressure steam	Inside CPP-628 at Valve HSV-WM-146	VES-WM-182 TR 19 Jet-WM-582-1A	Schedule 40, seamless or welded, 347 SST	Steam supply line to the steam jet in Riser 19.
1” HS-A-1009	High-pressure steam	Inside CPP-628 at Valve HSV-WM-145	VES-WM-182 TR 20 Jet-WM-582-1B	Schedule 40, seamless or welded, 347 SST	Steam supply line to the steam jet in Riser 20.
½” LL-A-104811	Low-pressure air line	CPP-628	CPP-782 South Sump SR 19	Schedule 40, seamless or welded, 347 SST	Instrument air supply.
½” LL-A-104812	Low-pressure air line	CPP-628	CPP-782 South Sump SR 19	Schedule 40, seamless or welded, 347 SST	Instrument air supply.
2” DC-N-601/605	Decontamination solution	Hose connect exterior of VES-WM-182 Tank Riser TR 52 thru DCV-WM-153	Tee to 12” access riser at TR 52	Stainless steel	601 is abovegrade, and 605 is belowgrade.
2” DC-N-602/606	Decontamination solution	Hose connect exterior of VES-WM-182 Tank Riser TR 20 thru DCV-WM-152	Tee to 12” access riser at TR 20	Stainless steel	602 is abovegrade, and 606 is belowgrade.
2” DC-N-603/607	Decontamination solution	Hose connect exterior of VES-WM-182 Tank Riser TR 19 thru DCV-WM-154	Tee to 12” access riser at TR 19	Stainless steel	603 is abovegrade, and 607 is belowgrade.
2” DC-N-604/608	Decontamination solution	Hose connect exterior of VES-WM-182 Tank Riser TR 51 thru DCV-WM-151	Tee to 12” access riser at TR 51	Stainless steel	604 is abovegrade, and 607 is belowgrade.
1½” SAMPLE	Sample line	Top inside of SR 18	CPP-782 North Sump	Stainless steel	Sample line for north sump.
1½” SAMPLE	Sample line	Top inside of SR 19	CPP-782 South Sump	Stainless steel	Sample line for south sump.

Table D-4. Tank WM-183 piping that will not require decontamination.

Number	Description	Point of Origin	Point of Termination	Material	Comments
½” PUA-656	Process drain	10” VGA-602	2” PUA-655	Schedule 40, seamless or welded, 347 SST or 304L SST	Ties into 2” PUA-655 prior to Tank WM-183. Condensate from vessel off-gas supply.
3” PUA-605 Abandoned and partially encased in 6” pipe	Process waste	VES-WM-183	Capped east side of VES-WM-183	Schedule 40, seamless or welded, 347 SST or 304L SST	This line was for a future tank and is now cut 8” outside of vault and filled with 2′ of concrete. Remaining line is in concrete trench extending east of CPP-783. Line then extends 5′ beyond trench and is encased in a 6” pipe.
3” PUA-607 Abandoned and partially encased in 6” pipe	Process waste	VES-WM-183	Capped east side of VES-WM-183	Schedule 40, seamless or welded, 347 SST or 304L SST	This line was for a future tank and is now cut 8” outside of vault and filled with 2′ of concrete. Remaining line is in concrete trench extending east of CPP-783. Line then extends 5′ beyond trench and is encased in a 6” pipe.
3” PUA-608 Abandoned and partially encased in 6” pipe	Process waste	VES-WM-183	Capped east side of VES-WM-183	Schedule 40, seamless or welded, 347 SST or 304L SST	This line was for a future tank and is now cut 8” outside of vault and filled with 2′ of concrete. Remaining line is in concrete trench extending east of CPP-783. Line then extends 5′ beyond trench and is encased in a 6” pipe.
¼” INST-621	Level alarm indicator	CPP-183 North Sump SR 20	CPP-628	Schedule 80, ASTM A312 TP 347 or 304L SST, seamless	Line runs from north sump and routes to CPP-628.
¼” INST-622	Level alarm indicator	CPP-183 North Sump SR 20	CPP-628	Schedule 80, ASTM A312 TP 347 or 304L SST, seamless	Line runs from north sump and routes to CPP-628.
¼” INST-623	Level alarm indicator (lower)	VES-WM-183	CPP-628	Schedule 80, ASTM A312 TP 347 or 304L SST, seamless	Line exits top of tank on west side and routes to CPP-628.
¼” INST-624to 629	Level alarm indicator (middle)	VES-WM-183	CPP-628	Schedule 80, ASTM A312 TP 347 or 304L SST, seamless	Line exits top of tank on west side and routes to CPP-628.
¼” INST-630	Level alarm indicator (upper)	VES-WM-183	CPP-628	Schedule 80, ASTM A312 TP 347 or 304L SST, seamless	Line exits top of tank on west side and routes to CPP-628.

Table D-4. (continued).

Number	Description	Point of Origin	Point of Termination	Material	Comments
¼” INST-631	Level alarm indicator (middle)	VES-WM-183	CPP-628	Schedule 80, ASTM A312 TP 347 or 304L SST, seamless	Line exits top of tank on west side and routes to CPP-628.
¼” INST-632 to 636	Level alarm indicator (lower)	VES-WM-183	CPP-628	Schedule 80, ASTM A312 TP 347 or 304L SST, seamless	Line exits top of tank on west side and routes to CPP-628.
¼” INST-637	Level alarm indicator	CPP-183 South Sump SR 21	CPP-628	Schedule 80, ASTM A312 TP 347 or 304L SST, seamless	Line runs from south sump and routes to CPP-628.
¼” INST-638	Level alarm indicator (spare)	CPP-183 South Sump SR 21	CPP-628	Schedule 80, ASTM A312 TP 347 or 304L SST, seamless	Line runs from south sump and routes to CPP-628.
½” INST-T1	Temperature indicator line Thermowell	VES-WM-183 east side	TE-WM-183-1A at JB box in Vault 783 east side		½” conduit with wire inside goes from Tank WM-183 to JB box on east side, then all wires are in 1½” conduit to JB on west side of vault, then in 2” conduit that routes to CPP-628.
½” INST-T2	Temperature indicator line Thermowell	VES-WM-183 east side	TE-WM-183-2A at JB box in Vault 783 east side		½” conduit with wire inside goes from Tank WM-183 to JB box on east side, then all wires are in 1½” conduit to JB on west side of vault, then in 2” conduit that routes to CPP-628.
½” INST-T3	Temperature indicator line Thermowell	VES-WM-183 east side	TE-WM-183-3A at JB box in Vault 783 east side		½” conduit with wire inside goes from Tank WM-183 to JB box on east side, then all wires are in 1½” conduit to JB on west side of vault, then in 2” conduit that routes to CPP-628.
½” INST-T4	Temperature indicator line Thermowell	VES-WM-183 east side	TE-WM-183-4A at JB box in Vault 783 east side		½” conduit with wire inside goes from Tank WM-183 to JB box on east side, then all wires are in 1½” conduit to JB on west side of vault, then in 2” conduit that routes to CPP-628.
½” INST-T5	Temperature indicator line Thermowell	VES-WM-183 east side	TE-WM-183-5A at JB box in Vault 783 east side		½” conduit with wire inside goes from Tank WM-183 to JB box on east side, then all wires are in 1½” conduit to JB on west side of vault, then in 2” conduit that routes to CPP-628.

Table D-4. (continued).

Number	Description	Point of Origin	Point of Termination	Material	Comments
½” INST-T6	Temperature indicator line Thermowell	VES-WM-183 east side	TE-WM-183-6A at JB box in Vault 783 east side		½” conduit with wire inside goes from Tank WM-183 to JB box on east side, then all wires are in 1½” conduit to JB on west side of vault, then in 2” conduit that routes to CPP-628.
½” INST-T7	Temperature indicator line Thermowell	VES-WM-183 east side	TE-WM-183-7A at JB box in Vault 783 east side		½” conduit with wire inside goes from Tank WM-183 to JB box on east side, then all wires are in 1½” conduit to JB on west side of vault, then in 2” conduit that routes to CPP-628.
½” INST-T8	Temperature indicator line Thermowell	VES-WM-183 east side	TE-WM-183-8A at JB box in Vault 783 east side		½” conduit with wire inside goes from Tank WM-183 to JB box on east side, then all wires are in 1½” conduit to JB on west side of vault, then in 2” conduit that routes to CPP-628.
½” INST-T9	Temperature indicator line Thermowell	VES-WM-183 east side	TE-WM-183-9A at JB box in Vault 783 east side		½” conduit with wire inside goes from Tank WM-183 to JB box on east side, then all wires are in 1½” conduit to JB on west side of vault, then in 2” conduit that routes to CPP-628.
½” INST-T10	Temperature indicator line Thermowell	VES-WM-183 east side	TE-WM-183-10A at JB box in Vault 783 east side		½” conduit with wire inside goes from Tank WM-183 to JB box on east side, then all wires are in 1½” conduit to JB on west side of vault, then in 2” conduit that routes to CPP-628.
½” INST-T11	Temperature indicator line Thermowell	VES-WM-183 east side	TE-WM-183-11A at JB box in Vault 783 east side		½” conduit with wire inside goes from Tank WM-183 to JB box on east side, then all wires are in 1½” conduit to JB on west side of vault, then in 2” conduit that routes to CPP-628.
½” INST-T12	Temperature indicator line Thermowell	VES-WM-183 east side	TE-WM-183-12A at JB box in Vault 783 east side		½” conduit with wire inside goes from Tank WM-183 to JB box on east side, then all wires are in 1½” conduit to JB on west side of vault, then in 2” conduit that routes to CPP-628.
½” INST-T13	Temperature indicator line Thermowell	VES-WM-183 west side	TE-WM-183-1B at JB box in Vault 783 east side		½” conduit with wire inside goes from Tank WM-183 to JB box on west side, then all wires including east 12, are in 2” conduit that routes to CPP-628.

Table D-4. (continued).

Number	Description	Point of Origin	Point of Termination	Material	Comments
½” INST-T14	Temperature indicator line Thermowell	VES-WM-183 west side	TE-WM-183-2B at JB box in Vault 783 east side		½” conduit with wire inside goes from Tank WM-183 to JB box on west side, then all wires including east 12, are in 2” conduit that routes to CPP-628.
½” INST-T15	Temperature indicator line Thermowell	VES-WM-183 west side	TE-WM-183-3B at JB box in Vault 783 east side		½” conduit with wire inside goes from Tank WM-183 to JB box on west side, then all wires including east 12, are in 2” conduit that routes to CPP-628.
½” INST-T16	Temperature indicator line Thermowell	VES-WM-183 west side	TE-WM-183-4B at JB box in Vault 783 east side		½” conduit with wire inside goes from Tank WM-183 to JB box on west side, then all wires including east 12, are in 2” conduit that routes to CPP-628.
½” INST-T17	Temperature indicator line Thermowell	VES-WM-183 west side	TE-WM-183-5B at JB box in Vault 783 east side		½” conduit with wire inside goes from Tank WM-183 to JB box on west side, then all wires including east 12, are in 2” conduit that routes to CPP-628.
½” INST-T18	Temperature indicator line Thermowell	VES-WM-183 west side	TE-WM-183-6B at JB box in Vault 783 east side		½” conduit with wire inside goes from Tank WM-183 to JB box on west side, then all wires including east 12, are in 2” conduit that routes to CPP-628.
½” INST-T19	Temperature indicator line Thermowell	VES-WM-183 west side	TE-WM-183-7B at JB box in Vault 783 east side		½” conduit with wire inside goes from Tank WM-183 to JB box on west side, then all wires including east 12, are in 2” conduit that routes to CPP-628.
½” INST-T20	Temperature indicator line Thermowell	VES-WM-183 west side	TE-WM-183-8B at JB box in Vault 783 east side		½” conduit with wire inside goes from Tank WM-183 to JB box on west side, then all wires including east 12, are in 2” conduit that routes to CPP-628.
½” INST-T21	Temperature indicator line Thermowell	VES-WM-183 west side	TE-WM-183-9B at JB box in Vault 783 east side		½” conduit with wire inside goes from Tank WM-183 to JB box on west side, then all wires including east 12, are in 2” conduit that routes to CPP-628.
½” INST-T22	Temperature indicator line Thermowell	VES-WM-183 west side	TE-WM-183-10B at JB box in Vault 783 east side		½” conduit with wire inside goes from Tank WM-183 to JB box on west side, then all wires including east 12, are in 2” conduit that routes to CPP-628.
½” INST-T23	Temperature indicator line Thermowell	VES-WM-183 west side	TE-WM-183-11B at JB box in Vault 783 east side		½” conduit with wire inside goes from Tank WM-183 to JB box on west side, then all wires including east 12, are in 2” conduit that routes to CPP-628.

Table D-4. (continued).

Number	Description	Point of Origin	Point of Termination	Material	Comments
½” INST-T24	Temperature indicator line Thermowell	VES-WM-183 west side	TE-WM-183-12B at JB box in Vault 783 east side		½” conduit with wire inside goes from Tank WM-183 to JB box on west side, then all wires including east 12, are in 2” conduit that routes to CPP-628.
1½” HS-A-604	High-pressure steam	1½” HS-A-104717	CPP-783 North Sump SR 20	Schedule 40, seamless or welded, 347 SST	This line connects to 104717 at west outside wall of Vault 783 and routes to north sump and connects to Jet WM-533.
1½” HS-A-104717	High-pressure steam	Valve box DVB-WM-C1	1½” HS-A-604	Schedule 40, seamless or welded, 347 SST	This line connects to 604 at west outside wall of Vault 783.
1½” HS-A-605	High-pressure steam	1½” HS-A-104720	CPP-7823 South Sump SR 21	Schedule 40, seamless or welded, 347 SST	This line connects to 104720 at west outside wall of Vault 783 and routes to north sump and connects to Jet WM-534.
1½” HS-A-104720	High-pressure steam	Valve Box DVB-WM-C1	1½” HS-A-605	Schedule 40, seamless or welded, 347 SST	This line connects to 605 at west outside wall of Vault 783.
1” PU-A-651	Process drain	Sump in pipe trench	CPP-783 South Sump SR 21	Schedule 40, seamless or welded, 347 SST	This line drains sump in pipe trench for line 3” PU-A-620 and 621.
10” VG-A-602	Vent off-gas	VES-WM-183 center manway	10” VP-AR-153504 in CPP-721	Schedule 40, seamless or welded, 347 SST	This line connects to 153507 thru valve PSV-WM-134 inside CPP-721. Steam supply line.
1” HS-A-104722	High-pressure steam	Valve Box DVB-WM-C6 Valve HSV-WM-222	CPP-783 South Sump SR 21 Jet-WM-583-4	Schedule 40, seamless or welded, 347 SST	Steam supply.
1” HS-A-104723	High-pressure steam	Valve Box DVB-WM-C6 Valve HSV-WM-222	CPP-783 South Sump SR 19 Jet-WM-582-4	Schedule 40, seamless or welded, 347 SST	Steam supply.
1” HS-A-104721	High-pressure steam	Valve Box DVB-WM-C6 Valve HSV-WM-222	Steam supply to Valve Box C6	Schedule 40, seamless or welded, 347 SST	Steam supply.
1” HS-A-1014	High-pressure steam	Inside CPP-628 at Valve HSV-WM-144	VES-WM-183 TR 13 Jet-WM-583-1A	Schedule 40, seamless or welded, 347 SST	Steam supply.
1” HS-A-1015	High-pressure steam	Inside CPP-628 at Valve HSV-WM-143	VES-WM-183 TR 21 Jet-WM-583-1B	Schedule 40, seamless or welded, 347 SST	Steam supply.
½” LAA-104813	Low-pressure air line	CPP-628	CPP-783 South Sump SR 21	Schedule 40, seamless or welded, 347 SST	Air supply.
½” LAA-104814	Low-pressure air line	CPP-628	CPP-783 South Sump SR 21	Schedule 40, seamless or welded, 347 SST	Air supply.