

APPENDIX D

▶ NO FURTHER RESPONSE ACTION PLANNED (NFRAP) SUMMARIES ◀

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Table D-1 identifies those sites where restoration has been completed or where no releases have occurred at UMDA. The table will be updated as additional remedial actions are completed.

**TABLE D-1. NO FURTHER RESPONSE
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Site No.	Description	Environmental Investigation Report Results/Findings					Final Determination
		RFA	ENPA	RI/SRI	Risk Assessment	Findings	
OU 1 - DEACTIVATION FURNACE SOILS							
Site 1	Deactivation Furnace Soils	✓	✓	✓	✓	Heavy metals with lead as primary contaminant	Contaminated soil was excavated as per ROD. Remediation is complete.
OU 4 - AMMUNITION DEMOLITION ACTIVITY AREA OU							
Site 7	Aniline Pit	✓	✓	✓	✓	No contamination identified	No further action as per ROD.
Site 8	Acid Pit	✓	✓	✓	✓	Heavy metal contamination; estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 13	Smoke Canister Disposal Area	✓	✓	✓	✓	Heavy metal contamination; estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 14	Flare and Fuse Disposal Area	✓	✓	✓	✓	Heavy metal contamination; estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 16	Open Detonation Pits	✓	✓	✓	✓	Heavy metal contamination estimated cancer and non-cancer risks were within the acceptable range for residential use.	Phased clearance of UXO as per ROD.
Site 18	Dunnage Pits	✓	✓	✓	✓	Heavy metal contamination, estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 21	Missile Fuel Storage Areas	✓	✓	✓	✓	Heavy metal contamination; estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 38	Pit Field Area		✓	✓	✓	Heavy metal contamination; estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 41	Chemical Agent Decontamination Solution Burial Area		✓	✓	✓	Heavy metal contamination; estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.

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Site 55	Trench/Burn Field		✓	✓	✓	Heavy metal contamination; estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 56	Munitions Crate Burn Area		✓	✓	✓	Heavy metal contamination; estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 57	Former Pit Area Locations		✓	✓	✓	Heavy metal contamination; estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 58	Borrow/Burn Disposal Area		✓	✓	✓	No contamination identified.	No further action as per ROD.
Site 59	Chemical Agent Decontamination Solution Disposal Area		✓	✓	✓	Heavy metal contamination; estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 60	Active Firing Range		✓	✓	✓	Heavy metal contamination; estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
OU 5 - MISCELLANEOUS SITES							
Site 3	Hazardous Waste Storage Facility	✓	✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 6	Sewage Treatment Plant	✓	✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 9	Remote Munitions Disassembly GB Bomb Area	✓	✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 10	Former Agent H Storage Area	✓	✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.

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Site 25-I	Metal Ore Piles - Location I	✓	✓	✓	✓	Cancer risk was not calculated and there were high uncertainties in the results because, contamination was sporadic and only slightly above background levels, caused the hazard quotient to be excluded.	No further action as per ROD.
Site 25-II	Metal Ore Piles Location II	✓	✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 26	Metal Ingot Stockpiles	✓	✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 27	Pesticide Storage Building	✓	✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 29	Septic Tanks	✓	✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 30	Stormwater Discharge Area	✓	✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 33	Gravel Pit Disposal Area		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 34	Paint Spray and Shot Blast Areas		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 35	Malathion Storage Leak Area		✓	✓	✓	High cadmium contamination; Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 37	Building 131 Paint Sludge Discharge Area		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.

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Site No.	Description	Environmental Investigation Report Results/Findings					Final Determination
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Site 39	QA Function Range		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 44-I	Road Oil Application Disposal Sites		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 44-II	Road Oil Application Disposal Sites		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 45	Buildings 612 and 617 Boiler Discharge Areas		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 46	Railcar Unloading Area		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 47	Boiler/Laundry Effluent Discharge Area		✓	✓	✓	Cancer risk was not calculated and there were high uncertainties in the results because, contamination was sporadic and only slightly above background levels, caused the hazard quotients to be excluded.	No further action as per ROD.
Site 48	Pipe Discharge Area		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 49	Drill and Transfer (DAT) Site		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 50	Railroad Landfill Areas		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 52	Coyote Coulee Discharge Gullies		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 53	Building 433 Collection Sump/Cistern and Disposal Area		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.

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Site No.	Description	Environmental Investigation Report Results/Findings					Final Determination
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Site 67	Building 493 Brass Cleaning Operations Area		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 80	Disposal Pit and Graded Area		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 81-I	Former Raw Materials Storage		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 81-II	Former Raw Materials Storage		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
Site 82	Former Gravel Pit/Disposal Location		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per ROD.
OU 7 - ACTIVE LANDFILL							
Site 11	Active Landfill	✓	✓	✓	✓	Landfill's current condition does not pose an unacceptable risk to human health or the environment.	ROD signed. No action was selected as the remedy.
OU 8 - INACTIVE LANDFILLS							
Site 12	Inactive Landfills	✓	✓	✓	✓	These landfills current condition does not pose an unacceptable risk to human health or the environment. Two areas within the Northern Inactive Landfill were investigated further in the SRI.	ROD signed. No action was selected as the remedy.
OU 9- SUPPLEMENTARY REMEDIAL INVESTIGATION (SRI) STUDY SITES AND PCB TRANSFORMER LOCATIONS							
Site 2	Storage Igloos	✓	✓			Good management practices are believed to preclude environmental concerns.	ENPA recommended no further investigation.

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Site No.	Description	Environmental Investigation Report Results/Findings					Final Determination
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Site 12	Inactive Landfills (Two Areas Within Northern Active Landfills)			✓	✓	No contaminants of concern were identified.	Decision Document was signed in September 1994. U.S. Army and DEQ have agreed that the contaminants at the SRI Study Sites and the PCB transformer locations do not pose sufficient risk to require cleanup and recommended that no RA is necessary under CERCLA. Transite siding will be removed from Site 12 and disposed of property.
Site 20	Open Burning Areas	✓	✓			Exact location of these areas could not be identified and may actually burning areas associated with other ADA sites.	ENPA recommended no further investigation.
Site 28	Missile Fuel Burning Areas	✓	✓			Burning reportedly took place in a kiln, not on bare soil, and because aniline and hydrazine fuels are not persistent in the environment.	ENPA recommended no further investigation.
Site 40	Jeep Storage Areas		✓			Area is a large parking lot, minor oil leaks.	ENPA recommended no further investigation.
Site 45	Buildings 612 and 617 Boiler Discharge Areas		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as Decision Document.
Site 46	Railcar Unloading Area		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as Decision Document.
Site 47	Boiler/Laundry Effluent Discharge Area		✓	✓	✓	Cancer risk was not calculated and there were high uncertainties in the results because, contamination was sporadic and only slightly above background levels, caused the hazard quotients to be excluded.	No further action as Decision Document.
Site 48	Pipe Discharge Area		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as Decision Document.

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Site 49	Drill and Transfer (DAT) Site		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as Decision Document.
Site 50	Railroad Landfill Areas		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as Decision Document.
Site 51	Large Open Storage Areas (Vicinity of Coyote Coulee)		✓			Site reconnaissance did not reveal any significant signs of disposal activities of environmental degradation in these areas.	ENPA recommended no further investigation.
Site 52	Coyote Coulee Discharge Gullies		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as Decision Document.
Site 53	Building 433 Collection Sump/Cistern and Disposal Area		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as Decision Document.
Site 54	Possible Disposal Pit Location		✓			Site was not located.	ENPA recommended no further investigation.
Site 61	Open Paint Spray Areas		✓	✓	✓	No contaminants of concern were identified.	See above
Site 63	Paint and Solvent Disposal Area		✓	✓	✓	Copper, lead, and zinc were identified as the contaminants of concern in the soil. Contaminants of concern in soil pose a risk of less than 1×10^{-6} and a hazard index of less than 1.	See above
Site 63	Pier 386 Chemical Solution Disposal Area		✓			During SRI Work Plan preparation. Site was reevaluated and it was determined no further investigation was necessary.	Determined no further investigation was necessary, following SRI Work Plan preparation.
Site 64	Leaking Railcar Shipment Inspection Area		✓	✓	✓	Heavy metal soil contamination. Contaminants of concern in soil pose a risk of less than 1×10^{-6} and a hazard index of less than 1.	No further action as per Decision Document.

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Site No.	Description	Environmental Investigation Report Results/Findings					Final Determination
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Site 65	Waste Paint and Solvent Disposal Area		✓	✓	✓	Mercury and zinc were identified as the contaminants of concern in the soil. Contaminants of concern in soil pose a risk of less than 1×10^{-6} and a hazard index of less than 1.	No further action as per Decision Document.
Site 66	Brass, Copper, and Steel Storage Area		✓	✓	✓	No contaminants of concern were identified.	Existing sump will be cleaned out and decontaminated when current operations end.
Site 67	Building 493 Brass Cleaning Operations Area		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as per Decision Document.
Site 68	Former Unsymmetrical Dimethyl Hydrazine Operations		✓	✓	✓	No contaminants of concern were identified.	No further action as per Decision Document.
Site 69	Area Skunk Works Area		✓	✓	✓	No contaminants of concern were identified.	No further action as per Decision Document.
Site 70	Wood Preserving Solution Spill Area		✓	✓	✓	Contaminants of concern were identified in groundwater; arsenic, and nitrate/nitrite.	No further action as per Decision Document.
Site 71	Possible Fire Training Pit		✓			This site was evaluated under the UST survey.	Determined no further investigation was necessary, following SRI Work Plan preparation.
Site 72	Vehicle Storage Area		✓			Site is a large parking lot.	ENPA recommended no further investigation.
Site 73	Diesel Fuel Spill Location		✓			This site was evaluated in the UST survey.	See UST survey.
Site 74	Oil/Fuel Transfer Station (Building 23)		✓			This site was evaluated under the UST survey.	Determined no further investigation was necessary, following SRI Work Plan preparation.
Site 75	Battery Acid Collection Sump		✓	✓	✓	Lead was identified as contaminant of concern in the soil. Contaminants of concern in soil pose a risk of less than 1×10^{-6} and a hazard index of less than 1.	No further action as per Decision Document.
Site 76	Photographic Chemical Solution Disposal Area		✓	✓	✓	No contaminants of concern were identified.	No further action as per Decision Document.

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Site 77	Paint Storage and Disposal Area		✓	✓	✓	No contaminants of concern were identified.	No further action as per Decision Document.
Site 78	Building 608 and 615 Heat Exchange Systems		✓			During SRI Work Plan preparation. Site was reevaluated and it was determined no further investigation was necessary.	No further investigation necessary and it was determined no further investigation was necessary.
Site 79	Malathion Spray Area		✓	✓	✓	No contaminants of concern were identified.	No further action as per Decision Document.
Site 80	Disposal Pit and Graded Area		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as Decision Document.
Site 81-1	Former Raw Materials Storage		✓	✓	✓	Estimated cancer and non-cancer risks were within the acceptable range for residential use.	No further action as Decision Document.
Site 83	Leaking Drum Storage Area		✓	✓	✓	No contaminants of concern were identified.	No further action as per Decision Document.
PCB Transformer Locations	Transformers locations 162, 163, 164, 197, and 198		✓	✓	✓	Risk of these sites is 7×10^{-6} due to PCB 1260 in soil, which is only slightly higher than the low end of the acceptable risk range, but still within the acceptable range. No hazard was calculated because no reference dose is available for PCB 1260. Soil in concrete vault at this location contained 3.8 ppm PCB.	Soil in concrete vault will be cleaned out and properly disposed of as a removal action to comply with State of Oregon's background level rule.
SITES THAT DO NOT FALL UNDER AN OU							
Site 23	Building 5 Waste Oil Tank		✓			This site was evaluated in the UST survey.	See UST survey.
Site 24	Building 10 Waste Oil Tank		✓			This site was evaluated in the UST survey.	This UST has been removed.
Site 42	Former UST Locations		✓			This site was evaluated in the UST survey.	No USTs were confirmed at these locations.
Site 43	Former Gas Station		✓			This was evaluated in the UST survey.	See UST survey.