

Appendix C
Piping List and Associated Equipment

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Table C-1 lists the piping associated with Tanks WM-103, WM-104, WM-105, WM-106, and WM-181, and describes past use, point of origin and termination, and function. Table C-1 lists the piping that must be decontaminated for HWMA (State of Idaho 1983)/RCRA (42 USC 6901 et seq., 1976) closure for the tanks. Table C-2 lists the piping that are non-RCRA but will be closed as part of this closure.

Table C-1. RCRA closure lines associated with TFF Tanks WM-103, WM-104, WM-105, WM-106, and WM-181.

Number	Description	Point of Origin	Point of Termination	Comments
Tank WM-103				
2" PPA-13	Equalization line	WM-103	WM-104	No access for flushing or grouting
3" PPA-1	Transfer line from WM-103 to WM-104	JET-WM-511 in WM-103	WM-104	Decontaminate with water, no access for grouting
3" PPA-2	Transfer line from WM-103 to WM-104	JET-WM-521 in WM-103	WM-104	Decontaminate with water, no access for grouting
3" PUA-1232	Low jet transfer line from WM-103 to B-8	JET-WM-519 in WM-103	Valve PUV-WM-27 and DCV-WM-18 in valve box B-8	Decontaminate and grout
3" PUA-1233	High jet transfer line from WM-103 to B-8	JET-WM-513 in WM-103	Valve PUV-WM-28 and DCV-WM-19 in valve box B-8	Decontaminate and grout
2" VGA-38	Vent off-gas line	3" VGA -35	WM-103	Grout only
2" CRA-21	Cooling return lines from heat exchanger HE-WM-303 on top of WM-103	HE-WM-303	3" CRN-23 header through 2" CRN-037 and CRV-53 in CPP-619	Decontaminate and grout
2" WSA-25	Cooling supply lines into heat exchanger HE-WM-303 on top of WM-103	3" CRN-23 header to 2" CSN-038 through CSV-WM-53 in CPP-619	HE-WM-303	Decontaminate and grout
1" WRA-09 to 12	Cooling return lines from WM-103 to CPP-619 to CRV-WM-7-10 cooling lines 1" CRN-025 through -028	WM-103	3" CRN-23 in CPP-619	Decontaminate and grout if intact
1" WSA-13 to 16	Cooling supply lines into WM-103, 1" CSN-026 through -029, CSV-WM-7-10	3" CRN-23 in CPP-619	WM-103	Decontaminate and grout if intact
Tank WM-104				
3" PPA-3	Transfer line from WM-104 to WM-105	JET-WM-522 in WM-104	WM-105	Decontaminate with water, no access for grouting
3" PPA-4	Transfer line from WM-104 to WM-105	JET-WM-512 in WM-104	WM-105	Decontaminate with water, no access for grouting
3" PPA-14	Equalization line	WM-104	WM-105	No access for flushing or grouting

Table C-1. (continued).

Number	Description	Point of Origin	Point of Termination	Comments
3" PUA-1227	High jet transfer line from WM-104 to B-8	JET-WM-520 in WM-104	Valve PUV-WM-30 and DCV-WM-21 in valve box B-8	Decontaminate and grout
3" PUA-1226	Low jet transfer line from WM-104 to B-8	JET-WM-514 in WM-104	Valve PUV-WM-28 and DCV-WM-19 in valve box B-8	Decontaminate and grout
2" WSA-026	Cooling supply lines into heat exchanger HE-WM-304 on top of WM-104	3" CSN-23 Header 2" CSN-039 through CSV-WM-54 in CPP-619	HE-WM-304	Decontaminate and grout
2" CRA-022	Cooling return lines from heat exchanger HE-WM-304 on top of WM-104	HE-WM-304	3" CRN-23 header through 2" CSN-038 and CRV-WM-54 in CPP-619	Decontaminate and grout
1" WRA-13 to 16	Cooling return lines from WM-104 to CPP-619 to CRV-WM-11-14 cooling lines 1" CRN-029 through -032	WM-104	3" CRN-23 in CPP-619	Decontaminate and grout if intact
1" WSA-17 to 20	Cooling supply lines into WM-104, 1" CSN-030 through -033	3" CSN-23 in CPP-619	WM-104	Decontaminate and grout if intact
2" VGA-37	Vent off-gas line	3" VGA-35	WM-104	Grout only
Tank WM-105				
3" PUA-1229	High jet transfer line from WM-105 to B-8	JET-WM-516 in WM-105	Valve PUV-WM-32 and DCV-WM-23 in valve box B-8	Decontaminate and grout
3" PUA-1228	Low jet transfer line from WM-105 to B-8	JET-WM-151 in WM-105	Valve PUV-WM-31 and DCV-WM-22 in valve box B-8	Decontaminate and grout
2" WSA-027	Cooling supply lines into heat exchanger HE-WM-305 on top of WM-105	3" CSN-23 header to 2" CSN-040 through CSV-WM-55 in CPP-619	HE-WM-305	Decontaminate and grout
2" CRA-023	Cooling return lines from heat exchanger HE-WM-305 on top of WM-105	HE-WM-305	3" CRN-23 header through 2" CSN-039 and CRV-WM-55 in CPP-619	Decontaminate and grout
1" WRA-17 to 20	Cooling return lines from WM-105 to CPP-619 to CRV-WM-15-18 cooling lines 1" CRN-033 through -036	WM-105	3" CRN-23 in CPP-619	Decontaminate and grout if intact
1" WSA-21 to 24	Cooling supply lines into WM-105, 1" CSN-034 through -037	3" CSN-23 in CPP-619	WM-105	Decontaminate and grout if intact
2" VGA-36	Vent off-gas line	3" VGA-35	WM-105	Grout only
Tank WM-106				
2" CRA-24	Cooling return lines from heat exchanger HE-WM-306 on top of WM-106	HE-WM-306	3" CRN-23 header through 2" line CRN-040 and CRV-WM-56 in CPP-619	Decontaminate and grout

Table C-1. (continued).

Number	Description	Point of Origin	Point of Termination	Comments
2" WSA-28	Cooling lines into heat exchanger HE-WM-306 on top of WM-106	3" CRN-23 header through line 2" CRN-041 and CRV-WM-56 in CPP-619	HE-WM-306	Decontaminate and grout
1" WRA-25 to 36	Cooling return lines from WM-106 to CPP-619 to CRV-WM-19-30 cooling lines 1" CRN-041 through 052	WM-106	3" CRN-23 in CPP-619	Decontaminate and grout if intact
1" WSA-29 to 40	Cooling supply lines into WM-106 1" CSN-042 through 053, CSV-WM-19-30	3" CSN-23 in CPP-619	WM-106	Decontaminate and grout if intact
Tank WM-181				
4" PWM-28104Y	Process waste line	PUV-WM-125 in valve box C-7	WM-181	Decontaminate and grout
2" PWM-48113C	Decontamination line	TR-18	Grade	Decontaminate and grout
2" PUA-1036	Tank jet pump 581-1B discharge	Tank jet pump 581-1B	PUV-WM-124 in valve box C-9	Decontaminate only
2" PWM 48117C	Decontamination line	TR-17	Grade	Decontaminate and grout
2" PUA-1096	Tank jet pump 581-1A discharge	Tank jet pump 581-1A	PUA-WM-123 in valve box C-9	Decontaminate only
2" PWM-48115C	Decontamination line	TR-49	Grade	Decontaminate and grout
2" PWM-48114C	Decontamination line	TR-50	Grade	Decontaminate and grout
1 1/2" PWL-3017C			WM-181	Decontaminate and grout
3" PWA-201	Abandoned	JB-2A	WM-181	Decontaminate and grout
3" PWA-203	Valve box drain line	JB-2B	WM-181	Decontaminate and grout
12" PWM-18111Y	Off-gas line	WM-181	Relief valve pit #2	Grout only
2" PWM-48116C	Decontamination line	TR-48	Grade	Decontaminate and grout
1 1/4" PLA-104705	Vault jet JET-WM-581-4 discharge to valve box C-11	Vault Jet JET-WM-581-4 discharge	PUV-WM-4 in valve box C-11	Decontaminate and grout
1 1/2" PWM-28113Y	SR-17 vault jet discharge JET-WM-510	WM-181 vault jet JET-WM-510	WM-180	Decontaminate only
1 1/2" PWM-28001Y	WM-181 vault SR-16 transfer to WM-181	WM-180 vault SR jet pump JET-WM-509 discharge line	WM-181	Decontaminate only

Table C-2. Non-RCRA closure lines associated with TFF Tanks WM-103, WM-104, WM-105, WM-106, and WM-181.

Number	Description	Point of Origin	Point of Termination	Comments
Tank WM-103				
1" PUA-2	Process waste line	Valve PUV-103	Capped at ground level	Cut and cap
1" PUA-3	Process waste line	Valve PUV-104	Capped at ground level	Cut and cap
1" PPA-16	Process waste line	Valve PUV-104	WM-103	Never used
1" PPA-15	Process waste line	Valve PUV-103	WM-103	Cut and cap
4" SWA-104825	Transfer line from 3" SWA-104825 to SWN-100180	3" SWA-104825	Capped in E-cell	Never used
1" PLA-104807	Transfer line from CPP-717A sump to WM-103	1" SWA-104825 line	WM-103	Never used
2" HSA-70	Steam line to high steam jet WM-519	Valve HSV-65 in CPP-619	JET-WM-519 in WM-103	Cut and cap
2" HSA-71	Steam line to low steam jet WM-513	Valve HSV-67 in CPP-619	JET-WM-513 in WM-103	Cut and cap
PT-WM-103	Instrument line from CPP-619	CPP-619	WM-103	Cut and cap
LT-WM-103	2 Instrument lines from CPP-619	CPP-619	WM-103	Cut and cap
LT-WM-103S	2 Instrument lines from CPP-717A sump	CPP-619	CPP-717A sump	Cut and cap
2" HSA-74	Steam line to low steam jet WM-511	Valve HSV-61 in CPP-619	JET-WM-511 in WM-103	Cut and cap
2" HSA-75	Steam line to high steam jet WM-521	Valve HSV-63 in CPP-619	JET-WM-521 in WM-103	Cut and cap
¾" HSA-104821	Steam to sump jet WM-503-4	Valve HSV-90 in CPP-619	JET-WM-503-4 in CPP-717A sump	Cut and cap
1" HAN-105853	Instrument line	Valve HAV-55 in CPP-619	WM-103	Cut and cap
1" SWA-104825	Transfer line from sump jet WM-503-4 to 3" SWA-104825	JET WM-503-4 in CPP-717A sump	3" SWA-104825	Never used
Tank WM-104				
1" PPA-18	Process waste line	WM-104	PUV-WM-107, capped at ground level	Cut and cap Never used
1" PLA-104808	Transfer line from CPP-717B sump to WM-104	SWA-104825 line	WM-104	Never used
¾" HSA-104824	Steam line to sump jet WM-504-4	Valve HSV-WM-96 in CPP-619	JET-WM-504-4 in 717B sump	Cut and cap
2" HSA-68	Steam line to JET-WM-520	Valve HSV-WM-59 in CPP-619	JET-WM-520 in WM-104	Cut and cap
2" HSA-69	Steam line to JET-WM-514	Valve HSV-WM-57 in CPP-619	JET-WM-514 in WM-104	Cut and cap

Table C-2. (continued).

Number	Description	Point of Origin	Point of Termination	Comments
2" HSA-72	Steam line to JET-WM-512	Valve HSV-WM-53 in CPP-619	JET-WM-512 in WM-104	Cut and cap
2" HSA-73	Steam line to JET-WM-522	Valve HSV-WM-55 in CPP-619	JET-WM-522 in WM-104	Cut and cap
PT-WM-104	Instrument line	CPP-619	WM-104	Cut and cap
LT-WM-104	Instrument line	CPP-619	WM-104	Cut and cap
LT-WM-104S	2 Instrument lines from CPP-717B sump	CPP-619	CPP-717B sump	Cut and cap
1" HAN-105854	Instrument line	HAV-WM-57 in CPP-619	WM-104	Cut and cap
1" SWA-104825	Transfer line from sump jet WM-504-4 to 3" SWA-104825	JET-WM-504-4 in 717B sump	3" SWA-104825	
Tank WM-105				
1" PPA-17	Waste transfer line	WM-105	Valve PUV-WM-109, capped at ground level	Never used
1" SWA-104825	Transfer line from sump jet WM-505-4 to 3" SWA-104825	JET-WM-505-4 in CPP-717C sump	3" SWA-104825	Never used
LT-WM-105S	2 instrument lines from CPP-717C sump	CPP-619	CPP-717C sump	Cut and cap
LT-WM-105	2 instrument lines	CPP-619	WM-105	Cut and cap
1" PLA-104809	Transfer line from CPP-717C sump to WM-105	Line SWA-104825	WM-105	Never used
PT-WM-105	Instrument line	CPP-619	WM-105	Cut and cap
2" HSA-67	Steam line to JET-WM-515	Valve HSV-WM-49 in CPP-619	WM-105	Cut and cap
2" HSA-66	Steam line to JET-WM-516	Valve HSV-WM-51 in CPP-619	WM-105	Cut and cap
¾" HSA-104823	Steam to sump jet WM-505-4	Valve HSV-WM-94 in CPP-619	JET-WM-505-4 in 717C sump	Cut and cap
3" SWA-104825	Transfer line from tank sumps through 1" SWA-104825 to 4" SWA-104825	1" SWA-104825	4" SWA-104825	Never used
1" HAN-105855	Instrument line	HAV-WM-51	WM-105	Cut and cap
Tank WM-106				
3" PUA-1230	Low jet transfer line from WM-106 to B-8	JET-WM-517 in WM-106	Valve PUV-WM-31 and DCV-WM- 22 in Valve Box B-8	Grout only
3" PUA-1231	High jet transfer line from WM-106 to B-8	JET-WM-518 in WM-106	Valve PUV-WM-32 and DCV-WM- 23 in Valve Box B-8	Grout only

Table C-2. (continued).

Number	Description	Point of Origin	Point of Termination	Comments
1" PPA-19	Waste transfer line	WM-106	Valve PUV-WM-110, capped at ground level	Never used
1" SWA-104825	Transfer line from sump jet WM-506-4 to 3" SWA-104825	JET WM-506-4 in CPP-717D sump	3" SWA-104825	Never used
¾" HSA-104822	Steam line to sump jet WM-506-4	Valve HSV-WM-92 in CPP-619	JET-WM-506-4 in CPP-717D sump	Cut and cap
1" PUA-4	Waste transfer line	E-cell	WM-106	Cut and cap
LT-WM-106S	2 instrument lines from CPP-717D sump	CPP-619	CPP-717D sump	Cut and cap
PT-WM-106	Instrument line	CPP-619	WM-106	Cut and cap
LT-WM-106	2 instrument lines	CPP-619	WM-106	Cut and cap
2" HSA-65	Steam line to JET-WM-516	Valve HSV-71 in CPP-619	JET-WM-516 in WM-106	Cut and cap
2" HSA-64	Steam line to JET-WM-517	Valve HSV-WM-69 in CPP-619	JET-WM-517 in WM-106	Cut and cap
1" HAN-105856	Instrument line	HAV-WM-53	WM-106	Cut and cap
1" PLA-104810	Transfer line from CPP-717D sump to WM-106	SWA-104825	WM-106	Never used
2" VGA-35	Vent off-gas line	3" VGA-35	WM-106	Grout only
Tank WM-181				
3/8" TWM-88144W	Level sensor	LT-WM-181 in CPP-712	WM-181	Cut and cap
3/8" TWM-88148W	Level sensor	LT-WM-181 in CPP-712	WM-181	Cut and cap
3/8" TWM-88124W	Level sensor	LT-WM-181 in CPP-712	WM-181	Cut and cap
1 ½" HSA-1013	Steam line for JET-581-1A	CPP-712	JET-WM-581-1A	Cut and cap
1 ½" HSA-1012	Steam line for JET-581-1B	CPP-712	JET-WM-581-1B	Cut and cap
4" PWM-28101Y	Transfer line	WM-181	Capped	Never used, abandon in place
4" PWM-28102Y	Transfer line	WM-181	Capped	Never used, abandon in place
4" PWM-28103Y	Transfer line	WM-181	Capped	Never used, abandon in place
1" HSA-104725	Steam line to SR-17 vault jet WM-581-4	HSV-WM-225 in CP 712	JET-WM-581-4 in SR-17	Cut and cap
1 ½" PMW-48112C	Steam line to SR-17 vault jet WM-510	CPP-712	JET-WM-510 in SR-17	Cut and cap

Table C-2. (continued).

Number	Description	Point of Origin	Point of Termination	Comments
4" PMW-28107Y	Transfer line	WM-181	Capped	Never used, abandon in place
4" PMW-28106Y	Transfer line	WM-181	Capped	Never used, abandon in place
4" PMW-28105Y	Transfer line	WM-181	Capped	Never used, abandon in place
6" PLA-100164	Process waste line	TR-49	WM-181	Cut and cap

REFERENCES

42 USC 6901 et seq., 1976, "Resource Conservation and Recovery Act of 1976," as amended.

State of Idaho, 1983, "Hazardous Waste Management," Idaho Statute, Title 39, "Health and Safety," Chapter 44, "Hazardous Waste Management" (also known as the Hazardous Waste Management Act of 1983).