

SWMU History and Status

SWMU #	REMEDIAL ACTIONS	STATUS CURRENT	STATUS ONGOING/FUTURE
SWMU 1 Underground Tank Farm	The Underground Tank Farm was closed under RCRA in 1987.	Active RCRA Corrective Action Complete. Approval of RCRA closure and post closure care received in a 12/16/1988 letter from MDNR. Post closure activities include inspection and maintenance of protective cap and cover. Continued groundwater monitoring and pump and treat. Post closure care activities implemented and ongoing. No further regulatory approval required.	Ongoing RCRA post closure care. Inspection and maintenance of protective cap and cover. Continued Institutional and Engineering Controls as defined in Sitewide Institutional Controls Plan as contained in the Long Term Operations Maintenance and Monitoring Plan. Continued groundwater monitoring and pump and treat. Access and Deed Restrictions.
SWMU 2 TCE Still Location	A solvent recovery still operated in this area in the 1950's. Solvent spills have contaminated soil and groundwater. Interim Measures completed FY98.	Active RCRA Corrective Action Complete. Unit a part of Multi-site CMS Final Decision issued July 15, 1998. CMI work plan outlining institutional controls, continued monitoring and groundwater pump and treat was approved by MDNR in a letter dated November 6, 2000. Remedy is implemented and ongoing. No further regulatory approval required.	Continued Institutional and Engineering Controls as defined in Sitewide Institutional Controls Plan. Continued groundwater monitoring and pump and treat. Access and Deed Restrictions.
SWMU 3 Waste Transfer Spill Area	Liquid wastes transferred to two holding tanks (unknown duration). Alleged routine spills. No evidence of release found in RFI. Combined and addressed with SWMU 37 (Abandoned Sump).	Active RCRA Corrective Action Complete. Investigated under TCE Still Area RFI. Unit a part of Multi-site CMS Final Decision issued July 15, 1998. Selected remedy is institutional controls for soils with groundwater pump and treat. CMI work plan outlining institutional controls, continued monitoring and groundwater pump and treat was approved by MDNR in a letter dated November 6, 2000. No further regulatory approval required.	Continued Institutional and Engineering Controls as defined in Sitewide Institutional Controls Plan. Continued groundwater monitoring and pump and treat. Access and Deed Restrictions.
SWMU 4 Classified Waste Trenches	Three former burial trenches excavated in 1984. Debris removed and disposed of off-site.	Active RCRA Corrective Action Complete. Investigated under TCE Still Area RFI. Unit a part of Multi-site CMS Final Decision issued July 15, 1998. Selected remedy is institutional controls for soils with groundwater pump and treat. CMI work plan outlining institutional controls, continued monitoring and groundwater pump and treat was approved by MDNR November 6, 2000. No further regulatory approval required.	Continued Institutional and Engineering Controls as defined in Sitewide Institutional Controls Plan. Continued groundwater monitoring and pump and treat. Access and Deed Restrictions.
SWMU 5 North Lagoon	An industrial wastewater lagoon in service from 1963 to 1985. Sludge was removed in 1985 and area capped in 1988 as a part of RCRA closure.	Active RCRA Corrective Action Complete. Hazardous Waste Management Unit in post-closure care. Approval of RCRA closure and post closure care received in a 12/16/1988 letter from MDNR. Unit also included in Northeast Area investigation. CMI Workplan for Northeast Area approved by EPA 10/29/96. Post closure care and institutional and engineering controls with groundwater pump and treat implemented and ongoing. No further regulatory approval required.	Ongoing RCRA post closure care. Inspection and maintenance of protective cap and cover. Continued Institutional and Engineering Controls as defined in Institutional Controls Plan. Continued groundwater monitoring and pump and treat. Access and Deed Restrictions.
SWMU 6 Old Ponds	Three ponds identified on historical aerial photographs. Addressed under corrective action. Identified as primary source of Northeast Area contamination.	Active RCRA Corrective Action Complete. Corrective Measure Study approved 11/13/95. Final Decision/Response to Comments issued 11/13/95 – Institutional controls with groundwater pump and treat. CMI workplan approved by EPA 10/29/96. Implementation of remedy ongoing. No further regulator approval required.	Continued Institutional and Engineering Controls as defined in Sitewide Institutional Controls Plan. Continued groundwater monitoring and pump and treat. Access and Deed Restrictions.
SWMU 7 North Lagoon Trench Area	Trench found under the base of the Former North Lagoon. It was rerouted when the lagoon was constructed. An excavation in this trench revealed an empty TCE drum and other miscellaneous items.	Active RCRA Corrective Action Complete Corrective Measures Study approved 11/13/95. Final Decision/Response to Comments issued 11/13/95 - Institutional controls with groundwater pump and treat. CMI Workplan approved by EPA 10/29/96. Implementation of remedy ongoing. No further regulatory approval required.	Continued Institutional and Engineering Controls as defined in Sitewide Institutional Controls Plan. Continued groundwater monitoring and pump and treat. Access and Deed Restrictions.
SWMU 8 Outfall 001 Raceway	Volatile organic contamination at this location derived from groundwater seeps. Groundwater collection system installed in April 1993.	Corrective Measures Study approved 11/13/95. Final Decision/Response to comments issued 11/13/95. CMI Workplan approved by EPA 10/29/96 that required operation of 001 Interceptor System under GW Treatment System Operations and Maintenance plan. Remedy implemented and ongoing. No further regulatory approval required.	Continued Institutional and Engineering Controls as defined in the Sitewide Institutional Controls Plan. Includes continued operation and maintenance of Outfall 001 groundwater collection sump. Continued groundwater monitoring and pump and treat. Access and Deed Restrictions.

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SWMU 9 Building 57 Acid and Alkaline Tanks	Tanks attached to an old plating facility. Corrective action determined that area was not a release site.	Active RCRA Corrective Action Complete. Tanks removed in 1989. Tank sumps removed in 1996 under Interim Measures. Unit a part of Multi-site CMS approved July 15, 1998. Selected remedy is institutional controls for soils with groundwater pump and treat. CMI workplan was approved by MDNR November 6, 2000. Remedy implemented and ongoing. No further regulatory approval required.	Continued Institutional and Engineering Controls as defined in Sitewide Institutional Controls Plan. Continued groundwater monitoring and pump and treat. Access and Deed Restrictions.
SWMU 10 Waste Oil Tank Under North End of Plating Building	A 26,000 gallon tank used for waste oil. Tank was installed in 1943 and used until 1950. Tank removed in 1995 under Interim measures.	Active RCRA Corrective Action Complete. Unit a part of Multi-site CMS. Final Decision issued July 15, 1998. Selected remedy is institutional controls for soils with groundwater pump and treat. CMI work plan was approved by MDNR November 6, 2000. Remedy implemented and ongoing. No further regulatory approval required.	Continued Institutional and Engineering Controls as defined in Sitewide Institutional Controls Plan. Continued groundwater monitoring and pump and treat. Access and Deed Restrictions.
SWMU 11 Substation 18 North of Plating Building	Electrical substation containing aroclor 1260 from which spills may have occurred.	Active RCRA Corrective Action Complete. Electrical equipment removed in 1989. Substation spill containment removed in 1995. Addressed under Interim Measures. Interim Measures Report approved by EPA 12/21/95. CMI work plan describing institutional controls to be implemented was approved by MDNR November 6, 2000. Remedy implemented and ongoing. No further regulatory approval required.	Continued Institutional and Engineering Controls as defined in Sitewide Institutional Controls Plan. Continued groundwater monitoring and pump and treat. Access and Deed Restrictions.
SWMU 12 Department 26 Outside	Site of former Therminol heat transfer system. Three Therminol tanks and piping removed in 1985. Contaminated soil above storm sewer laterals removed under of Interim Measures in 1996.	Active RCRA Corrective Action Complete. Unit a part of Multi-site CMS Final Decision issued July 15, 1998. Selected remedy is institutional controls for soils with groundwater pump and treat. CMI work plan was approved by MDNR November 6, 2000. Remedy implemented and ongoing. No further regulatory approval required.	Continued Institutional and Engineering Controls as defined in Sitewide Institutional Controls Plan. Continued groundwater monitoring and pump and treat. Access and Deed Restrictions.
SWMU 13 South Lagoon	An industrial wastewater lagoon in service from 1975 to 1988. Sludge was removed and the area was capped in 1988 as a part of RCRA closure.	Active RCRA Corrective Action Complete. Final closure report and post closure care plan approved by MDNR in a letter dated 12/16/98. RFI performed under RCRA 3008(h) Consent Order. No further action for groundwater as contamination is below remediation goals based on MDNR approval of South Lagoon RFI Report November 13, 1995. Ongoing post-closure care under RCRA consisting of cap maintenance and institutional controls. No further regulatory approval required.	Ongoing RCRA post closure care. Inspection and maintenance of protective cap and cover. Access and Deed Restrictions
SWMU 14 Old 002 Storm Sewer Outfall (AICO)	Outfall prior to construction of Highway W (Bannister Road). PCB spills contaminated the Outfall area, and then were buried during highway construction. RCRA Corrective Action completed.	Active RCRA Corrective Action Complete. Corrective Measure Implementation (CMI) completed. Confirmation study approved by EPA Region VII on 8/12/94.	No further action.
SWMU 15 New 002 Storm Sewer Outfall	Present location of storm water discharge to Indian Creek. PCB contaminated soil historically located in and around the Outfall.	Active RCRA Corrective Action Complete. Contaminated soil along bank of Indian Creek removed to EPA Region VII prescribed levels and covered with clean backfill (1988). Approved for no further action under Consent Order. Re-addressed as a part of the 95 th Terrace Project. Remedy includes institutional and engineering controls with continued monitoring. All monitoring and controls are implemented and ongoing. CMI workplan submitted.	See SWMU 42.

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SWMU 16 Sales Building	Building was used from mid 1940's to 1972 to store surplus equipment for sale. Degreasing solvents may have been used. Groundwater contamination is present in the area.	Active RCRA Corrective Action Complete. Unit a part of Multi-site CMS. Final Decision issued July 15, 1998. Selected remedy is institutional controls for soils with groundwater pump and treat. CMI work plan was approved by MDNR November 6, 2000. Remedy implemented and ongoing.	Continued Institutional and Engineering Controls as defined in Sitewide Institutional Controls Plan. Continued groundwater monitoring and pump and treat. Access and Deed Restrictions.
SWMU 17 Building 54	Oil seeping through a wall in the basement of this building caused it to be added to the prior Consent Order. A sump was later determined to be located outside the building near the leak. Investigation, revealed no widespread contamination.	Active RCRA Corrective Action Complete. Unit a part of Multi-site CMS. Final Decision issued July 15, 1998. Selected remedy is institutional controls for soils with groundwater pump and treat. CMI work plan was approved by MDNR November 6, 2000. Remedy implemented and ongoing. No further regulatory approval required.	Continued Institutional and Engineering Controls as defined in Sitewide Institutional Controls Plan. Continued groundwater monitoring and pump and treat. Access and Deed Restrictions.
SWMU 18 North Lot	Historical aerial photos indicate drums and equipment in this area. No contamination found at this location.	Active RCRA Corrective Action Complete. RFI for Miscellaneous Contaminated Soils found no contamination. EPA approved the Miscellaneous Contaminated Soils CMS on 11/13/95, which removed this SWMU from further consideration.	No further action.
SWMU 19 Building 16 Underground Pit	A pit which may have received spills of PCBs from cleaning operations.	Active RCRA Corrective Action Complete. RFI for Miscellaneous Contaminated Soils found no contamination. EPA approved the Miscellaneous Contaminated Soils CMS on 11/13/95, which removed this SWMU from further consideration.	No further action.
SWMU 20 Abandoned Fuel Lines	Fuel lines from the old Underground Tank Farm, which may contain residual fuel/oil. Addressed as a part of Miscellaneous Contaminated Soils.	Active RCRA Corrective Action Complete. Final remedy of institutional controls chosen in Final Decision/ Response to Comments for Miscellaneous Contaminated Soils. CMI Workplan approved by EPA 10/29/96. Remedy implemented and ongoing. No further regulatory approval required.	Continued Institutional and Engineering Controls as defined in Sitewide Institutional Controls Plan. Continued groundwater monitoring and pump and treat. Access and Deed Restrictions
SWMU 21 Fuel Oil Tank Unloading Area	Unloading area for two 400,000 gallon fuel oil tanks. Addressed as a part of Miscellaneous Contaminated Soils.	Active RCRA Corrective Action Complete. Final remedy of institutional controls chosen in Final Decision/Response to Comments For Miscellaneous Contaminated Soils. CMI Workplan approved by EPA 10/29/96. Remedy implemented and ongoing. No further regulatory approval required.	Continued Institutional and Engineering Controls as defined in Sitewide Institutional Controls Plan. Continued groundwater monitoring and pump and treat. Access and Deed Restrictions.
SWMU 22 East of Oil Storage Tanks, Underground Tank Farm and Building 15, Extending to Lagoons	PCB contaminated water was spread on the ground in this area. Sampling prior to 1989 indicated no significant contamination, allowing the site to be approved for no further action.	Assigned no further action in Appendix E of the prior RCRA 3008(h) Consent Order dated June 23, 1989.	No Further Action
SWMU 23 PCB and Hydraulic Oil Spills in Open Area East of Barrel Lot	Water contaminated with PCBs and hydraulic oil was dumped on ground. Sampling prior to 1989 indicated no significant contamination, allowing the site to be approved for no further action.	Assigned no further action in Appendix E of prior (June 23, 1989) RCRA 3008(h) Consent Order.	No Further Action

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SWMU 24 Wastewater Dumping West of Building 16	Dilute waste acids, caustics, water from spills and sumps (some containing oils), and PCBs were dumped onto the ground and allowed to infiltrate into soil. Sampling prior to 1989 indicated no significant contamination, allowing the site to be approved for no further action when the prior Consent Order was signed.	Assigned no further action in Appendix E of prior (June 23, 1989) RCRA 3008(h) Consent Order.	No Further Action
SWMU 25 Spill of Cutting Oil and Coolants Near Lot 187-1 Outside Diked Area	Cutting oil and coolants were spilled, routed to an unlined concrete sump and pumped out. Sampling prior to 1989 indicated no significant contamination, allowing the site to be approved for no further action when the prior Consent Order was signed.	Assigned no further action in Appendix E of prior (June 23, 1989) RCRA 3008(h) Consent Order.	No Further Action
SWMU 26 Spill of Caustic Wastewater North of Manufacturing Support Building	Caustic wastewater from a leaking pipe spilled into an excavation. Approved for no further action when prior Consent Order was signed. No sampling performed.	Assigned no further action in Appendix E of prior (June 23, 1989) RCRA 3008(h) Consent Order.	No Further Action
SWMU 27 Dumping of PCB contaminated wastewater west of lagoons	Sampling indicated no significant contamination. Approved for no further action when prior Consent Order was signed	Assigned no further action in Appendix E of prior (June 23, 1989) RCRA 3008(h) Consent Order.	No Further Action
SWMU 28 Spill of Plating Acid From Truck (East Half of Barrel Lot)	Approximately 3000 gallons of acid was spilled onto gravel and covered with sodium carbonate. Sampling indicated no significant contamination. Approved for no further action when prior Order was signed.	Assigned no further action in Appendix E of prior (June 23, 1989) RCRA 3008(h) Consent Order.	No Further Action
SWMU 29 Southeast Parking Lot	Construction waste was dumped here leading to the concern that hazardous/toxic materials may have been dumped as well.	Active RCRA Corrective Action Complete. Assigned no further action in Appendix E of prior RCRA 3008(h) Consent Order. However, the 1999 MHWMF Permit required a Phase I RFI which was subsequently approved by MDNR on August 28, 2000. Approval requires continued operation of groundwater pump and treat system. Remedy implemented and ongoing. No further regulatory approval required.	Continued Institutional and Engineering Controls as defined in Site-wide Institutional Controls Plan. Continued groundwater monitoring and pump and treat. Access and Deed Restrictions.
SWMU 30 Department 27 Outside	Piping and underground tank for Department 27 Therminol system. One project removed tank, piping and most contamination. Another removed remaining contamination.	Approved for no further action based on EPA approval of Interim Measures Implementation Report November 13, 1995.	No further Action

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SWMU 31 Department 26	Active manufacturing department with heat transfer equipment, which formerly contained PCB fluids. System was replaced in mid 1980's with non-PCB fluids. Leaks from sumps prior to system replacement have contaminated soil and groundwater in and around department.	Active RCRA Corrective Action Complete. Unit a part of Multi-Sites Final Decision issued July 15, 1998. CMI Workplan approved by MDNR on November 6, 2000. Selected remedy is institutional controls. However, PCB contaminated soils continue to infiltrate into 002 storm sewer system. Base flows in storm sewer have been re-routed to the groundwater treatment system. PCB stormwater contamination issues addressed in 95 th Terrace Project. Remedy implemented and ongoing. No further regulatory approval required for this SWMU.	Continued Institutional and Engineering Controls as defined in Sitewide Institutional Controls Plan. Continued groundwater monitoring and pump and treat. Access and Deed Restrictions. Reroute of baseflows from 002 storm sewer system.
SWMU 32 Department 27 Inside	Inactive manufacturing department with heat transfer equipment, which formerly contained PCB fluids. System was replaced in mid-1980's with current, non PCB fluids. Leaks from pits were suspected but not found upon investigation.	Active RCRA Corrective Action Complete. Unit a part of Multi-Sites Final Decision issued July 15, 1998. Selected remedy is institutional controls for soils. CMI workplan approved by MDNR November 6, 2000. Remedy implemented and ongoing. No further regulatory approval required.	Continued Institutional and Engineering Controls as defined in Sitewide Institutional Controls Plan. Continued groundwater monitoring and pump and treat. Access and Deed Restrictions.
SWMU 33 Oil House	Building used to store oil and other fluids. Floor drains formerly routed to a French Drain outside the building caused contamination in soil and groundwater.	Active RCRA Corrective Action Complete. Unit a part of Multi-Sites Final Decision issued July 15, 1998. Selected remedy is institutional controls for soils with groundwater pump and treat. CMI workplan approved by MDNR November 6, 2000. Remedy implemented and ongoing. No further regulatory approval required.	Continued Institutional and Engineering Controls as defined in Sitewide Institutional Controls Plan. Continued groundwater monitoring and pump and treat. Access and Deed Restrictions.
SWMU 34 Sanitary Sewer Pump Station	Sanitary sewer pipe vent where oil discharged from vent during high flows. Soil indicated low levels of PCBs initially. No oil or PCBs in subsequent sampling.	Approved for no further action based on D/27 Outside RFI report (Appendix E of prior RCRA 3008(h) Consent Order). No further regulatory approval required.	No further Action
SWMU 35 East Boilerhouse	Substation 23 and underground electrical lines near the East Boilerhouse were contaminated with PCBs. Interim measures removed contamination in 1994/1995.	Active RCRA Corrective Action Complete. Area addressed under Interim Measures. I/M Report approved by EPA/MDNR on 3/20/97. No further regulatory approval required.	No further Action
SWMU 36 Maintenance Vehicle Repair Shop Sump	Sump where plant vehicles were washed. Sump leaked liquids to soil and groundwater under sump.	Active RCRA Corrective Action Complete. Unit a part of Multi-Sites Final Decision issued July 15, 1998. Selected remedy is institutional controls for soils. CMI workplan approved by MDNR November 6, 2000. Remedy implemented and ongoing. No further regulatory approval required.	Continued Institutional and Engineering Controls as defined in Sitewide Institutional Controls Plan. Continued groundwater monitoring and pump and treat. Access and Deed Restrictions.
SWMU 37 Abandoned Sump	Sump located between Buildings 89 and 96, immediately east of Waste Transfer Spill Area and covered with a large concrete slab. Combined with SWMU 3 in TCE Still Area RFI. Interim Measures conducted in FY98.	Active RCRA Corrective Action Complete. Unit a part of Multi-Sites Final Decision issued July 15, 1998. Selected remedy is institutional controls for soils with groundwater pump and treat. CMI workplan approved by MDNR November 6, 2000. Remedy implemented and ongoing. No further regulatory approval required.	Continued Institutional and Engineering Controls as defined in Sitewide Institutional Controls Plan. Continued groundwater monitoring and pump and treat. Access and Deed Restrictions.
SWMU 38 Reported Buried Drum Site	Employee interviews reported burial of approximately 20 drums thought to have contained water and black metal shavings from a previous manufacturing operation. Ground-penetrating radar, electromagnetic, and magnetometer surveys were used to locate. Never found. Presumed non-existent and was approved for no further action.	No further action based on Results of TCE Still Area RFI Report (Appendix E).	No further Action

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SWMU 39 Department 95	Located in the northeast quadrant of the Main Manufacturing Building. The area was used for machining operations including degreasing. RFI Report approved. No source contamination identified.	Active RCRA Corrective Action Complete. Unit a part of Multi-Sites Final Decision issued July 15, 1998. Selected remedy is institutional controls for soils with groundwater pump and treat. CMI workplan approved by MDNR November 6, 2000. Remedy implemented and ongoing. No further regulatory approval required.	Continued Institutional and Engineering Controls as defined in Sitewide Institutional Controls Plan. Continued groundwater monitoring and pump and treat. Access and Deed Restrictions.
SWMU 40 Former Chip Handling Building	Formerly located north of the Main Manufacturing Building. Used to store and recycle chips from manufacturing processes.	Active RCRA Corrective Action Complete. Unit a part of Multi-Sites Final Decision issued July 15, 1998. Selected remedy is institutional controls for soils with groundwater pump and treat. CMI workplan approved by MDNR November 6, 2000. Remedy implemented and ongoing. No further regulatory approval required.	Continued Institutional and Engineering Controls as defined in Sitewide Institutional Controls Plan. Continued groundwater monitoring and pump and treat. Access and Deed Restrictions.
SWMU 41 Department 20 Degreaser Pit	Located in the southeast quadrant of the Main Manufacturing Building. Was formerly used to clean parts using a vapor degreaser which was known to have leaked. The degreaser has been removed and the pit filled with sand and capped with concrete.	Active RCRA Corrective Action Complete. Unit a part of Multi-Sites Final Decision issued July 15, 1998. Selected remedy is institutional controls for soils with groundwater pump and treat. CMI workplan approved by MDNR November 6, 2000. Remedy implemented and ongoing. No further regulatory approval required.	Continued Institutional and Engineering Controls as defined in Sitewide Institutional Controls Plan. Continued groundwater monitoring and pump and treat. Access and Deed Restrictions.
SWMU 42 95th Terrace	Site is located under and around street called 95th Terrace on the south side of the complex. It includes PCB contamination originally investigated under the Old 002 Outfall (Abandoned Indian Creek Outfall – SWMU 14) RFI.	Active RCRA Corrective Action Complete. Final Remedy incorporated into HWMF permit revision dated 9/29/06	Continued Institutional and Engineering Controls as defined in Sitewide Institutional Controls Plan. Access and Deed Restrictions on land owned by NNSA. Continued monitoring.
SWMU 43 Test Cell Tanks	Located near the northeast corner of Main Manufacturing Building. Tanks contained petroleum hydrocarbons and reported closed.	Remediation completed in FY 98. CMI workplan approved by MDNR November 6, 2000. Remedy implemented and ongoing. No further regulatory approval required.	Continued Institutional and Engineering Controls as defined in Sitewide Institutional Controls Plan. Continued groundwater monitoring and pump and treat. Access and Deed Restrictions.