CHAPTER 33-24-05
STANDARDS FOR TREATMENT, STORAGE, AND DISPOSAL FACILITIES AND FOR THE MANAGEMENT OF SPECIFIC HAZARDOUS WASTES AND SPECIFIC TYPES OF HAZARDOUS WASTE MANAGEMENT FACILITIES

Section	
33-24-05-01	Purpose, Scope, and Applicability
33-24-05-02	Identification Number and Permit
33-24-05-03	Required Notices
33-24-05-04	General Waste Analysis
33-24-05-05	Security
33-24-05-06	General Inspection Requirements
33-24-05-07	Personnel Training
33-24-05-08	General Requirements for Ignitable, Reactive, or Incompatible Wastes
33-24-05-09	Location Standards
33-24-05-10	Construction Quality Assurance Program
33-24-05-11	[Reserved]
33-24-05-12	[Reserved]
33-24-05-13	[Reserved]
33-24-05-14	[Reserved]
33-24-05-15	Design and Operation of Facility
33-24-05-16	Required Equipment
33-24-05-17	Testing and Maintenance of Equipment
33-24-05-18	Access to Communications or Alarm System
33-24-05-19	Required Aisle Space
33-24-05-20	Arrangements With Local Authorities
33-24-05-21	[Reserved]
33-24-05-22	[Reserved]
33-24-05-23	[Reserved]
33-24-05-24	[Reserved]
33-24-05-25	[Reserved]
33-24-05-26	Purpose and Implementation of Contingency Plan
33-24-05-27	Content of Contingency Plan
33-24-05-28	Copies of Contingency Plan
33-24-05-29	Amendment of Contingency Plan
33-24-05-30	Emergency Coordinator
33-24-05-31	Emergency Procedures
33-24-05-32	[Reserved]
33-24-05-33	[Reserved]
33-24-05-34	[Reserved]
33-24-05-35	[Reserved]
33-24-05-36	[Reserved]
33-24-05-37	Applicability of Manifest System, Recordkeeping, and Reporting Requirements
33-24-05-38	Use of Manifest System
33-24-05-39	Manifest Discrepancies
33-24-05-40	Operating Record
33-24-05-41	Availability, Retention, and Disposition of Records

33-24-05-42 Biennial Report
33-24-05-43 Unmanifested Waste Report
33-24-05-44 Additional Reports
33-24-05-45 [Reserved]
33-24-05-46 [Reserved]
33-24-05-47 Applicability of Ground Water Protection Requirements
33-24-05-48 Required Programs
33-24-05-49 Ground Water Protection Standard
33-24-05-50 Hazardous Constituents
33-24-05-51 Concentration Limits
33-24-05-52 Point of Compliance
33-24-05-53 Compliance Period
33-24-05-54 General Ground Water Monitoring Requirements
33-24-05-55 Detection Monitoring Program
33-24-05-56 Compliance Monitoring Program
33-24-05-57 Corrective Action Program
33-24-05-58 Corrective Action for Solid Waste Management Units
33-24-05-59 Applicability of Closure and Postclosure Requirements
33-24-05-60 Closure Performance Standard
33-24-05-61 Closure Plan - Amendment of Plan
33-24-05-62 Closure - Time Allowed for Closure
33-24-05-63 Disposal or Decontamination of Equipment
33-24-05-64 Certification of Closure
33-24-05-65 Survey Plat
33-24-05-66 Postclosure Care and Use of Property
33-24-05-67 Postclosure Plan - Amendment of Plan
33-24-05-68 Postclosure Notices
33-24-05-69 Certification of Completion of Postclosure Care
33-24-05-70 [Reserved]
33-24-05-71 [Reserved]
33-24-05-72 [Reserved]
33-24-05-73 [Reserved]
33-24-05-74 Applicability of Financial Requirements
33-24-05-75 Definitions of Terms Used in This Chapter
33-24-05-76 Cost Estimates for Closure and Postclosure Care
33-24-05-77 Financial Assurance for Closure and Postclosure Care
33-24-05-78 Use of a Financial Mechanism for Both Closure and Postclosure Care
33-24-05-79 Liability Requirements
33-24-05-80 Incapacity of Owners or Operators, Guarantors, or Financial Institutions
33-24-05-81 Wording of the Instruments
33-24-05-82 [Reserved]
33-24-05-83 [Reserved]
33-24-05-84 [Reserved]
33-24-05-85 [Reserved]
33-24-05-86 [Reserved]
33-24-05-87 [Reserved]
33-24-05-88 [Reserved]

33-24-05-89	Applicability of Requirements for Use and Management of Containers
33-24-05-90	Condition of Containers
33-24-05-91	Compatibility of Waste With Containers
33-24-05-92	Management of Containers
33-24-05-93	Inspections
33-24-05-94	Containment
33-24-05-95	Special Requirements for Ignitable or Reactive Wastes
33-24-05-96	Special Requirements for Incompatible Wastes
33-24-05-97	Closure
33-24-05-98	Air Emission Standards
33-24-05-99	[Reserved]
33-24-05-100	[Reserved]
33-24-05-101	[Reserved]
33-24-05-102	[Reserved]
33-24-05-103	Applicability of Tank Requirements
33-24-05-104	Assessment of Existing Tank System's Integrity
33-24-05-105	Design and Installation of New Tank Systems or Components
33-24-05-106	Containment and Detection of Releases
33-24-05-107	General Operating Requirements
33-24-05-108	Inspections
33-24-05-109	Response to Leaks or Spills and Disposition of Leaking or Unfit-for-Use Tank Systems
33-24-05-110	Closure and Postclosure Care
33-24-05-111	Special Requirements for Ignitable or Reactive Waste
33-24-05-112	Special Requirements for Incompatible Wastes
33-24-05-113	Waste Analysis and Trial Tests
33-24-05-114	Special Requirements for Generators of Between One Hundred and One Thousand Kilograms Per Month That Accumulate Hazardous Waste in Tanks
33-24-05-115	Air Emission Standards
33-24-05-116	[Reserved]
33-24-05-117	[Reserved]
33-24-05-118	Applicability of Surface Impoundment Requirements
33-24-05-119	Design and Operating Requirements
33-24-05-120	Monitoring and Inspection
33-24-05-121	Emergency Repairs - Contingency Plans
33-24-05-122	Closure and Postclosure Care
33-24-05-123	Special Requirements for Ignitable or Reactive Waste
33-24-05-124	Special Requirements for Incompatible Wastes
33-24-05-125	Special Requirements for Hazardous Wastes F020, F021, F022, F023, F026, and F027
33-24-05-126	Action Leakage Rate
33-24-05-127	Response Actions
33-24-05-128	Air Emission Standards
33-24-05-129	[Reserved]
33-24-05-130	Applicability of Waste Pile Requirements
33-24-05-131	Design and Operating Requirements
33-24-05-132	Monitoring and Inspection

33-24-05-133 Special Requirements for Ignitable or Reactive Waste
33-24-05-134 Special Requirements for Incompatible Wastes
33-24-05-135 Closure and Postclosure Care
33-24-05-136 Special Requirements for Hazardous Wastes F020, F021, F022, F023, F026, and F027
33-24-05-137 Action Leakage Rate
33-24-05-138 Response Actions
33-24-05-139 [Reserved]
33-24-05-140 [Reserved]
33-24-05-141 [Reserved]
33-24-05-142 [Reserved]
33-24-05-143 [Reserved]
33-24-05-144 Applicability of Incinerator Requirements
33-24-05-145 Waste Analysis
33-24-05-146 Designation of Principal Organic Hazardous Constituents
33-24-05-147 Performance Standards
33-24-05-148 Hazardous Waste Incinerator Permits
33-24-05-149 Operating Requirements
33-24-05-150 Monitoring and Inspections
33-24-05-151 Closure
33-24-05-152 [Reserved]
33-24-05-153 [Reserved]
33-24-05-154 [Reserved]
33-24-05-155 [Reserved]
33-24-05-156 [Reserved]
33-24-05-157 [Reserved]
33-24-05-158 [Reserved]
33-24-05-159 [Reserved]
33-24-05-160 Applicability of Land Treatment Requirements
33-24-05-161 Treatment Program
33-24-05-162 Treatment Demonstration
33-24-05-163 Design and Operating Requirements
33-24-05-164 Food Chain Crops
33-24-05-165 Unsaturated Zone Monitoring
33-24-05-166 Recordkeeping
33-24-05-167 Closure and Postclosure Care
33-24-05-168 Special Requirements for Ignitable or Reactive Waste
33-24-05-169 Special Requirements for Incompatible Wastes
33-24-05-170 Special Requirements for Hazardous Wastes F020, F021, F022, F023, F026, and F027
33-24-05-171 [Reserved]
33-24-05-172 [Reserved]
33-24-05-173 [Reserved]
33-24-05-174 [Reserved]
33-24-05-175 [Reserved]
33-24-05-176 Applicability of Landfill Requirements
33-24-05-177 Design and Operating Requirements
33-24-05-178 Monitoring and Inspection
33-24-05-179 Surveying and Recordkeeping

33-24-05-180	Closure and Postclosure Care
33-24-05-181	Special Requirements for Ignitable or Reactive Waste
33-24-05-182	Special Requirements for Incompatible Wastes
33-24-05-183	Special Requirements for Bulk and Containerized Waste
33-24-05-184	Special Requirements for Containers
33-24-05-185	Disposal of Small Containers of Hazardous Waste in Overpacked Drums (Lab Packs)
33-24-05-186	Special Requirements for Hazardous Wastes F020, F021, F022, F023, F026, and F027
33-24-05-187	Action Leakage Rate
33-24-05-188	Response Actions
33-24-05-189	[Reserved]
33-24-05-190	[Reserved]
33-24-05-191	[Reserved]
33-24-05-192	[Reserved]
33-24-05-193	[Reserved]
33-24-05-194	[Reserved]
33-24-05-195	[Reserved]
33-24-05-196	[Reserved]
33-24-05-197	[Reserved]
33-24-05-198	[Reserved]
33-24-05-199	[Reserved]
33-24-05-200	[Reserved]
33-24-05-201	Applicability to Recyclable Materials Used in a Manner Constituting Disposal
33-24-05-202	Standards Applicable to Generators and Transporters of Materials Used in a Manner That Constitutes Disposal
33-24-05-203	Standards Applicable to Storers of Materials That Are to Be Used in a Manner That Constitutes Disposal Who Are Not the Ultimate Users
33-24-05-204	Standards Applicable to Users of Materials That Are Used in a Manner That Constitutes Disposal
33-24-05-205	[Reserved]
33-24-05-206	[Reserved]
33-24-05-207	[Reserved]
33-24-05-208	[Reserved]
33-24-05-209	[Reserved]
33-24-05-210	Applicability to Hazardous Waste Burned for Energy Recovery [Repealed]
33-24-05-211	Prohibitions [Repealed]
33-24-05-212	Standards Applicable to Generators of Hazardous Waste Fuel [Repealed]
33-24-05-213	Standards Applicable to Transporters of Hazardous Waste Fuel [Repealed]
33-24-05-214	Standards Applicable to Marketers of Hazardous Waste Fuel [Repealed]
33-24-05-215	Standards Applicable to Burners of Hazardous Fuel [Repealed]
33-24-05-216	[Reserved]

33-24-05-217 [Reserved]
33-24-05-218 [Reserved]
33-24-05-219 [Reserved]
33-24-05-220 Applicability to Used Oil Burned for Energy Recovery [Repealed]
33-24-05-221 Prohibitions [Repealed]
33-24-05-222 Standards Applicable to Generators of Used Oil Burned for Energy Recovery [Repealed]
33-24-05-223 Standards Applicable to Marketers of Used Oil Burned for Energy Recovery [Repealed]
33-24-05-224 Standards Applicable to Burners of Used Oil Burned for Energy Recovery [Repealed]
33-24-05-225 [Reserved]
33-24-05-226 [Reserved]
33-24-05-227 [Reserved]
33-24-05-228 [Reserved]
33-24-05-229 [Reserved]
33-24-05-230 Applicability and Requirements for Recyclable Materials Utilized for Precious Metal Recovery
33-24-05-231 [Reserved]
33-24-05-232 [Reserved]
33-24-05-233 [Reserved]
33-24-05-234 [Reserved]
33-24-05-235 Applicability and Requirements of Spent Lead Acid Batteries Being Reclaimed
33-24-05-236 [Reserved]
33-24-05-237 [Reserved]
33-24-05-238 [Reserved]
33-24-05-239 [Reserved]
33-24-05-240 [Reserved]
33-24-05-241 [Reserved]
33-24-05-242 [Reserved]
33-24-05-243 [Reserved]
33-24-05-244 [Reserved]
33-24-05-245 [Reserved]
33-24-05-246 [Reserved]
33-24-05-247 [Reserved]
33-24-05-248 [Reserved]
33-24-05-249 [Reserved]
33-24-05-250 Purpose, Scope, and Applicability to Land Disposal Restrictions
33-24-05-251 Definitions Applicable to Sections 33-24-05-250 Through 33-24-05-300
33-24-05-252 Dilution Prohibited as a Substitute for Treatment
33-24-05-253 Treatment Surface Impoundment Exemption
33-24-05-254 Procedures for Case-by-Case Extensions to an Effective Date
33-24-05-255 Petitions to Allow Law Disposal of a Waste Prohibited Under Sections 33-24-05-270 Through 33-24-05-279

33-24-05-256 Testing, Tracking, and Recordkeeping Requirements for Generators, Treaters, and Disposal Facilities
33-24-05-257 [Reserved]
33-24-05-258 Special Rules Regarding Wastes That Exhibit a Characteristic
33-24-05-259 [Reserved]
33-24-05-260 [Reserved]
33-24-05-261 [Reserved]
33-24-05-262 [Reserved]
33-24-05-263 [Reserved]
33-24-05-264 [Reserved]
33-24-05-265 Surface Impoundment Exemptions
33-24-05-266 [Reserved]
33-24-05-267 [Reserved]
33-24-05-268 [Reserved]
33-24-05-269 [Reserved]
33-24-05-270 Waste Specific Prohibitions - Wood Preserving Wastes
33-24-05-271 Waste Specific Prohibitions - Dioxin-Containing Wastes
33-24-05-272 Waste Specific Prohibitions - Soils Exhibiting the Toxicity Characteristic for Metals and Containing Polychlorinated Biphenyls
33-24-05-273 Waste Specific Prohibitions - Chlorinated Aliphatic Wastes
33-24-05-274 Waste Specific Prohibitions - Toxicity Characteristic Metal Wastes
33-24-05-275 Waste Specific Prohibitions - Petroleum Refining Wastes
33-24-05-276 Waste Specific Prohibitions - Inorganic Chemical Wastes
33-24-05-277 Waste Specific Prohibitions - Ignitable and Corrosive Characteristic Wastes Whose Treatment Standards Were Vacated
33-24-05-278 Waste Specific Prohibitions - Newly Identified Organic Toxicity Characteristic Wastes and Newly Listed Coke Byproduct and Chlorotoluene Production Wastes
33-24-05-279 Waste Specific Prohibitions - Spent Aluminum Potliners; Reactive; and Carbamate Wastes
33-24-05-280 Applicability of Treatment Standards
33-24-05-281 Treatment Standards Expressed as Concentrations in Waste Extract
33-24-05-282 Treatment Standards Expressed as Specified Technologies
33-24-05-283 Treatment Standards Expressed as Waste Concentrations
33-24-05-284 Variance From a Treatment Standard
33-24-05-285 Treatment Standards for Hazardous Debris
33-24-05-286 Alternative Treatment Standards Based on High Temperatures Metal Recovery
33-24-05-287 [Reserved]
33-24-05-288 Universal Treatment Standards
33-24-05-289 Alternative Land Disposal Restriction Treatment Standards for Contaminated Soil
33-24-05-290 Prohibitions on Storage of Restricted Wastes
33-24-05-291 [Reserved]

33-24-05-292 [Reserved]
33-24-05-293 [Reserved]
33-24-05-294 [Reserved]
33-24-05-295 [Reserved]
33-24-05-296 [Reserved]
33-24-05-297 [Reserved]
33-24-05-298 [Reserved]
33-24-05-299 [Reserved]
33-24-05-300 Applicability to Miscellaneous Units
33-24-05-301 Environmental Performance Standards
33-24-05-302 Monitoring, Analysis, Inspection, Response, Reporting, and Corrective Action
33-24-05-303 Postclosure Care
33-24-05-304 [Reserved]
33-24-05-305 [Reserved]
33-24-05-306 [Reserved]
33-24-05-307 [Reserved]
33-24-05-308 [Reserved]
33-24-05-309 [Reserved]
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33-24-05-341	[Reserved]
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33-24-05-396 [Reserved]
33-24-05-397 [Reserved]
33-24-05-398 [Reserved]
33-24-05-399 [Reserved]
33-24-05-400 Applicability to Air Emission Standards for Process Vents
33-24-05-401 Definitions
33-24-05-402 Standards - Process Vents
33-24-05-403 Standards - Closed-Vent Systems and Control Devices
33-24-05-404 Test Methods and Procedures
33-24-05-405 Recordkeeping Requirements
33-24-05-406 Reporting Requirements
33-24-05-407 [Reserved]
33-24-05-408 [Reserved]
33-24-05-409 [Reserved]
33-24-05-410 [Reserved]
33-24-05-411 [Reserved]
33-24-05-412 [Reserved]
33-24-05-413 [Reserved]
33-24-05-414 [Reserved]
33-24-05-415 [Reserved]
33-24-05-416 [Reserved]
33-24-05-417 [Reserved]
33-24-05-418 [Reserved]
33-24-05-419 [Reserved]
33-24-05-420 Applicability to Air Emission Standards for Equipment Leaks
33-24-05-421 Definitions as Used in Sections 33-24-05-420 Through 33-24-05-435
33-24-05-422 Standards - Pumps in Light Liquid Service
33-24-05-423 Standards - Compressors
33-24-05-424 Standards - Pressure Relief Devices in Gas or Vapor Service
33-24-05-425 Standards - Sampling Connection Systems
33-24-05-426 Standards - Open-Ended Valves or Lines
33-24-05-427 Standards - Valves in Gas or Vapor Service or in Light Liquid Service
33-24-05-428 Standards - Pumps and Valves in Heavy Liquid Service, Pressure Relief Devices in Light Liquid or Heavy Liquid Service, and Flanges and Other Connectors
33-24-05-429 Standards - Delay of Repair
33-24-05-430 Standards - Closed-Vent Systems and Control Devices
33-24-05-431 Alternative Standards for Valves in Gas or Vapor Service or Light Liquid Service - Percentage of Valves Allowed to Leak

33-24-05-432	Alternative Standard for Valves in Gas or Vapor Service or in Light Liquid Service - Skip Period Leak Detection and Repair
33-24-05-433	Test Methods and Procedures
33-24-05-434	Recordkeeping Requirements
33-24-05-435	Reporting Requirements
33-24-05-436	[Reserved]
33-24-05-437	[Reserved]
33-24-05-438	[Reserved]
33-24-05-439	[Reserved]
33-24-05-440	[Reserved]
33-24-05-441	[Reserved]
33-24-05-442	[Reserved]
33-24-05-443	[Reserved]
33-24-05-444	[Reserved]
33-24-05-445	[Reserved]
33-24-05-446	[Reserved]
33-24-05-447	[Reserved]
33-24-05-448	[Reserved]
33-24-05-449	[Reserved]
33-24-05-450	Applicability to Air Emission Standards for Tanks, Surface Impoundments, and Containers
33-24-05-451	Definitions
33-24-05-452	Standards - General
33-24-05-453	Waste Determination Procedures
33-24-05-454	Standards - Tanks
33-24-05-455	Standards - Surface Impoundments
33-24-05-456	Standards - Containers
33-24-05-457	Standards - Closed-Vent Systems and Control Devices
33-24-05-458	Inspection and Monitoring Requirements
33-24-05-459	Recordkeeping Requirements
33-24-05-460	Reporting Requirements
33-24-05-461	[Reserved]
33-24-05-462	[Reserved]
33-24-05-463	[Reserved]
33-24-05-464	[Reserved]
33-24-05-465	[Reserved]
33-24-05-466	[Reserved]
33-24-05-467	[Reserved]
33-24-05-468	[Reserved]
33-24-05-469	[Reserved]
33-24-05-470	[Reserved]
33-24-05-471	[Reserved]
33-24-05-472	[Reserved]
33-24-05-473	[Reserved]
33-24-05-474	[Reserved]
33-24-05-475	Applicability to Containment Buildings
33-24-05-476	Design and Operating Standards
33-24-05-477	Closure and Postclosure Care

33-24-05-478 [Reserved]
33-24-05-479 [Reserved]
33-24-05-480 [Reserved]
33-24-05-481 [Reserved]
33-24-05-482 [Reserved]
33-24-05-483 [Reserved]
33-24-05-484 [Reserved]
33-24-05-485 [Reserved]
33-24-05-486 [Reserved]
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33-24-05-495 [Reserved]
33-24-05-496 [Reserved]
33-24-05-497 [Reserved]
33-24-05-498 [Reserved]
33-24-05-499 [Reserved]
33-24-05-500 [Reserved]
33-24-05-501 Applicability to Drip Pads
33-24-05-502 Assessment of Existing Drip Pad Integrity
33-24-05-503 Design and Installation of New Drip Pads
33-24-05-504 Design and Operating Requirements
33-24-05-505 Inspections
33-24-05-506 Closure
33-24-05-507 [Reserved]
33-24-05-508 [Reserved]
33-24-05-509 [Reserved]
33-24-05-510 [Reserved]
33-24-05-511 [Reserved]
33-24-05-512 [Reserved]
33-24-05-513 [Reserved]
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33-24-05-515 [Reserved]
33-24-05-516 [Reserved]
33-24-05-517 [Reserved]
33-24-05-518 [Reserved]
33-24-05-519 [Reserved]
33-24-05-520 [Reserved]
33-24-05-521 [Reserved]
33-24-05-522 [Reserved]
33-24-05-523 [Reserved]
33-24-05-524 [Reserved]
33-24-05-525 Applicability to Hazardous Waste Burned in Boilers and Industrial Furnaces

33-24-05-526	Management Prior to Burning
33-24-05-527	Permit Standards for Burners
33-24-05-528	Interim Status Standards for Burners
33-24-05-529	Standards to Control Organic Emissions
33-24-05-530	Standards to Control Particulate Matter
33-24-05-531	Standards to Control Metals Emissions
33-24-05-532	Standards to Control Hydrogen Chloride (HCl) and Chlorine Gas (Cl^2) Emissions
33-24-05-533	Small Quantity Onsite Burner Exemption
33-24-05-534	Low Risk Waste Exemption
33-24-05-535	Waiver of Destruction and Removal Efficiency Trial Burn for Boilers
33-24-05-536	Standards for Direct Transfer
33-24-05-537	Regulation of Residues
33-24-05-538	[Reserved]
33-24-05-539	[Reserved]
33-24-05-540	[Reserved]
33-24-05-541	[Reserved]
33-24-05-542	[Reserved]
33-24-05-543	[Reserved]
33-24-05-544	[Reserved]
33-24-05-545	[Reserved]
33-24-05-546	[Reserved]
33-24-05-547	[Reserved]
33-24-05-548	[Reserved]
33-24-05-549	[Reserved]
33-24-05-550	Applicability of Corrective Action Management Unit (CAMU) Regulations
33-24-05-551	Grandfathered Corrective Action Management Units (CAMUs)
33-24-05-552	Corrective Action Management Unit (CAMU)
33-24-05-553	Temporary Units (TU)
33-24-05-554	Staging Piles
33-24-05-555	Disposal of Corrective Action Management Unit-Eligible Wastes in Permitted Hazardous Waste Landfills
33-24-05-556	[Reserved]
33-24-05-557	[Reserved]
33-24-05-558	[Reserved]
33-24-05-559	[Reserved]
33-24-05-560	[Reserved]
33-24-05-561	[Reserved]
33-24-05-562	[Reserved]
33-24-05-563	[Reserved]
33-24-05-564	[Reserved]
33-24-05-565	[Reserved]
33-24-05-566	[Reserved]
33-24-05-567	[Reserved]
33-24-05-568	[Reserved]
33-24-05-569	[Reserved]

33-24-05-570 [Reserved]
33-24-05-571 [Reserved]
33-24-05-572 [Reserved]
33-24-05-573 [Reserved]
33-24-05-574 [Reserved]
33-24-05-575 [Reserved]
33-24-05-576 [Reserved]
33-24-05-577 [Reserved]
33-24-05-578 [Reserved]
33-24-05-579 [Reserved]
33-24-05-580 [Reserved]
33-24-05-581 [Reserved]
33-24-05-582 [Reserved]
33-24-05-583 [Reserved]
33-24-05-584 [Reserved]
33-24-05-585 [Reserved]
33-24-05-586 [Reserved]
33-24-05-587 [Reserved]
33-24-05-588 [Reserved]
33-24-05-589 [Reserved]
33-24-05-590 [Reserved]
33-24-05-591 [Reserved]
33-24-05-592 [Reserved]
33-24-05-593 [Reserved]
33-24-05-594 [Reserved]
33-24-05-595 [Reserved]
33-24-05-596 [Reserved]
33-24-05-597 [Reserved]
33-24-05-598 [Reserved]
33-24-05-599 [Reserved]
33-24-05-600 Definitions for the Management of Used Oil
33-24-05-601 [Reserved]
33-24-05-602 [Reserved]
33-24-05-603 [Reserved]
33-24-05-604 [Reserved]
33-24-05-605 [Reserved]
33-24-05-606 [Reserved]
33-24-05-607 [Reserved]
33-24-05-608 [Reserved]
33-24-05-609 [Reserved]
33-24-05-610 Applicability of Used Oil Standards
33-24-05-611 Used Oil Specifications
33-24-05-612 Prohibitions
33-24-05-613 [Reserved]
33-24-05-614 [Reserved]
33-24-05-615 [Reserved]
33-24-05-616 [Reserved]
33-24-05-617 [Reserved]
33-24-05-618 [Reserved]
33-24-05-619 [Reserved]

33-24-05-620 Applicability of Standards for Used Oil Generators
33-24-05-621 Hazardous Waste Mixing
33-24-05-622 Used Oil Storage
33-24-05-623 Onsite Burning in Space Heaters
33-24-05-624 Offsite Shipments
33-24-05-625 [Reserved]
33-24-05-626 [Reserved]
33-24-05-627 [Reserved]
33-24-05-628 [Reserved]
33-24-05-629 [Reserved]
33-24-05-630 Do-It-Yourselfer Used Oil Collection Centers
33-24-05-631 Used Oil Collection Centers
33-24-05-632 Used Oil Aggregation Points Owned by the Generator
33-24-05-633 [Reserved]
33-24-05-634 [Reserved]
33-24-05-635 [Reserved]
33-24-05-636 [Reserved]
33-24-05-637 [Reserved]
33-24-05-638 [Reserved]
33-24-05-639 [Reserved]
33-24-05-640 Applicability of Standards for Used Oil Transporter and Transfer Facilities
33-24-05-641 Restrictions on Transporters Who Are Not Also Processors
33-24-05-642 Notification
33-24-05-643 Used Oil Transportation
33-24-05-644 Rebuttable Presumption for Used Oil
33-24-05-645 Used Oil Storage at Transfer Facilities
33-24-05-646 Tracking
33-24-05-647 Management of Residues
33-24-05-648 [Reserved]
33-24-05-649 [Reserved]
33-24-05-650 Applicability of Standards for Used Oil Processors
33-24-05-651 Notification
33-24-05-652 General Facility Standards
33-24-05-653 Rebuttable Presumption for Used Oil
33-24-05-654 Used Oil Management
33-24-05-655 Analysis Plan
33-24-05-656 Tracking
33-24-05-657 Operating Record and Reporting
33-24-05-658 Offsite Shipments of Used Oil
33-24-05-659 Management of Residues
33-24-05-660 Applicability of Standards for Used Oil Burners Who Burn Off-Specification Used Oil for Energy Recovery
33-24-05-661 Restrictions on Burning
33-24-05-662 Notification
33-24-05-663 Rebuttable Presumption for Used Oil
33-24-05-664 Used Oil Storage
33-24-05-665 Tracking
33-24-05-666 Notices

33-24-05-667 Management of Residues
33-24-05-668 [Reserved]
33-24-05-669 [Reserved]
33-24-05-670 Applicability of Standards for Used Oil Fuel Marketers
33-24-05-671 Prohibitions
33-24-05-672 On-Specification Used Oil Fuel
33-24-05-673 Notification
33-24-05-674 Tracking
33-24-05-675 Notices
33-24-05-676 [Reserved]
33-24-05-677 [Reserved]
33-24-05-678 [Reserved]
33-24-05-679 [Reserved]
33-24-05-680 Applicability of Standards for Disposal of Used Oil
33-24-05-681 Disposal
33-24-05-682 [Reserved]
33-24-05-683 [Reserved]
33-24-05-684 [Reserved]
33-24-05-685 [Reserved]
33-24-05-686 [Reserved]
33-24-05-687 [Reserved]
33-24-05-688 [Reserved]
33-24-05-689 [Reserved]
33-24-05-690 [Reserved]
33-24-05-691 [Reserved]
33-24-05-692 [Reserved]
33-24-05-693 [Reserved]
33-24-05-694 [Reserved]
33-24-05-695 [Reserved]
33-24-05-696 [Reserved]
33-24-05-697 [Reserved]
33-24-05-698 [Reserved]
33-24-05-699 [Reserved]
33-24-05-700 [Reserved]
33-24-05-701 Scope of Universal Waste Rule
33-24-05-702 Applicability - Batteries
33-24-05-703 Applicability - Pesticides
33-24-05-704 Applicability - Mercury Containing Devices
33-24-05-705 Applicability - Lamps
33-24-05-706 [Reserved]
33-24-05-707 [Reserved]
33-24-05-708 Applicability - Household and Conditionally Exempt Small Quantity Generator Waste
33-24-05-709 Definitions
33-24-05-710 Applicability - Small Quantity Handlers of Universal Waste
33-24-05-711 Prohibitions
33-24-05-712 Notification
33-24-05-713 Waste Management
33-24-05-714 Labeling and Marking

33-24-05-715 Accumulation Time Limits
33-24-05-716 Employee Training
33-24-05-717 Response to Releases
33-24-05-718 Offsite Shipments
33-24-05-719 Tracking Universal Waste Shipments
33-24-05-720 Exports
33-24-05-721 [Reserved]
33-24-05-722 [Reserved]
33-24-05-723 [Reserved]
33-24-05-724 [Reserved]
33-24-05-725 [Reserved]
33-24-05-726 [Reserved]
33-24-05-727 [Reserved]
33-24-05-728 [Reserved]
33-24-05-729 [Reserved]
33-24-05-730 Applicability - Large Quantity Handlers of Universal Waste
33-24-05-731 Prohibitions
33-24-05-732 Notification
33-24-05-733 Waste Management
33-24-05-734 Labeling and Marking
33-24-05-735 Accumulation Time Limits
33-24-05-736 Employee Training
33-24-05-737 Response to Releases
33-24-05-738 Offsite Shipments
33-24-05-739 Tracking Universal Waste Shipments
33-24-05-740 Exports
33-24-05-741 [Reserved]
33-24-05-742 [Reserved]
33-24-05-743 [Reserved]
33-24-05-744 [Reserved]
33-24-05-745 [Reserved]
33-24-05-746 [Reserved]
33-24-05-747 [Reserved]
33-24-05-748 [Reserved]
33-24-05-749 [Reserved]
33-24-05-750 Applicability - Universal Waste Transporters
33-24-05-751 Prohibitions
33-24-05-752 Waste Management
33-24-05-753 Storage Time Limits
33-24-05-754 Response to Releases
33-24-05-755 Offsite Shipments
33-24-05-756 Exports
33-24-05-757 [Reserved]
33-24-05-758 [Reserved]
33-24-05-759 [Reserved]
33-24-05-760 Applicability - Destination Facilities
33-24-05-761 Offsite Shipments
33-24-05-762 Tracking Universal Waste Shipments
33-24-05-763 [Reserved]

33-24-05-764 [Reserved]
33-24-05-765 [Reserved]
33-24-05-766 [Reserved]
33-24-05-767 [Reserved]
33-24-05-768 [Reserved]
33-24-05-769 [Reserved]
33-24-05-770 Imports
33-24-05-771 [Reserved]
33-24-05-772 [Reserved]
33-24-05-773 [Reserved]
33-24-05-774 [Reserved]
33-24-05-775 [Reserved]
33-24-05-776 [Reserved]
33-24-05-777 [Reserved]
33-24-05-778 [Reserved]
33-24-05-779 [Reserved]
33-24-05-780 Petitions to Include Other Wastes Under Sections 33-24-05-701 Through 33-24-05-799
33-24-05-781 Factors for Petitions to Include Other Wastes Under Sections 33-24-05-701 Through 33-24-05-799
33-24-05-782 [Reserved]
33-24-05-783 [Reserved]
33-24-05-784 [Reserved]
33-24-05-785 [Reserved]
33-24-05-786 [Reserved]
33-24-05-787 [Reserved]
33-24-05-788 [Reserved]
33-24-05-789 [Reserved]
33-24-05-790 [Reserved]
33-24-05-791 [Reserved]
33-24-05-792 [Reserved]
33-24-05-793 [Reserved]
33-24-05-794 [Reserved]
33-24-05-795 [Reserved]
33-24-05-796 [Reserved]
33-24-05-797 [Reserved]
33-24-05-798 [Reserved]
33-24-05-799 [Reserved]
33-24-05-800 Applicability - Military Munitions
33-24-05-801 Design and Operating Standards
33-24-05-802 Closure and Postclosure Care
33-24-05-803 [Reserved]
33-24-05-804 [Reserved]
33-24-05-805 [Reserved]
33-24-05-806 [Reserved]
33-24-05-807 [Reserved]
33-24-05-808 [Reserved]
33-24-05-809 [Reserved]
33-24-05-810 [Reserved]

33-24-05-811 [Reserved]
33-24-05-812 [Reserved]
33-24-05-813 [Reserved]
33-24-05-814 [Reserved]
33-24-05-815 [Reserved]
33-24-05-816 [Reserved]
33-24-05-817 [Reserved]
33-24-05-818 [Reserved]
33-24-05-819 [Reserved]
33-24-05-820 Applicability
33-24-05-821 Definitions
33-24-05-822 Definition of Solid Waste
33-24-05-823 Standards Applicable to the Transportation of Solid Waste Military Munitions
33-24-05-824 Standards Applicable to Emergency Responses
33-24-05-825 Standards Applicable to the Storage of Solid Waste Military Munitions
33-24-05-826 Standards Applicable to the Treatment and Disposal of Waste Military Munitions
33-24-05-827 [Reserved]
33-24-05-828 [Reserved]
33-24-05-829 [Reserved]
33-24-05-830 [Reserved]
33-24-05-831 [Reserved]
33-24-05-832 [Reserved]
33-24-05-833 [Reserved]
33-24-05-834 [Reserved]
33-24-05-835 [Reserved]
33-24-05-836 [Reserved]
33-24-05-837 [Reserved]
33-24-05-838 [Reserved]
33-24-05-839 [Reserved]
33-24-05-840 [Reserved]
33-24-05-841 [Reserved]
33-24-05-842 [Reserved]
33-24-05-843 [Reserved]
33-24-05-844 [Reserved]
33-24-05-845 [Reserved]
33-24-05-846 [Reserved]
33-24-05-847 [Reserved]
33-24-05-848 [Reserved]
33-24-05-849 [Reserved]
33-24-05-850 Definitions Applicable to the Conditional Exemption for Low-Level Mixed Waste Storage, Treatment, Transportation, and Disposal
33-24-05-851 [Reserved]
33-24-05-852 [Reserved]
33-24-05-853 [Reserved]
33-24-05-854 [Reserved]

33-24-05-855 Storage and Treatment Conditional Exemption and Eligibility
33-24-05-856 Eligible Wastes for the Storage and Treatment Conditional Exemption
33-24-05-857 Conditions to Qualify for and Maintain a Storage and Treatment Exemption
33-24-05-858 [Reserved]
33-24-05-859 [Reserved]
33-24-05-860 Treatment Allowed Under Storage and Treatment Conditional Exemption
33-24-05-861 [Reserved]
33-24-05-862 [Reserved]
33-24-05-863 [Reserved]
33-24-05-864 [Reserved]
33-24-05-865 Loss of Conditional Exemption
33-24-05-866 Procedures to Reclaim a Lost Storage and Treatment Conditional Exemption for Low-Level Mixed Waste
33-24-05-867 [Reserved]
33-24-05-868 [Reserved]
33-24-05-869 [Reserved]
33-24-05-870 Recordkeeping for the Storage and Treatment Conditional Exemption
33-24-05-871 [Reserved]
33-24-05-872 [Reserved]
33-24-05-873 [Reserved]
33-24-05-874 [Reserved]
33-24-05-875 Reentry Into Regulation Under the Hazardous Waste Management Rules
33-24-05-876 [Reserved]
33-24-05-877 [Reserved]
33-24-05-878 [Reserved]
33-24-05-879 [Reserved]
33-24-05-880 Storage Unit Closure
33-24-05-881 [Reserved]
33-24-05-882 [Reserved]
33-24-05-883 [Reserved]
33-24-05-884 [Reserved]
33-24-05-885 Transportation and Disposal Conditional Exemption
33-24-05-886 [Reserved]
33-24-05-887 [Reserved]
33-24-05-888 [Reserved]
33-24-05-889 [Reserved]
33-24-05-890 Eligibility for the Transportation and Disposal Conditional Exemption
33-24-05-891 [Reserved]
33-24-05-892 [Reserved]
33-24-05-893 [Reserved]
33-24-05-894 [Reserved]
33-24-05-895 Conditions to Qualify for and Maintain the Transportation and Disposal Conditional Exemption

33-24-05-896 Treatment Standards for Eligible Waste
33-24-05-897 Manifest and Transportation of Eligible Wastes Not Already Subject to Nuclear Regulatory Commission or Nuclear Regulatory Commission Agreement State Equivalent Manifest and Transportation Regulations
33-24-05-898 Transportation and Disposal Exemption
33-24-05-899 Disposal Facilities for Exempted Wastes
33-24-05-900 Disposal Containers for Exempted Waste
33-24-05-901 [Reserved]
33-24-05-902 [Reserved]
33-24-05-903 [Reserved]
33-24-05-904 [Reserved]
33-24-05-905 Notification
33-24-05-906 [Reserved]
33-24-05-907 [Reserved]
33-24-05-908 [Reserved]
33-24-05-909 [Reserved]
33-24-05-910 Recordkeeping for the Transportation and Disposal Conditional Exemption
33-24-05-911 [Reserved]
33-24-05-912 [Reserved]
33-24-05-913 [Reserved]
33-24-05-914 [Reserved]
33-24-05-915 Loss of Transportation and Disposal Conditional Exemption
33-24-05-916 Procedures to Reclaim a Lost Transportation and Disposal Conditional Exemption for Low-Level Mixed Waste
33-24-05-917 [Reserved]
33-24-05-918 [Reserved]
33-24-05-919 [Reserved]
33-24-05-920 [Reserved]
33-24-05-921 [Reserved]
33-24-05-922 [Reserved]
33-24-05-923 [Reserved]
33-24-05-924 [Reserved]
33-24-05-925 [Reserved]
33-24-05-926 [Reserved]
33-24-05-927 [Reserved]
33-24-05-928 [Reserved]
33-24-05-929 [Reserved]
33-24-05-930 [Reserved]
33-24-05-931 [Reserved]
33-24-05-932 [Reserved]
33-24-05-933 [Reserved]
33-24-05-934 [Reserved]
33-24-05-935 [Reserved]
33-24-05-936 [Reserved]
33-24-05-937 [Reserved]
33-24-05-938 [Reserved]
33-24-05-939 [Reserved]

33-24-05-940 [Reserved]
33-24-05-941 [Reserved]
33-24-05-042 [Reserved]
33-24-05-943 [Reserved]
33-24-05-944 [Reserved]
33-24-05-945 [Reserved]
33-24-05-946 [Reserved]
33-24-05-947 [Reserved]
33-24-05-948 [Reserved]
33-24-05-949 [Reserved]

33-24-05-01. Purpose, scope, and applicability.

1. The purpose of this chapter is to establish minimum standards which define the acceptable management of hazardous waste.

2. The standards in this chapter apply to owners and operators of all facilities which treat, store, or dispose of hazardous waste, except as specifically provided otherwise in this chapter or chapter 33-24-02.

3. The requirements of this chapter apply to a person disposing of hazardous waste by means of underground injection subject to a permit issued under an underground injection control program approved or promulgated under the Safe Drinking Water Act only to the extent they are required by chapter 33-24-06.

4. The requirements of this chapter apply to the owner or operator of a publicly owned treatment works which treats, stores, or disposes of hazardous waste only to the extent they are included in a hazardous waste permit by rule granted to such a person under chapter 33-24-06.

5. The requirements of this chapter apply to recyclable materials used in a manner constituting disposal, hazardous waste burned for energy recovery, recyclable materials utilized for precious metal recovery, and spent lead acid batteries being reclaimed.

6. The requirements of this chapter do not apply to:

   a. The owner or operator of a facility permitted, licensed, or registered by the department to manage municipal or industrial solid waste, if the only hazardous waste the facility treats, stores, or disposes of is excluded from regulation under section 33-24-02-05.

   b. The owner or operator of a facility managing recyclable materials described in subdivisions b, c, and d of subsection 1 of section 33-24-02-06 (except to the extent they are referred to in sections 33-24-05-600 through 33-24-05-689 or sections 33-24-05-201 through 33-24-05-209, sections 33-24-05-230

through 33-24-05-249, or sections 33-24-05-525 through 33-24-05-549).

c. A generator accumulating waste onsite in compliance with section 33-24-03-12.

d. A farmer disposing of pesticide containers from the farmer's own use in compliance with section 33-24-03-40.

e. The owner or operator of a totally enclosed treatment facility, as defined in section 33-24-01-04.

f. The owner or operator of an elementary neutralization unit or a wastewater treatment unit as defined in section 33-24-01-04, provided that if the owner or operator is diluting hazardous ignitable (D001) wastes (other than the D001 high total organic carbon subcategory defined in section 33-24-05-280, table treatment standards for hazardous wastes, or reactive (D003) waste, to remove the characteristic before land disposal, the owner or operator must comply with the requirements set out in subsection 2 of section 33-24-05-08.

g. Immediate response activities.

(1) Except as provided in paragraph 2, a person engaged in treatment or containment activities during immediate response to any of the following situations:

(a) A discharge of hazardous waste.

(b) An imminent and substantial threat of a discharge of hazardous waste.

(c) A discharge of material which, when discharged, becomes a hazardous waste.

(d) An immediate threat to human health, public safety, property, or the environment, from the known or suspected presence of military munitions, other explosive material, or an explosive device, as determined by an explosive or munitions emergency response specialist as defined in section 33-24-01-04.

(2) An owner or operator of a facility otherwise regulated by this chapter shall comply with all applicable requirements of sections 33-24-05-15 through 33-24-05-36.

(3) Any person who is covered by paragraph 1 and continues or initiates hazardous waste treatment or containment

activities after the immediate response is over is subject to all applicable requirements of this chapter and chapters 33-24-06 and 33-24-07.

(4) In the case of an explosives or munitions emergency response, if a federal, state, tribal, or local official acting within the scope of that person's official responsibilities, or an explosives or munitions emergency response specialist, determines that immediate removal of the material or waste is necessary to protect human health or the environment, that official or specialist may authorize the removal of the material or waste by transporters who do not have identification numbers and without the preparation of a manifest. In the case of emergencies involving military munitions, the responding military emergency response specialist's organizational unit must retain records for three years identifying the dates of the response, the responsible persons responding, the type and description of material addressed, and its disposition.

h. A transporter storing manifested shipments of hazardous waste in containers meeting the requirements of section 33-24-03-08 at a transfer facility for a period of ten days or less.

i. The addition of absorbent material to waste in a container (as defined in section 33-24-01-04) or the addition of waste to absorbent material in a container provided that these actions occur at the time waste is first placed in a container and subsection 2 of section 33-24-05-08 and sections 33-24-05-90 and 33-24-05-91 are complied with.

j. Universal waste handlers and universal waste transporters (as defined in section 33-24-01-04) handling the wastes listed below. These handlers are subject to regulation under sections 33-24-05-701 through 33-24-05-765, when handling the below listed universal wastes:

(1) Batteries as described in section 33-24-05-702;

(2) Pesticides as described in section 33-24-05-703;

(3) Mercury containing devices as described in section 33-24-05-704; and

(4) Lamps as described in section 33-24-05-705.

7. The requirements of this chapter apply to owners or operators of all facilities which treat, store, or dispose of hazardous wastes referred to in sections 33-24-05-250 through 33-24-05-300.

8. Subsection 2 of section 33-24-05-09 applies only to facilities subject to regulation under sections 33-24-05-89 through 33-24-05-317 and sections 33-24-05-300 through 33-24-05-303.

9. Section 33-24-05-825 identifies when the requirements of this part apply to the storage of military munitions classified as solid waste under section 33-24-05-822. The treatment and disposal of hazardous waste military munitions are subject to the applicable permitting, procedural, and technical standards in article 33-24.

10. The requirements of sections 33-24-05-02 through 33-24-05-36 and section 33-24-05-58 do not apply to remediation waste management sites. (However, some remediation waste management sites may be a part of a facility that is subject to a traditional hazardous waste permit because the facility is also treating, storing, or disposing of hazardous wastes that are not remediation wastes. In these cases, sections 33-24-05-02 through 33-24-05-36 and section 33-24-05-58 do apply to the facility subject to the traditional hazardous waste permit.) Instead of the requirements of sections 33-24-05-02 through 33-24-05-36, owners or operators of remediation waste management sites must:

    a. Obtain an identification number by applying to the department using environmental protection agency form 8700-12, or equivalent state form;

    b. Obtain a detailed chemical and physical analysis of a representative sample of the hazardous remediation wastes to be managed a the site. At a minimum, the analysis must contain all of the information which must be known to treat, store, or dispose of the waste according to chapter 33-24-05, and must be kept accurate and up to date;

    c. Prevent people who are unaware of the danger from entering, and minimize the possibility for unauthorized people or livestock to enter onto the active portion of the remediation waste management site, unless the owner or operator can demonstrate to the department that:

        (1) Physical contact with the waste, structures, or equipment within the active portion of the remediation waste management site will not injure people or livestock who may enter the active portion of the remediation waste management site; and

        (2) Disturbance of the waste or equipment by people or livestock who enter onto the active portion of the remediation waste management site will not cause a violation of the requirements of this article;

d. Inspect the remediation waste management site for malfunctions, deterioration, operator errors, and discharges that may be causing, or may lead to, a release of hazardous waste constituents to the environment, or a threat to human health. The owner or operator must conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment, and must remedy the problem before it leads to a human health or environmental hazard. If a hazard is imminent or has already occurred, the owner or operator must take remedial action immediately;

e. Provide personnel with classroom or on-the-job training on how to perform their duties in a way that ensures the remediation waste management site complies with the requirements of sections 33-24-05-01 through 33-24-05-190, 3-24-05-300 through 33-24-05-524, 33-24-05-550 through 33-24-05-559, and 33-24-05-800 through 33-24-05-819, and on how to respond effectively to emergencies;

f. Take precautions to prevent accidental ignition or reaction of ignitable or reactive waste, and prevent threats to human health and the environment from ignitable, reactive, and incompatible waste;

g. For remediation waste management sites subject to regulation under sections 33-24-05-89 through 33-24-05-190 and sections 33-24-05-300 through 33-24-05-303, the owner or operator must design, construct, operate, and maintain a unit within a one hundred-year floodplain to prevent washout of any hazardous waste by a one hundred-year flood, unless the owner or operator can meet the demonstration of subsection 2 of section 33-24-05-09;

h. Not place any noncontainerized or bulk liquid hazardous waste in any salt dome formation, salt bed formation, or underground mine or cave;

i. Develop and maintain a construction quality assurance program for all surface impoundments, waste piles, and landfill units that are required to comply with subsections 3 and 4 of section 33-24-05-119, subsections 3 and 4 of section 33-24-05-131, and subsections 3 and 4 of section 33-24-05-177 at the remediation waste management site, according to the requirements of section 33-24-05-10;

j. Develop and maintain procedures to prevent accidents and a contingency and emergency plan to control accidents that occur. These procedures must address proper design, construction, maintenance, and operation of remediation waste management units at the site. The goal of the plan must be to minimize the

possibility of, and the hazards from a fire, explosion, or any unplanned sudden or nonsudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water that could threaten human health or the environment. The plan must explain specifically how to treat, store, and dispose of the hazardous remediation waste in question, and must be implemented immediately whenever a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment;

k. Designate at least one employee, either on the facility premises or on call (that is, available to respond to an emergency by reaching the facility quickly), to coordinate all emergency response measures. This emergency coordinator must be thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility, and the facility layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan;

l. Develop, maintain, and implement a plan to meet the requirements in subdivisions b through f, i, and j; and

m. Maintain records documenting compliance with subdivisions a through l.

History: Effective January 1, 1984; amended effective October 1, 1986; December 1, 1988; December 1, 1991; January 1, 1994; July 1, 1997; December 1, 2003.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-02. Identification number and permit. Every facility owner or operator shall apply to the department for an identification number and a permit. ~~The department may assess and collect reasonable fees for the review and issuance of permits.~~

History: Effective January 1, 1984.
General Authority: NDCC 23-20.3-03, 23-20.3-05.1
Law Implemented: NDCC 23-20.3-03, 23-20.3-04, 23-20.3-05, 23-20.3-05.1

33-24-05-03. Required notices.

1. The owner or operator of a facility that has arranged to receive hazardous waste from a foreign source shall notify the department and the environmental protection agency in writing at least four weeks in advance of the date the waste is expected to arrive at the facility. Notice of subsequent shipments of the same waste from the same foreign source is not required.

2. Before transferring ownership or operation of a facility during its operating life, or of a disposal facility during the postclosure care period, the owner or operator shall notify the new owner or operator in writing of the requirements in this chapter.

3. The owner or operator of a facility that receives hazardous waste from an offsite source (except where the owner or operator is also the generator) shall inform the generator in writing that the owner or operator has the appropriate permit for, and will accept, the waste the generator is shipping. The owner or operator shall keep a copy of this written notice as part of the operating record.

History: Effective January 1, 1984.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-04. General waste analysis.

1. Waste analysis requirements.

   a. Before an owner or operator treats, stores, or disposes of any hazardous wastes, the owner or operator shall obtain a detailed chemical and physical analysis of a representative sample of the waste. At a minimum, this analysis must contain all the information which must be known to treat, store, or dispose of the waste in accordance with the requirements of this chapter or a permit issued under chapter 33-24-06.

   b. The analysis may include data developed under chapter 33-24-02 and existing published or documented data on the hazardous waste or on hazardous waste generated from similar processes. (Comment: For example, the facility's records of analyses performed on the waste before the effective date of these rules, or studies conducted on hazardous wastes generated from processes similar to that which generated the waste to be managed at the facility, may be included in the data base required to comply with subdivision a of subsection 1. The owner or operator of an offsite facility may arrange for the generator of the hazardous waste to supply part of the information required by subdivision a of subsection 1, except as otherwise specified in subsections 2 and 3 of section 33-24-05-256. If the generator does not supply the information, and the owner or operator chooses to accept a hazardous waste, the owner or operator is responsible for obtaining the information required to comply with this section.)

   c. The analysis must be repeated as necessary to ensure that it is accurate and up-to-date. At a minimum, the analysis must be repeated:

(1) When the owner or operator is notified, or has reason to believe, that the process or operation generating the hazardous waste has changed; and

(2) For offsite facilities when the results of the inspection required in subdivision d indicate that the hazardous waste received at the facility does not match the waste designated on the accompanying manifest or shipping paper.

d. The owner or operator of an offsite facility shall inspect and, if necessary, analyze each hazardous waste movement received at the facility to determine whether it matches the identity of the waste specified on the accompanying manifest or shipping paper.

2. The owner or operator shall develop and follow a written waste analysis plan which describes the procedures which the owner or operator will carry out to comply with subsection 1. The owner or operator must keep this plan at the facility. At a minimum, the plan must specify:

a. The parameters for which each hazardous waste will be analyzed and the rationale for the selection of these parameters, i.e., how analysis for these parameters will provide sufficient information on the waste's properties to comply with subsection 1.

b. The test methods which will be used to test for these parameters.

c. The sampling method which will be used to obtain a representative sample of the waste to be analyzed. A representative sample may be obtained using either:

(1) One of the sampling methods described in appendix I of chapter 33-24-02; or

(2) An equivalent sampling method.

d. The frequency with which the initial analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate and up-to-date.

e. For offsite facilities the waste analysis that hazardous waste generators have agreed to supply.

f. Where applicable, the methods which will be used to meet the additional waste analysis requirements for specific waste management methods as specified in sections 33-24-05-08, 33-24-05-145, 33-24-05-183, 33-24-05-256, subsection 4 of section 33-24-05-404, subsection 4 of section 33-24-05-433, and section 33-24-05-453.

g. For surface impoundments exempted from land disposal restrictions under subsection 1 of section 33-24-05-253, the procedures and schedules for:

(1) The sampling of impoundment contents;

(2) The analyses of test data; and

(3) The annual removal of residues which are not delisted under section 33-24-01-08 or which exhibit a characteristic of hazardous waste and either:

(a) Do not meet applicable treatment standards of sections 33-24-05-280 through 33-24-05-289; or

(b) Where no treatment standards have been established;

[1] Such residues are prohibited from land disposal under section 33-24-05-272 or Resource Conservation and Recovery Act section 3004(b); or

[2] Such residues are prohibited from land disposal under subsection 6 of section 33-24-05-273.

h. For owners and operators seeking an exemption to the air emission standards of sections 33-24-05-450 through 33-24-05-474 in accordance with section 33-24-05-452:

(1) If direct measurement is used for the waste determination, the procedures and schedules for waste sampling and analysis, and the results of the analysis of test data to verify the exemption.

(2) If knowledge of the waste is used for the waste determination, any information prepared by the facility owner or operator or by the generator of the hazardous waste, if the waste is received from offsite, that is used as the basis for knowledge of the waste.

3. For offsite facilities, the waste analysis plan required in subsection 2 must also specify the procedures which will be used to inspect and analyze each movement of hazardous waste received at the facility to ensure that it matches the identity of the waste designated on the accompanying manifest or shipping paper. At a minimum, the plan must describe:

a. The procedures which will be used to determine the identity of each movement of waste managed at the facility.

b. The sampling method which will be used to obtain a representative sample of the waste to be identified, if the identification method includes sampling.

c. The procedures that the owner or operator of an offsite landfill receiving containerized hazardous waste will use to determine whether a hazardous waste generator or treater has added a biodegradable sorbent to the waste in the container.

History: Effective January 1, 1984; amended effective October 1, 1986; December 1, 1988; December 1, 1991; January 1, 1994; July 1, 1997.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-05. Security.

1. The owner or operator shall prevent the unknowing entry, and minimize the possibility for the unauthorized entry, of persons or livestock onto the active portion of the owner's or operator's facility, unless the owner or operator can demonstrate to the department that:

   a. Physical contact with the waste, structures, or equipment with the active portion of the facility will not injure unknowing or unauthorized persons or livestock which may enter the active portion of the facility.

   b. Disturbance of the waste or equipment, by the unknowing or unauthorized entry of persons or livestock onto the active portion of a facility, will not cause a violation of the requirements of this chapter.

2. Unless exempt under subdivisions a and b of subsection 1, the facility must have:

   a. A twenty-four-hour surveillance system, for example, television monitoring or surveillance by guards or facility personnel, which continuously monitors and controls entry onto the active portion of the facility; or

   b. Both of the following:

      (1) An artificial or natural barrier, for example, a fence in good repair or a fence combined with a cliff, which completely surrounds the active portion of the facility.

      (2) A means to control entry, at all times, through the gates or other entrances to the active portion of the facility, for example, an attendant, television monitors, locked entrance, or controlled roadway access to the facility.

3. Unless exempt under subdivisions a and b of subsection 1, a sign with a legend, "Danger - Unauthorized Personnel Keep Out", must be posted at each entrance to the active portion of a facility, and at other locations, in sufficient numbers to be seen from any approach to this active portion, and must be legible from a distance of at least twenty-five feet [7.62 meters]. The legend must be written in English and in any other language predominant in the area surrounding the facility. Existing signs with a legend other than "Danger - Unauthorized Personnel Keep Out" may be used if the legend on the sign indicates that only authorized personnel are allowed to enter the active portion, and that entry onto the active portion can be dangerous.

History: Effective January 1, 1984; amended effective July 1, 1997.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-04

33-24-05-06. General inspection requirements.

1. The owner or operator shall inspect the facility for malfunctions and deterioration, operator errors, and discharges which may be causing or may lead to release of hazardous waste constituents to the environment, or a threat to human health. The owner or operator shall conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment.

2. Schedule requirements.

   a. The owner or operator shall develop and follow a written schedule for inspecting all monitoring equipment, safety, and emergency equipment, security devices, and operating and structural equipment (such as dikes and sump pumps) that are important to preventing, detecting, or responding to environmental or human health hazards.

   b. The owner or operator shall keep this schedule at the facility.

   c. The schedule must identify the types of problems, for example, malfunctions or deterioration, which are to be looked for during the inspection, for example, inoperative sump pump, leaking fitting, eroding dike, etc.

   d. The frequency of inspection may vary for the items on the schedule. However, the frequency should be based on the rate of possible deterioration of the equipment and the probability of an environmental or human health incident if the deterioration, malfunction, or any operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, must be inspected daily when in use. At a minimum, the inspection schedule must include the items and

frequencies called for in sections 33-24-05-93, 33-24-05-106, 33-24-05-108, 33-24-05-120, 33-24-05-132, 33-24-05-150, 33-24-05-165, 33-24-05-178, 33-24-05-302, 33-24-05-403, 33-24-05-422, 33-24-05-423, 33-24-05-428, and 33-24-05-453 through 33-24-05-459, where applicable.

3. The owner or operator shall remedy any deterioration or malfunction of equipment or structures which the inspection reveals on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action must be taken immediately.

4. The owner or operator shall record inspections in an inspection log or summary. The owner or operator shall keep these records for at least three years from the date of inspection. At a minimum, these records must include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.

History: Effective January 1, 1984; amended effective December 1, 1988; December 1, 1991; January 1, 1994; July 1, 1997; December 1, 2003.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-04

33-24-05-07. Personnel training.

1. Initial training requirements.

   a. Facility personnel shall successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of these rules. The owner or operator shall ensure that this program includes all the elements described in the document required under subdivision c of subsection 4.

   b. This program must be directed by a person trained in hazardous waste management procedures, and must include instruction which teaches facility personnel hazardous waste management procedures, including contingency plan implementation, relevant to the positions in which they are employed.

   c. At a minimum, the training program must be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including where applicable:

      (1) Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment.

(2) Key parameters for automatic waste feed cutoff systems.

(3) Communications or alarm systems.

(4) Response to fires or explosions.

(5) Response to ground water contamination incidents.

(6) Shutdown of operations.

2. Facility personnel shall successfully complete the program required in subsection 1 within six months after January 1, 1984, or six months after the date of their employment or assignment to a facility, or to a new position at a facility, whichever is later. Employees hired after January 1, 1984, may not work in unsupervised positions until they have completed the training requirements of subsection 1.

3. Facility personnel shall take part in an annual review of the initial training required in subsection 1.

4. The owner or operator shall maintain the following documents and records at the facility:

   a. The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job.

   b. A written job description for each position listed under subdivision a. This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company location or bargaining unit, but must include the requisite skill, education, or other qualifications and duties of facility personnel assigned to each person.

   c. A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position listed under subdivision a.

   d. Records that document that the training or job experience required under subsections 1, 2, and 3 has been given to, and completed by, facility personnel.

5. Training records on current personnel must be kept until closure of the facility. Training records on former employees must be kept for at least three years from the date the employee last worked at the facility.

Personnel training records may accompany personnel transferred within the same company.

History: Effective January 1, 1984.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-08. General requirements for ignitable, reactive, or incompatible wastes.

1. The owner or operator shall take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste must be separated and protected from sources of ignition or reaction including, but not limited to: open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (for example, from heat-producing chemical reactions), and radiant heat. While ignitable or reactive waste is being handled, the owner or operator shall confine smoking and open flames to specially designated locations. "No Smoking" signs must be conspicuously placed wherever there is a hazard from ignitable or reactive wastes.

2. Where specifically required by other sections of this chapter, the treatment, storage, or disposal of ignitable or reactive waste, and the mixture or commingling of incompatible wastes, or incompatible wastes and materials, must be conducted so that it does not:

   a. Generate extreme heat or pressure, fire or explosion, or violent reaction;

   b. Produce uncontrolled toxic mists, fumes, dust, or gases in sufficient quantity to threaten human health or the environment;

   c. Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;

   d. Damage the structural integrity of the device or facility; or

   e. Through other like means threaten human health or the environment.

3. When required to comply with subsection 1 or 2, the owner or operator shall document that compliance. This documentation may be based on references to published scientific or engineering literature data, from trial tests (for example, bench scale or pilot scale tests), waste analysis (as specified in section 33-24-05-04), or the results of the treatment

of similar wastes by similar treatment processes and under similar operating conditions.

History: Effective January 1, 1984; amended effective July 1, 1997.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-09. Location standards.

1. The department will not issue a permit to any facility which is or will be constructed in a location with a geology, hydrogeology, hydrology, or topography which the department reasonably believes is incompatible with the type of hazardous waste management activity occurring or proposed to occur. Locations which are specifically within the meaning of this section include but are not limited to floodplains, ground water recharge areas, highly permeable soils, high ground water tables, and areas of high topographic relief.

2. The placement of any noncontainerized or bulk liquid hazardous waste in any salt dome formation, salt bed formation, underground mine, or cave is prohibited.

History: Effective January 1, 1984; amended effective October 1, 1986.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-10. Construction quality assurance program.

1. **Construction quality assurance program.**

   a. A construction quality assurance (CQA) program is required for all surface impoundment, waste pile, and landfill units that are required to comply with subsections 3 and 4 of section 33-24-05-119, subsections 3 and 4 of section 33-24-05-131, and subsections 3 and 4 of section 33-24-05-177. The program must ensure that the constructed unit meets or exceeds all design criteria and specifications in the permit. The program must be developed and implemented under the direction of a construction quality assurance officer who is a registered professional engineer.

   b. The construction quality assurance program must address the following physical components, where applicable:

      (1) Foundations;

      (2) Dikes;

      (3) Low-permeability soil liners;

(4) Geomembranes (flexible membrane liners);

(5) Leachate collection and removal systems and leak detection systems; and

(6) Final cover systems.

2. **Written construction quality assurance plan.** The owner or operator of units subject to the construction quality assurance program under subsection 1 must develop and implement a written construction quality assurance plan. The plan must identify steps that will be used to monitor and document the quality of materials and the condition and manner of their installation. The construction quality assurance plan must include:

a. Identification of applicable units and a description of how they will be constructed.

b. Identification of key personnel in the development and implementation of the construction quality assurance plan and construction quality assurance officer qualifications.

c. A description of inspection and sampling activities for all unit components identified in subdivision b of subsection 1, including observations and tests that will be used before, during, and after construction to ensure that the construction materials and the installed unit components meet the design specifications. The description must cover: sampling size and locations; frequency of testing; data evaluation procedures; acceptance and rejection criteria for construction materials; plans for implementing corrective measures; and data or other information to be recorded and retained in the operating record under section 33-24-05-40.

3. **Contents of program.**

a. The construction quality assurance program must include observations, inspections, tests, and measurements sufficient to ensure:

(1) Structural stability and integrity of all components of the unit identified in subdivision b of subsection 1;

(2) Proper construction of all components of the liners, leachate collection and removal system, leak detection system, and final cover system, according to permit specifications and good engineering practices, and proper installation of all components (for example, pipes) according to design specifications; and

(3) Conformity of all materials used with design and other material specifications under sections 33-24-05-119, 33-24-05-131, and 33-24-05-177.

b. The construction quality assurance program must include test fills for compacted soil liners, using the same compaction methods as in the full scale unit, to ensure that the liners are constructed to meet the hydraulic conductivity requirements of subparagraph b of paragraph 1 of subdivision a of subsection 3 of section 33-24-05-119, subparagraph b of paragraph 1 of subdivision a of subsection 3 of section 33-24-05-131, and subparagraph b of paragraph 1 of subdivision a of subsection 3 of section 33-24-05-177 in the field. Compliance with the hydraulic conductivity requirements must be verified by using in situ testing on the constructed test fill. The department may accept an alternative demonstration, in lieu of a test fill, where data are sufficient to show that a constructed soil liner will meet the hydraulic conductivity requirements of subparagraph b of paragraph 1 of subdivision a of subsection 3 of section 33-24-05-119, subparagraph b of paragraph 1 of subdivision a of subsection 3 of section 33-24-05-131, and subparagraph b of paragraph 1 of subdivision a of subsection 3 of section 33-24-05-177 in the field.

4. **Certification.** Waste shall not be received in a unit subject to section 33-24-05-10 until the owner or operator has submitted to the department by certified mail or hand delivery a certification signed by the construction quality assurance officer that the approved construction quality assurance plan has been successfully carried out and that the unit meets the requirements of subsection 3 or 4 of section 33-24-05-119, subsection 3 or 4 of section 33-24-05-131, or subsection 3 or 4 of section 33-24-05-177; and the procedure in paragraph 2 of subdivision b of subsection 12 of section 33-24-06-04 has been completed. Documentation supporting the construction quality assurance officer's certification must be furnished to the department upon request.

History: Effective January 1, 1994; amended effective July 1, 1997.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

~~**33-24-05-11. [Reserved]**~~

~~**33-24-05-12. [Reserved]**~~

~~**33-24-05-13. [Reserved]**~~

~~**33-24-05-14. [Reserved]**~~

33-24-05-15. Design and operation of facility. Facilities must be designed, constructed, maintained, and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or nonsudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

History: Effective January 1, 1984.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-16. Required equipment. All facilities must be equipped with the following, unless it can be demonstrated to the department that none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below:

1. An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel.

2. A device, such as a telephone (immediately available at the scene of operations), or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or state or local emergency response teams.

3. Portable fire extinguishers, fire control equipment, including special extinguishing equipment (such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment.

4. Water at adequate volume and pressure to supply water hose streams, foam-producing equipment, automatic sprinklers, or water spray systems.

History: Effective January 1, 1984.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-04

33-24-05-17. Testing and maintenance of equipment. All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary, to ensure its proper operation in time of emergency.

History: Effective January 1, 1984.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-18. Access to communications or alarm system.

1. Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation must have immediate access to an internal alarm or emergency communication

device, either directly or through visual or voice contact with another employee, unless such a device is not required under section 33-24-05-16.

2. If there is ever just one employee on the premises while the facility is operating, the employee must have immediate access to a device, such as a telephone, immediately available at the scene of the operation, or a hand-held two-way radio, capable of summoning external emergency assistance, unless such a device is not required under section 33-24-05-16.

History: Effective January 1, 1984.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-19. Required aisle space. The owner or operator shall maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless it can be demonstrated to the department that aisle space is not needed for any of these purposes.

History: Effective January 1, 1984.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-20. Arrangements with local authorities.

1. The owner or operator shall attempt to make the following arrangements, as appropriate for the types of waste handled at the facility and the potential need for the services of these organizations:

   a. Arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of hazardous waste handled at the facility and associated hazardous places where facility personnel would normally be working, entrances to and roads inside the facility, and possible evacuation routes.

   b. Where more than one police and fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department and agreements with any others to provide support to the primary emergency authority.

   c. Agreements with state emergency response teams, emergency response contractors, and equipment suppliers.

   d. Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or

illnesses which could result from fires, explosions, or releases at the facility.

2. Where state or local authorities decline to enter into such arrangements, the owner or operator shall document the refusal in the operating record.

History: Effective January 1, 1984.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

~~**33-24-05-21. [Reserved]**~~

~~**33-24-05-22. [Reserved]**~~

~~**33-24-05-23. [Reserved]**~~

~~**33-24-05-24. [Reserved]**~~

~~**33-24-05-25. [Reserved]**~~

33-24-05-26. Purpose and implementation of contingency plan.

1. Each owner or operator shall have a contingency plan for the facility. The contingency plan must be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or nonsudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water.

2. The provisions of the plan must be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

History: Effective January 1, 1984.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-27. Content of contingency plan.

1. The contingency plan must describe the actions facility personnel must take to comply with sections 33-24-05-26 and 33-24-05-31 in response to fires, explosions, or any unplanned sudden or nonsudden release of hazardous waste or hazardous constituents to air, soil, or surface water at the facility.

2. If the owner or operator has already prepared some other emergency or contingency plan, the owner or operator need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with these requirements.

3. The plan must describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and state and local emergency response teams to coordinate emergency services, pursuant to section 33-24-05-20.

4. The plan must list names, addresses, and telephone numbers (office and home) of all persons qualified to act as emergency coordinator and this list must be kept up to date. Where more than one is listed, one must be named as primary emergency coordinator and others must be listed in the order in which they will assume responsibility as alternates.

5. The plan must include a list of all emergency equipment at the facility, such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment, where this equipment is required. This list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities.

6. The plan must include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe signals to be used to begin evacuation, evacuation routes, and alternate evacuation routes, in cases where the primary routes could be blocked by releases of hazardous waste or fires.

History: Effective January 1, 1984.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-28. Copies of contingency plan. A copy of the contingency plan and all revisions to the plan must be:

1. Maintained at the facility; and

2. Submitted to all local police departments, fire departments, hospitals, and state and local emergency response teams that may be called upon to provide emergency services.

History: Effective January 1, 1984.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-29. Amendment of contingency plan. The contingency plan must be reviewed, and immediately amended, if necessary, whenever:

1. The facility permit is revised;

2. The plan fails in an emergency;

3. The facility changes in its design, construction, operation, maintenance, or other circumstances, in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency;

4. The list of emergency coordinators changes;

5. The list of emergency equipment changes; or

6. Applicable regulations are revised.

History: Effective January 1, 1984; amended effective December 1, 2003.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-30. Emergency coordinator. At all times, there must be at least one employee either on the facility premises or on call, i.e., available to respond to an emergency by reaching the facility within a short period of time, with the responsibility for coordinating all emergency response measures. This emergency coordinator shall be thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of wastes handled, the location of all records within the facility, and the facility layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan.

History: Effective January 1, 1984.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-31. Emergency procedures.

1. When there is an imminent or actual emergency situation, the emergency coordinator, or the coordinator's designee when the emergency coordinator is on call, shall immediately:

   a. Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel.

   b. Notify appropriate state or local agencies with designated response roles if their help is needed.

2. When there is a release, fire, or explosion, the emergency coordinator shall immediately identify the character, exact source, amount, and areal extent of any released materials. The emergency coordinator may do this by observation or review of facility records or manifests and, if necessary, by chemical analysis.

3. Concurrently, the emergency coordinator shall assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion, for example, the effects of any toxic irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water runoffs from water or chemical agents used to control fire and heat-induced explosions.

4. If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health or the environment outside the facility, the emergency coordinator shall report the coordinator's findings as follows:

    a. If the coordinator's assessment indicates that evacuation of local areas may be advisable, the coordinator shall immediately notify appropriate local authorities. The coordinator shall be available to help appropriate officials decide whether local areas should be evacuated.

    b. The coordinator shall immediately notify either the government official designated as the on-scene coordinator for that geographical area or the national response center (using their twenty-four-hour toll-free number 800-424-8802). The report must include:

        (1) Name and telephone number of reporter.

        (2) Name and address of facility.

        (3) Time and type of incident, for example, release, fire.

        (4) Name and quantity of materials involved, to the extent known.

        (5) The extent of injuries, if any.

        (6) The possible hazard to human health or the environment, outside the facility.

5. During an emergency, the emergency coordinator shall take all reasonable measures to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.

6. If the facility stops operations in response to a fire, an explosion or release, the emergency coordinator shall monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

7. Immediately after an emergency, the emergency coordinator shall provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility.

8. The emergency coordinator shall ensure that, in the affected areas of the facility:

   a. No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and

   b. All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

9. The owner or operator shall notify the department and other appropriate state and local authorities, that the facility is in compliance with subsection 8 before operations are resumed in the affected areas of the facility.

10. The owner or operator shall note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within fifteen days after the incident, the owner or operator must submit a written report on the incident to the department. The report must include:

   a. Name, address, and telephone number of the owner or operator.

   b. Name, address, and telephone number of the facility.

   c. Date, time, and type of incident, for example, fire, explosion.

   d. Name and quantity of materials involved.

   e. The extent of injuries, if any.

   f. An assessment of actual or potential hazards to human health or the environment, where this is applicable.

   g. Estimated quantity and disposition of recovered material that resulted from the incident.

History: Effective January 1, 1984; amended effective July 1, 1997.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

~~33-24-05-32. [Reserved]~~

~~33-24-05-33. [Reserved]~~

~~33-24-05-34. [Reserved]~~

~~33-24-05-35. [Reserved]~~

~~33-24-05-36. [Reserved]~~

33-24-05-37. Applicability of manifest system, recordkeeping, and reporting requirements. Sections 33-24-05-37 through 33-24-05-46 apply to owners and operators of both onsite and offsite facilities except as section 33-24-05-01 provides otherwise. Sections 33-24-05-38, 33-24-05-39, and 33-24-05-43 do not apply to owners and operators of onsite facilities that do not receive any hazardous waste from offsite sources, and to owners and operators of offsite facilities with respect to waste military munitions exempted from manifest requirements under subsection 1 of section 33-24-05-823. Subsection 2 of section 33-24-05-40 only applies to permittees who treat, store, or dispose of hazardous waste onsite where such wastes were generated.

History: Effective January 1, 1984; amended effective October 1, 1986; December 1, 2003.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-38. Use of manifest system.

1. If a facility receives hazardous waste accompanied by a manifest, the owner or operator, or the owner's or operator's agent, shall:

   a. Sign and date each copy of the manifest to certify that the hazardous waste covered by the manifest was received.

   b. Note any significant discrepancies in the manifest, as defined in subsection 1 of section 33-24-05-39, on each copy of the manifest.

   c. Immediately give the transporter at least one copy of the signed manifest.

   d. Within thirty days after the delivery, send a copy of the manifest to the generator.

   e. Retain at the facility a copy of each manifest for at least three years from the date of delivery.

2. If a facility receives, from a rail or water (bulk shipment) transporter, hazardous waste which is accompanied by a shipping paper containing all the information required on the manifest (excluding the identification numbers, generator's certification, and signatures), the owner or operator, or the owner's or operator's agent, shall:

a. Sign and date each copy of the manifest or shipping paper (if the manifest has not been received) to certify that the hazardous waste covered by the shipping paper was received.

b. Note any significant discrepancies (as defined in subsection 1 of section 33-24-05-39) in the manifest or shipping paper on each copy of the manifest or shipping paper.

c. Immediately give the rail or water (bulk shipment) transporter at least one copy of the manifest or shipping paper.

d. Within thirty days after the delivery, send a copy of the manifest to the generator; however, if the manifest has not been received within thirty days after delivery, the owner or operator, or the owner's or operator's agent, must sign and date the shipping paper and return it to the generator.

e. Retain at the facility a copy of each shipping paper and manifest for at least three years from the date of delivery.

History: Effective January 1, 1984.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-39. Manifest discrepancies.

1. Manifest discrepancies are differences between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity or type of hazardous waste a facility actually receives. Significant discrepancies in type are obvious differences which can be discovered by inspection or waste analysis, such as waste solvents substituted for waste acid, or toxic constituents not reported on the manifest or shipping paper. Significant discrepancies in quantity are:

   a. For bulk wastes, variations greater than ten percent in weight.

   b. For batch wastes, any variation in piece count, such as a discrepancy of one drum in a truckload.

2. Upon discovering a significant discrepancy, the owner or operator shall attempt to reconcile the discrepancy with the waste generator or transporter, for example, with telephone conversations. If the discrepancy is not resolved within fifteen days after receiving the waste, the owner or operator shall immediately submit to the department a

letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue.

History: Effective January 1, 1984; amended effective July 1, 1997.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-40. Operating record.

1. The owner or operator shall keep a written operating record at the facility.

2. The following information must be recorded, as it becomes available, and maintained in the operating record until closure of the facility:

   a. A description and quantity of each hazardous waste received and the methods and dates of its treatment, storage, or disposal at the facility as required by appendix I.

   b. The location of each hazardous waste within the facility and the quantity at each location. For disposal facilities, the location and quantity of each hazardous waste must be recorded on a map or diagram of each cell or disposal area. For all facilities, this information must include cross-reference to specific manifest document numbers, if the waste was accompanied by a manifest.

   c. Records and results of waste analysis and waste determinations performed as specified in sections 33-24-05-04, 33-24-05-08, 33-24-05-145, 33-24-05-183, subsection 1 of section 33-24-05-253, sections 33-24-05-256, 33-24-05-404, 33-24-05-433, and 33-24-05-453.

   d. Summary reports and details of all incidents that require implementing the contingency plan as specified in subsection 10 of section 33-24-05-31.

   e. Records and results of inspections as required by subsection 4 of section 33-24-05-06 (except these data need to be kept only three years).

   f. Monitoring, testing, or analytical data, and corrective action where required by sections 33-24-05-47 through 33-24-05-58, sections 33-24-05-10, 33-24-05-104, 33-24-05-106, 33-24-05-108, 33-24-05-120, 33-24-05-126, 33-24-05-127, 33-24-05-132, 33-24-05-137, 33-24-05-138, 33-24-05-150, 33-24-05-164, 33-24-05-165, 33-24-05-167, 33-24-05-178, 33-24-05-179, 33-24-05-187, 33-24-05-188, 33-24-05-302, subsections 3 through 6 of section 33-24-05-404, section 33-24-05-405, subsections 4

through 9 of section 33-24-05-433, section 33-24-05-434, and sections 33-24-05-452 through 33-24-05-460.

g. For offsite facilities, notices to generators as specified in subsection 2 of section 33-24-05-03.

h. All closure and postclosure cost estimates under section 33-24-05-76.

i. A certification by the permittee no less often than annually that the permittee has a program in place to reduce the volume and toxicity of hazardous waste that is generated to the degree determined by the permittee to be economically practicable; and the proposed method of treatment, storage, or disposal is that practicable method currently available to the permittee which minimizes the present and future threat to human health and the environment.

j. Records of the quantities and date of placement for each shipment of hazardous waste placed in land disposal units under an extension to the effective date of any land disposal restriction granted pursuant to section 33-24-05-254, a petition pursuant to section 33-24-05-255, and the applicable notice required by a generator under subsection 1 of section 33-24-05-256.

k. For an offsite treatment facility, a copy of the notice, and the certification and demonstration, if applicable, required by the generator or the owner or operator under section 33-24-05-256.

l. For an onsite treatment facility, the information contained in the notice except the manifest number, and the certification and demonstration, if applicable, required by the generator or the owner or operator under section 33-24-05-256.

m. For an offsite land disposal facility, a copy of the notice, and the certification and demonstration, if applicable, required by the generator or the owner or operator of a treatment facility under section 33-24-05-256.

n. For an onsite land disposal facility, the information contained in the notice required by the generator or owner or operator of a treatment facility under section 33-24-05-256.

o. For an offsite storage facility, a copy of the notice, and the certification and demonstration, if applicable, required by the generator or the owner or operator under section 33-24-05-256.

p. For an onsite storage facility, the information contained in the notice except the manifest number, and the certification and

demonstration, if applicable, required by the generator or the owner or operator under section 33-24-05-256.

q. Any records required under subdivision m of subsection 10 of section 33-24-05-01.

History: Effective January 1, 1984; amended effective October 1, 1986; December 1, 1988; December 1, 1991; January 1, 1994; July 1, 1997; December 1, 2003.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-41. Availability, retention, and disposition of records.

1. All records, including plans, required under this chapter must be furnished upon request, and made available at all reasonable times for inspection, by a duly designated officer, employee, or representative of the department.

2. The retention period for all records is extended automatically during the course of any unresolved enforcement action regarding the facility or as requested by the department.

3. A copy of records of waste disposal locations and quantities under subdivision b of subsection 2 of section 33-24-05-40 must be submitted to the department and local land authority upon closure of the facility.

History: Effective January 1, 1984.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-42. Biennial report. The owner or operator shall prepare and submit a single copy of a biennial report to the department by March first of each even-numbered year. The report form and instructions can be obtained from the department's division of waste management and special studies. The biennial report must cover facility activities during the previous calendar year and must include the following information:

1. The identification number, name, and address of the facility.

2. The calendar year covered by the report.

3. For offsite facilities, identification number of each hazardous waste generator from which the facility received a hazardous waste during the year; for imported shipments, the report must give the name and address of the foreign generator.

4. A description and quantity of each hazardous waste the facility received during the year. For offsite facilities, this information must be listed by identification number of each generator.

5. The method of treatment, storage, or disposal for each hazardous waste.

6. Any ground water monitoring data which the owner or operator is required to collect under section 33-24-05-55, 33-24-05-56, or 33-24-05-57, and which the owner or operator has not otherwise submitted to the department under those sections.

7. The most recent closure and postclosure cost estimate under section 33-24-05-76.

8. For generators who treat, store, or dispose of hazardous waste onsite, a description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated.

9. For generators who treat, store, or dispose of hazardous waste onsite, a description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available for the years prior to 1984.

10. The certification signed by the owner or operator of the facility or the owner's or operator's authorized representative.

History: Effective January 1, 1984; amended effective October 1, 1986; December 1, 1988; July 1, 1997; December 1, 2003.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-43. Unmanifested waste report. If a facility accepts for treatment, storage, or disposal any hazardous waste from an offsite source without an accompanying manifest, or without an accompanying shipping paper as described in subdivision b of subsection 5 of section 33-24-04-04 and if the waste is not excluded from the manifest requirement by section 33-24-02-05, then the owner or operator shall prepare and submit a single copy of a report to the department within fifteen days after receiving the waste. The report must be designated "Unmanifested Waste Report" and must include the following information:

1. The identification number, name, and address of the facility.

2. The date the facility received the waste.

3. The identification number, name, and address of the generator and the transporter, if available.

4. A description and the quantity of each unmanifested hazardous waste the facility received.

5. The method of treatment, storage, or disposal for each hazardous waste.

6. The certification signed by the owner or operator of the facility or the owner's or operator's authorized representative.

7. A brief explanation of why the waste was unmanifested, if known.

History: Effective January 1, 1984.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-44. Additional reports. In addition to submitting the biennial reports and unmanifested waste reports described in sections 33-24-05-42 and 33-24-05-43, the owner or operator shall also report to the department:

1. Releases, fires, and explosions as specified in subsection 10 of section 33-24-05-31.

2. Facility closures specified in section 33-24-05-64.

3. As otherwise required by sections 33-24-05-47 through 33-24-05-58, 33-24-05-118 through 33-24-05-143, 33-24-05-160 through 33-24-05-190, and 33-24-05-400 through 33-24-05-474.

History: Effective January 1, 1984; amended effective December 1, 1991; July 1, 1997; December 1, 2003.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

~~**33-24-05-45. [Reserved]**~~

~~**33-24-05-46. [Reserved]**~~

33-24-05-47. Applicability of ground water protection requirements.

1. Applicability.

   a. Except as provided in subsection 2, the rules in this chapter apply to owners or operators of facilities that treat, store, or dispose of hazardous waste. The owner or operator must satisfy the requirements identified in subdivision b of subsection 1 for all wastes (or constituents thereof) contained in solid waste management units at the facility, regardless of the time at which waste was placed in such units.

b. All solid waste management units must comply with the requirements in section 33-24-05-58. A surface impoundment, waste pile, and land treatment unit, or landfill that receives hazardous waste after July 26, 1982, (hereinafter referred to as a "regulated unit") must comply with the requirements of sections 33-24-05-48 through 33-24-05-57 in lieu of section 33-24-05-58 for purposes of detecting, characterizing, and responding to releases to the uppermost aquifer. The financial responsibility requirements of section 33-24-05-58 apply to regulated units.

2. The owner's or operator's regulated unit or units, are not subject to regulation for releases into the uppermost aquifer under this chapter if:

a. The owner or operator is exempted under section 33-24-05-01; or

b. He operates a unit which the department finds:

(1) Is an engineered structure;

(2) Does not receive or contain liquid waste or waste containing free liquids;

(3) Is designed and operated to exclude liquid, precipitation, and other run-on and runoff;

(4) Has both inner and outer layers of containment enclosing the waste;

(5) Has a leak detection system built into each containment layer;

(6) The owner or operator will provide continuing operation and maintenance of these leak detection systems during the active life of the unit and the closure and postclosure care periods; and

(7) To a reasonable degree of certainty, will not allow hazardous constituents to migrate beyond the outer containment layer prior to the end of the postclosure care period;

c. The department finds, pursuant to subsection 4 of section 33-24-05-167, that the treatment zone of a land treatment unit that qualifies as a regulated unit does not contain levels of hazardous constituents that are above background levels of those constituents by an amount that is statistically significant, and if an unsaturated zone monitoring program meeting the requirements of section 33-24-05-165 has not shown a statistically significant increase in hazardous constituents below the treatment zone during the operating life of the unit. An exemption under this

section can only relieve an owner or operator of responsibility to meet the requirements of this chapter during the postclosure care period;

d. The department finds that there is no potential for migration of liquid from a regulated unit to the uppermost aquifer during the active life of the regulated unit (including the closure period) and the postclosure care period specified under section 33-24-05-65. This demonstration must be certified by a qualified geologist or geotechnical engineer. In order to provide an adequate margin of safety in the prediction of potential migration of liquid, the owner or operator shall base any predictions made under this section on assumptions that maximize the rate of liquid migration; or

e. He designs and operates a pile in compliance with subsection 3 of section 33-24-05-130.

3. The ground water protection requirements apply during the active life of the regulated unit (including the closure period). After closure of the regulated unit, the ground water protection requirements:

   a. Do not apply if all waste, waste residues, contaminated containment system components, and contaminated subsoils are removed or decontaminated at closure;

   b. Apply during the postclosure care period under section 33-24-05-65 if the owner or operator is conducting a detection monitoring program under section 33-24-05-55; or

   c. Apply during the compliance period under section 33-24-05-53 if the owner or operator is conducting a compliance monitoring program under section 33-24-05-56 or a corrective action program under section 33-24-05-57.

4. Rules in this chapter may apply to miscellaneous units when necessary to comply with sections 33-24-05-301 through 33-24-05-303.

History: Effective January 1, 1984; amended effective October 1, 1986; December 1, 1988; December 1, 1991.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-04

33-24-05-48. Required programs.

1. Owners and operators subject to the ground water protection requirements shall conduct a monitoring and response program as follows:

a. Whenever hazardous constituents under section 33-24-05-50 from a regulated unit are detected at a compliance point under section 33-24-05-52, the owner or operator must institute a compliance monitoring program under section 33-24-05-56. Detected is defined as statistically significant evidence of contamination as described in subsection 6 of section 33-24-05-55;

b. Whenever the ground water protection standard under section 33-24-05-49 is exceeded, the owner or operator must institute a corrective action program under section 33-24-05-57. Exceeded is defined as statistically significant evidence of increased contamination as described in subsection 4 of section 33-24-05-56;

c. Whenever hazardous constituents under section 33-24-05-50 from a regulated unit exceed concentration limits under section 33-24-05-51 in ground water between the compliance point under section 33-24-05-52 and the downgradient facility boundary property, the owner or operator shall institute a corrective action program under section 33-24-05-57; or

d. In all other cases, the owner or operator shall institute a detection monitoring program under section 33-24-05-55.

2. The department will specify in the facility permit the specific elements of the monitoring and response program. The department may include one or more of the programs identified in subsection 1 in the facility permit as may be necessary to protect human health and the environment and will specify the circumstances under which each of the programs will be required. In deciding whether to require the owner or operator to be prepared to institute a particular program, the department will consider the potential adverse effects on human health and the environment that might occur before final administrative action on a permit modification application to incorporate such a program could be taken.

History: Effective January 1, 1984; amended effective December 1, 1991.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-49. Ground water protection standard. The owner or operator must comply with conditions specified in the facility permit designed to ensure that hazardous constituents under section 33-24-05-50 detected in the ground water from a regulated unit do not exceed the concentration limits under section 33-24-05-51 in the uppermost aquifer underlying the waste management area beyond the point of compliance under section 33-24-05-52 during the compliance period under section 33-24-05-53. The department will establish this ground water

protection standard in the facility permit when hazardous constituents have been detected in the ground water.

History: Effective January 1, 1984; amended effective December 1, 1991.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-50. Hazardous constituents.

1. The department will specify in the facility permit the hazardous constituents to which the ground water protection standard of section 33-24-05-49 applies. Hazardous constituents are constituents identified in appendix V of chapter 33-24-02 that have been detected in ground water in the uppermost aquifer underlying a regulated unit and that are reasonably expected to be in or derived from waste contained in a regulated unit, unless the department has excluded them under subsection 2.

2. The department will exclude an appendix V of chapter 33-24-02 constituent from the list of hazardous constituents specified in the facility permit if it finds that the constituent is not capable of posing a substantial present or potential hazard to human health or the environment. In deciding whether to grant an exemption, the department will consider the following:

   a. Potential adverse effects on ground water quality, considering:

      (1) The physical and chemical characteristics of the waste in the regulated units, including its potential for migration.

      (2) The hydrogeological characteristics of the facility and surrounding land.

      (3) The quantity of ground water and the direction of ground water flow.

      (4) The proximity and withdrawal rates of ground water users.

      (5) The current and future uses of ground water in the area.

      (6) The existing quality of ground water, including other sources of contamination and their cumulative impact on the ground water quality.

      (7) The potential for health risks caused by human exposure to waste constituents.

(8) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.

(9) The persistence and permanence of the potential adverse effect.

b. Potential adverse effects on hydraulically connected surface water quality, considering:

(1) The volume and physical and chemical characteristics of the waste in the regulated unit.

(2) The hydrogeological characteristics of the facility and surrounding land.

(3) The quantity and quality of ground water, and the direction of ground water flow.

(4) The patterns of rainfall in the region.

(5) The proximity of the regulated unit to surface water.

(6) The current and future uses of surface water in the area and any water quality standards established for those surface waters.

(7) The existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality.

(8) The potential for health risks caused by human exposure to waste constituents.

(9) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.

(10) The persistence and permanence of the potential adverse effects.

3. In making any determination under subsection 2 about the use of ground water in the area around the facility, the department will consider any identification of underground sources of drinking water and exempted

aquifers made under provisions of the Safe Drinking Water Act and 40 CFR 144.8.

History: Effective January 1, 1984; amended effective July 1, 1997.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-51. Concentration limits.

1. The department will specify in the facility permit concentration limits in the ground water for hazardous constituents established under section 33-24-05-50. The concentration of a hazardous constituent:

   a. May not exceed the background level of that constituent in the ground water at the time that limit is specified in the permit;

   b. For any of the constituents listed in table 1, may not exceed the respective value given in that table if the background level of the constituent is below the value given in table 1; or

   c. May not exceed an alternate limit established by the department under subsection 2.

Table 1. Maximum Concentration of Constituents for Ground Water Protection

Constituent	Maximum Concentration mg/l
Barium	1.0
Cadmium	0.01
Chromium	0.05
Lead	0.05
Mercury	0.002
Selenium	0.01
Silver	0.05
Endrin (1,2,3,4,10, 10-hexachloro-1,7-epoxy-1,4,4a,5,6,7,8,9a-octahydro-1, 4-endo, endo-5, 8-dimenthano naphthalene)	0.0002
Lindane (1,2,3,4,5,6-hexachlorocyclohexane, gamma isomer)	0.004
Methoxychlor (1,1,1-trichloro-2, 2-bis[p-methoxyphenyl] ethane)	0.1
Toxaphene ($C_{10}H_{10}Cl_8$ technical chlorinated camphene, 67-69% chlorine)	0.005

~~2,4-D (2,4-dichlorophenoxyacetic acid)~~	~~0.1~~
~~2,4,5-TP silvex (2,4,5-trichlorophen-oxy propionic acid)~~	~~0.01~~

2. The department will establish an alternate concentration limit for a hazardous constituent if it finds that the constituent will not pose a substantial present or potential hazard to human health or the environment as long as the alternate concentration limit is not exceeded. In establishing alternate concentration limits, the department will consider the following factors:

   a. Potential adverse effects on ground water quality, considering:

      (1) The physical and chemical characteristics of the waste in the regulated unit, including the potential for migration.

      (2) The hydrogeological characteristics of the facility and surrounding land.

      (3) The quantity of ground water and direction of ground water flow.

      (4) The proximity and withdrawal rates of ground water users.

      (5) Current and future uses of ground water in the area.

      (6) The existing quality of ground water, including other sources of contamination and their cumulative impact on the ground water quality.

      (7) The potential for health risks caused by human exposure to waste constituents.

      (8) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.

      (9) The persistence and permanence of potential adverse effects.

   b. Potential adverse effects on hydraulically connected surface water quality, considering:

      (1) The volume and physical and chemical characteristics of the waste in the regulated unit.

      (2) The hydrogeological characteristics of the facility and surrounding land.

(3) The quantity and quality of ground water, and the direction of ground water flow.

(4) The patterns of rainfall in the region.

(5) The proximity of the regulated unit to surface waters.

(6) The current and future uses of surface waters in the area and any water quality standards established for those surface waters.

(7) Existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality.

(8) The potential for health risks caused by human exposure to waste constituents.

(9) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.

(10) The persistence and permanence of the potential adverse effects.

3. In making any determination under subsection 2 about the use of ground water in the area around the facility the department will consider any identification of underground sources of drinking water and exempted aquifers made under provisions of the Safe Drinking Water Act and 40 CFR 144.8.

History: Effective January 1, 1984; amended effective July 1, 1997.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-52. Point of compliance.

1. The department will specify in the facility permit the point of compliance at which the ground water protection standard of section 33-24-05-49 applies and at which monitoring must be conducted. The point of compliance is a vertical surface located at the hydraulically downgradient limit of the waste management area that extends down into the uppermost aquifer underlying the regulated units.

2. The waste management area is the limit projected in the horizontal plane of the area on which waste will be placed during the active life of a regulated unit.

a. The waste management area includes horizontal space taken up by any liner, dike, or other barrier designed to contain waste in a regulated unit.

b. If the facility contains more than one regulated unit, the waste management area is described by an imaginary line circumscribing the several regulated units.

History: Effective January 1, 1984.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-53. Compliance period.

1. The department will specify in the facility permit the compliance period during which the ground water protection standard of section 33-24-05-49 applies. The compliance period is the number of years equal to the active life of the waste management area (including any waste management activity prior to permitting, and the closure period).

2. The compliance period begins when the owner or operator initiates a compliance monitoring program meeting the requirements of section 33-24-05-56.

3. If the owner or operator is engaged in a corrective action program at the end of the compliance period specified in subsection 1, the compliance period is extended until the owner or operator can demonstrate that the ground water protection standard of section 33-24-05-49 has not been exceeded for a period of three consecutive years.

History: Effective January 1, 1984.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-54. General ground water monitoring requirements. The owner or operator shall comply with the following requirements for any ground water monitoring program developed to satisfy section 33-24-05-55, 33-24-05-56, or 33-24-05-57:

1. The ground water monitoring system must consist of a sufficient number of wells, installed at appropriate locations and depth to yield ground water samples from the uppermost aquifer that:

a. Represent the quality of background water that has not been affected by leakage from a regulated unit. A determination of background quality may include sampling of wells that are not hydraulically upgradient of the waste management area where:

(1) Hydrogeologic conditions do not allow the owner or operator to determine what wells are hydraulically upgradient; and

(2) Sampling at other wells will provide an indication of background ground water quality that is representative or more representative than that provided by the upgradient wells.

b. Represent the quality of ground water passing the point of compliance.

c. Allow for the detection of contamination when hazardous waste or hazardous constituents have migrated from the waste management area to the uppermost aquifer.

2. If a facility contains more than one regulated unit, separate ground water monitoring systems are not required for each regulated unit provided that provisions for sampling the ground water in the uppermost aquifer will enable detection and measurement at the compliance point of hazardous constituents from the regulated units that have entered the ground water in the uppermost aquifer.

3. All monitoring wells must be cased in a manner that maintains the integrity of the monitoring well borehole. This casing must be screened or perforated and packed with gravel or sand, where necessary, to enable collection of ground water samples. The annular space, i.e., the space between the borehole and well casing, above the sampling depth must be sealed to prevent contamination of samples and the ground water.

4. The ground water monitoring program must include consistent sampling and analysis procedures that are designed to ensure monitoring results that provide a reliable indication of ground water quality below the waste management area. At a minimum, the program must include procedures and techniques for:

a. Sample collection.

b. Sample preservation and shipment.

c. Analytical procedures.

d. Chain of custody control.

5. The ground water monitoring program must include sampling and analytical methods that are appropriate for ground water sampling and that accurately measure hazardous constituents in ground water samples.

6. The ground water monitoring program must include a determination of the ground water surface elevation each time ground water is sampled.

7. In detection monitoring or where appropriate in compliance monitoring, data on each hazardous constituent specified in the permit will be collected from background wells and wells at the compliance points the number and kinds of samples collected to establish background must be appropriate for the form of statistical test employed following generally accepted statistical principles. The sample site must be as large as necessary to ensure with reasonable confidence that a contaminant released to ground water from a facility will be detected. The owner or operator will determine an appropriate sampling procedure and interval for each hazardous constituent listed in the facility permit which must be specified in the unit permit upon approval by the department. This sampling procedure must be:

    a. A sequence of at least four samples, taken at an interval that assures, to the greatest extent technically feasible, that an independent sample is obtained, by reference to the uppermost aquifers effective porosity, hydraulic conductivity, and hydraulic gradient, and the fate and transport characteristics of the potential contaminants; or

    b. An alternate sampling procedure proposed by the owner or operator and approved by the department.

8. The owner or operator will specify one of the following statistical methods to be used in evaluating ground water monitoring data for each hazardous constituent which, upon approval by the department, will be specified in the unit permit. The statistical test chosen must be conducted separately for each hazardous constituent in each well. Where practical quantification limits are used in any of the following statistical procedures to comply with subdivision e of subsection 9, the practical quantification limits must be proposed by the owner or operator and approved by the department. Use of any of the following statistical methods must be protective of human health and the environment and must comply with the performance standards outlined in subsection 9.

    a. A parametric analysis of variance followed by multiple comparison procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance wells mean and the background mean levels for each constituent.

    b. An analysis of variance based on ranks followed by multiple comparison procedures to identify statistically significant evidence of contamination. The method must include estimation and testing

of the contrasts between each compliance wells median and the background median levels for each constituent.

c. A tolerance or prediction interval procedure in which an interval for each constituent is established from the distribution of the background data, and the level of each constituent in each compliance well is compared to the upper tolerance or prediction limit.

d. A control chart approach that gives control limits for each constituent.

e. Another statistical test method submitted by the owner or operator and approved by the department.

9. Any statistical method chosen under subsection 8 of section 33-24-05-54 for specification in the unit permit shall comply with the following performance standards, as appropriate:

a. The statistical method used to evaluate ground water monitoring data must be appropriate for the distribution of chemical parameters or hazardous constituents. If the distribution of the chemical parameters or hazardous constituents is shown by the owner or operator to be inappropriate for a normal theory test, then the data should be transformed or a distribution-free theory test should be used. If the distributions for the constituents differ, more than one statistical method may be needed.

b. If an individual well comparison procedure is used to compare an individual compliance well constituent concentration with background constituent concentrations or a ground water protection standard, the test must be done at a type one error level no less than one hundredth for each testing period. If a multiple comparisons procedure is used, the type one experiment wise error rate for each testing period must be no less than five hundredths; however, the type one error of no less than one hundredth for individual well comparisons must be maintained. This performance standard does not apply to tolerance intervals, prediction intervals, or control charts.

c. If a control chart approach is used to evaluate ground water monitoring data, the specific type of control chart and its associated parameter values must be proposed by the owner or operator and approved by the department if he or she finds it to be protective of human health and the environment.

d. If a tolerance interval or a prediction interval is used to evaluate ground water monitoring data, the levels of confidence and, for tolerance intervals, the percentage of the population that

the interval must contain, must be proposed by the owner or operator and approved by the department if he or she finds these parameters to be protective of human health and the environment. These parameters will be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each constituent of concern.

e. The statistical method must account for data below the limit of detection with one or more statistical procedures that are protective of human health and the environment. Any practical quantification limit approved by the department under subsection 8 of section 33-24-05-54 that is used in the statistical method must be the lowest concentration level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions that are available to the facility.

f. If necessary, the statistical method must include procedures to control or correct for seasonal and spacial variability as well as temporal correlation in the data.

10. Ground water monitoring data collected in accordance with subsection 7 including actual levels of constituents must be maintained in the facility operating record. The department will specify in the permit when the data must be submitted for review.

History: Effective January 1, 1984; amended effective December 1, 1991.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-55. Detection monitoring program. An owner or operator required to establish a detection monitoring program shall, at a minimum, discharge the following responsibilities:

1. The owner or operator shall monitor for indicator parameters (for example, specific conductance, total organic carbon, or total organic halogen), waste constituents, or reaction products that provide a reliable indication of the presence of hazardous constituents in ground water. The department will specify the parameters or constituents to be monitored in the facility permit, after considering the following factors:

   a. The types, quantities, and concentrations of constituents in wastes managed at the regulated unit.

   b. The mobility, stability, and persistence of waste constituents or their reaction products in the unsaturated zone beneath the waste management area.

c. The detectability of indicator parameters, waste constituents, and reaction products in ground water.

d. The concentrations or values and coefficients of variation of proposed monitoring parameters or constituents in the ground water background.

2. The owner or operator shall install a ground water monitoring system at the compliance point under section 33-24-05-52 which complies with subdivision b of subsection 1, and subsections 2 and 3, of section 33-24-05-54.

3. The owner or operator must conduct a ground water monitoring program for each chemical parameter and hazardous constituent specified in the permit pursuant to subsection 1 in accordance with subsection 7 of section 33-24-05-54. The owner or operator must maintain a record of ground water analytical data as measured and in a form necessary for the determination of statistical significance under subsection 8 of section 33-24-05-54.

4. The department will specify the frequencies for collecting samples and conducting statistical tests to determine whether there is statistically significant evidence of contamination for any parameter or hazardous constituent specified in the permit under subsection 1 in accordance with subsection 7 of section 33-24-05-54. A sequence of at least four samples from each well (background and compliance wells) must be collected at least semiannually during detection monitoring.

5. The owner or operator shall determine the ground water flow rate and direction in the uppermost aquifer at least annually.

6. The owner or operator must determine whether there is statistically significant evidence of contamination for any chemical parameter of hazardous constituent specified in the permit pursuant to subsection 1 at a frequency specified under subsection 4.

a. In determining whether statistically significant evidence of contamination exists, the owner or operator must use the methods specified in the permit under subsection 8 of section 33-24-05-54. These methods must compare data collected at the compliance points to the background ground water quality data.

b. The owner or operator must determine whether there is statistically significant evidence of contamination at each monitoring well at the compliance point within a reasonable period of time at the completion of sampling. The department will specify in the facility permit what period of time is reasonable, after considering the complexity of the statistical test and availability of laboratory facilities to perform the analysis of ground water samples.

7. If the owner or operator determines pursuant to subsection 6 that there is statistically significant evidence of contamination for chemical parameters or hazardous constituents specified pursuant to subsection 1 at any monitoring well at the compliance point, the owner or operator must:

   a. Notify the department of this finding in writing within seven days. The notification must indicate what chemical parameters or hazardous constituents have shown statistically significant evidence of contamination.

   b. Immediately sample the ground water in all monitoring wells and determine whether constituents in the list of appendix IX of chapter 33-24-05 are present, and if so, in what concentration.

   c. For any appendix IX compounds found in the analysis pursuant to subdivision b of subsection 7, the owner or operator may resample within one month and repeat the analysis for those compounds detected. If the results of the second analysis confirm the initial results, then these constituents will form the basis for compliance monitoring. If the owner or operator does not resample the compounds found pursuant to subdivision b of subsection 7, the hazardous constituents found during this initial appendix IX analysis will form the basis for compliance monitoring.

   d. Within ninety days, submit to the department an application for a permit modification to establish a compliance monitoring program meeting the requirements of section 33-24-05-56. The application must include the following information:

      (1) An identification of the concentration or any appendix IX constituent detected in the ground water at each monitoring well at the compliance point.

      (2) Any proposed changes to the ground water monitoring system at the facility necessary to meet the requirements of section 33-24-05-56.

      (3) Any proposed additions or changes to the monitoring frequency, sampling and analysis procedures or methods, or statistical methods used at the facility necessary to meet the requirements of section 33-24-05-56.

      (4) For each hazardous constituent detected at the compliance point, a proposed concentration limit under subdivision a or b of subsection 1 of section 33-24-05-51, or a notice of intent to seek an alternate concentration limit under subsection 2 of section 33-24-05-51.

e. Within one hundred eighty days, submit to the department:

(1) All data necessary to justify an alternate concentration limit sought under subsection 2 of section 33-24-05-51; and

(2) An engineering feasibility plan for a corrective action program necessary to meet the requirements of section 33-24-05-57, unless:

(a) All hazardous constituents identified under subdivision b of subsection 7 are listed in table 1 of section 33-24-05-51 and their concentrations do not exceed the respective values given in that table; or

(b) The owner or operator has sought an alternate concentration limit under subsection 2 of section 33-24-05-51 for every hazardous constituent identified under subdivision b of subsection 7.

f. If the owner or operator determines, pursuant to subsection 6, that there is a statistically significant difference for chemical parameters or hazardous constituents specified pursuant to subsection 1 at any monitoring well at the compliance point, the owner or operator may demonstrate that a source other than a regulated unit caused the contamination or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the ground water. The owner or operator may make a demonstration under this section in addition to, or in lieu of, submitting a permit modification application under subdivision d of subsection 7; however, the owner or operator is not relieved of the requirement to submit a permit modification application within the time specified in subdivision d of subsection 7 unless the demonstration made under this subdivision successfully shows that a source other than a regulated unit caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation. In making a demonstration under this subdivision, the owner or operator must:

(1) Notify the department in writing within seven days of determining statistically significant evidence of contamination at the compliance point that the owner or operator intends to make a demonstration under this subdivision;

(2) Within ninety days, submit a report to the department which demonstrates that a source other than a regulated unit caused the contamination or that the contamination resulted from error in sampling, analysis, or evaluation;

(3) Within ninety days, submit to the department an application for a permit modification to make any appropriate changes to the detection monitoring program facility; and

(4) Continue to monitor in accordance with the detection monitoring program established under this section.

8. If the owner or operator determines that the detection monitoring program no longer satisfies the requirements of this section, the owner or operator must, within ninety days, submit an application for a permit modification to make any appropriate changes to the program.

History: Effective January 1, 1984; amended effective December 1, 1988; December 1, 1991; July 1, 1997.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-56. Compliance monitoring program. An owner or operator who is required to establish a compliance monitoring program under this chapter shall, at a minimum, discharge the following responsibilities:

1. The owner or operator shall monitor the ground water to determine whether regulated units are in compliance with the ground water protection standard under section 33-24-05-49. The department will specify the ground water protection standard in the facility permit, including:

   a. A list of the hazardous constituents identified under section 33-24-05-50.

   b. Concentration limits under section 33-24-05-51 for each of those hazardous constituents.

   c. The compliance point under section 33-24-05-52.

   d. The compliance period under section 33-24-05-53.

2. The owner or operator shall install a ground water monitoring system at the compliance point as specified under section 33-24-05-52. The ground water monitoring system must comply with subdivision b of subsection 1, and subsections 2 and 3, of section 33-24-05-54.

3. The department will specify the sampling procedures and statistical methods appropriate for the constituents and the facility, consistent with subsections 7 and 8 of section 33-24-05-54.

   a. The owner or operator must conduct a sampling program for each chemical parameter or hazardous constituent in accordance with subsection 7 of section 33-24-05-54.

b. The owner or operator must record ground water analytical data as measured and in form necessary for the determination of statistical significance under subsection 8 of section 33-24-05-54 for the compliance period of the facility.

4. The owner or operator must determine whether there is statistically significant evidence of increased contamination for any chemical parameter or hazardous constituent specified in the permit, pursuant to subsection 1, at a frequency specified under subsection 6.

   a. In determining whether statistically significant evidence of increased contamination exists, the owner or operator must use the methods specified in the permit under subsection 8 of section 33-24-05-54. The methods must compare data collected at the compliance points to a concentration limit developed in accordance with section 33-24-05-51.

   b. The owner or operator must determine whether there is statistically significant evidence of increased contamination at each monitoring well at the compliance point within a reasonable time period after completion of sampling. The department will specify that time period and the facility permit, after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of ground water samples.

5. The owner or operator shall determine the ground water flow rate and direction in the uppermost aquifer at least annually.

6. The department will specify the frequencies for collecting samples and conducting statistical tests to determine statistically significant evidence of increased contamination in accordance with subsection 7 of section 33-24-05-54. A sequence of at least four samples from each well, background and compliance wells, must be collected at least semiannually during the compliance period of the facility.

7. The owner or operator must analyze samples from all monitoring wells at the compliance point for all constituents contained in appendix IX at least annually to determine whether additional hazardous constituents are present in the uppermost aquifer and, if so, at what concentration, pursuant to the procedures in subsection 6 of section 33-24-05-55. If the owner or operator finds appendix IX constituents in the ground water that are not already identified in the permit as monitoring constituents, the owner or operator may resample within one month and repeat the appendix IX analysis. If the second analysis confirms the presence of new constituents, the owner or operator must report the concentration of these additional constituents to the department within seven days after the completion of the second analysis and add them to the monitoring list. If the owner or operator chooses not to resample, then the owner or operator must report the concentrations of

these additional constituents to the department within seven days after completion of the initial analysis and add them to the monitoring list.

8. If the owner or operator determines pursuant to subsection 4 that any concentration limits under section 33-24-05-51 are being exceeded at any monitoring well at the point of compliance, the owner or operator must:

   a. Notify the department of this finding in writing within seven days. The notification must indicate what concentration limits have been exceeded.

   b. Submit to the department an application for a permit modification to establish a corrective action program meeting the requirements of section 33-24-05-57 within one hundred eighty days, or within ninety days if an engineering feasibility study has been previously submitted to the department under subdivision e of subsection 8 of section 33-24-05-55. The application must, at a minimum, include the following information:

      (1) A detailed description of corrective actions that will achieve compliance within the ground water protection standard specified in the permit under subsection 1.

      (2) A plan for a ground water monitoring program that will demonstrate the effectiveness of the corrective action. Such a ground water monitoring program may be based on a compliance monitoring program developed to meet the requirements of this section.

9. If the owner or operator determines, pursuant to subsection 4, that the ground water concentration limits under this section are being exceeded at any monitoring well at the point of compliance, the owner or operator may demonstrate that a source other than a regulated unit caused the contamination or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the ground water. In making a demonstration under this section, the owner or operator must:

   a. Notify the department in writing within seven days that the owner or operator intends to make a demonstration under this subsection.

   b. Within ninety days, submit a report to the department which demonstrates that a source other than a regulated unit caused the standard to be exceeded or that the apparent noncompliance with the standards resulted from error in sampling, analysis, or evaluation.

c. Within ninety days, submit to the department an application for a permit modification to make any appropriate changes to the compliance monitoring program at the facility.

d. Continue to monitor in accordance with the compliance monitoring program established under this section.

10. If the owner or operator determines that the compliance monitoring program no longer satisfies the requirements of this section, the owner or operator shall, within ninety days, submit an application for a permit modification to make any appropriate changes to the program.

~~11. The owner or operator shall assure that monitoring and corrective~~ action measures necessary to achieve compliance with the ground water protection ~~standard~~ under section 33-24-05-49 are taken during ~~the term of this permit.~~

History: Effective January 1, 1984; amended effective December 1, 1988; December 1, 1991.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-57. Corrective action program. An owner or operator required to establish a corrective action program shall, at a minimum, discharge the following responsibilities:

1. The owner or operator shall take corrective action to ensure that regulated units are in compliance with the ground water protection standard under section 33-24-05-49. The department will specify the ground water protection standard in the facility permit including:

   a. A list of the hazardous constituents identified under section 33-24-05-50.

   b. Concentration limits under section 33-24-05-51 for each of those hazardous constituents.

   c. The compliance point under section 33-24-05-52.

   d. The compliance period under section 33-24-05-53.

2. The owner or operator shall implement a corrective action program that prevents hazardous constituents from exceeding their respective concentration limits at the compliance point by removing the hazardous waste constituents or treating them in place. The permit will specify the specific measures that will be taken.

3. The owner or operator shall begin corrective action within a reasonable time period after the ground water protection standard is exceeded. The

department will specify that time period in the facility permit. If a facility permit includes a corrective action program in addition to a compliance monitoring program, the permit will specify when the corrective action will begin and such a requirement will operate in lieu of subdivision b of subsection 9 of section 33-24-05-56.

4. In conjunction with a corrective action program, the owner or operator shall establish and implement a ground water monitoring program to demonstrate the effectiveness of the corrective action program. Such a monitoring program may be based on the requirements for a compliance monitoring program under section 33-24-05-56 and must be as effective as that program in determining compliance with the ground water protection standard under section 33-24-05-49 and in determining the success of a corrective action program under subsection 5 where appropriate.

5. In addition to the other requirements of this section, the owner or operator shall conduct a corrective action program to remove or treat in place any hazardous constituents under section 33-24-05-50 that exceed concentration limits under section 33-24-05-51 in ground water:

   a. Between the compliance point under section 33-24-05-52 and the downgradient property boundary; and

   b. Beyond the facility boundary, where necessary to protect human health and the environment, unless the owner or operator demonstrates to the satisfaction of the department that, despite the owner's or operator's best efforts, the owner or operator was unable to obtain the necessary permission to undertake such action. The owner or operator is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where offsite access is denied. Onsite measures to address such releases will be determined on a case-by-case basis.

   c. Corrective action measures under this paragraph must be initiated and completed within a reasonable period of time considering the extent of contamination.

   d. Corrective action measures under this subsection may be terminated once the concentration of hazardous constituents under section 33-24-05-50 is reduced to levels below their respective concentration limits under section 33-24-05-51.

6. The owner or operator shall continue corrective action measures during the compliance period to the extent necessary to ensure that the ground water protection standard is not exceeded. If the owner or operator is conducting corrective action at the end of the compliance period, the owner or operator shall continue that corrective action for as long as necessary to achieve compliance with the ground water

protection standard. The owner or operator may terminate corrective action measures taken beyond the period equal to the active life of the waste management area (including the closure period) if the owner or operator can demonstrate, based on data from the ground water monitoring program under subsection 4 that the ground water protection standard of section 33-24-05-49 has not been exceeded for a period of three consecutive years.

7. The owner or operator shall report in writing to the department on the effectiveness of the corrective action program. The owner or operator shall submit these reports semiannually.

8. If the owner or operator determines that the corrective action program no longer satisfies the requirements of this section, the owner or operator shall, within ninety days, submit an application for a permit modification to make any appropriate changes to the program.

History: Effective January 1, 1984; amended effective January 1, 1994.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-58. Corrective action for solid waste management units.

1. The owner or operator of a facility seeking a permit for the treatment, storage, or disposal of hazardous waste must institute corrective action as necessary to protect human health and the environment for all releases of hazardous waste or constituents from any solid waste management unit at the facility, regardless of the time at which waste was placed in such unit.

2. Corrective action will be specified in the permit in accordance with this section and sections 33-24-05-550 through 33-24-05-559. The permit will contain schedules of compliance for such corrective action (where such corrective action cannot be completed prior to issuance of the permit) and assurances of financial responsibility for completing such corrective action.

3. The owner or operator must implement corrective actions beyond the facility property boundary, where necessary to protect human health and the environment, unless the owner or operator demonstrates to the satisfaction of the department that, despite the owner's or operator's best efforts, the owner or operator was unable to obtain the necessary permission to undertake such actions. The owner or operator is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where offsite access is denied. Onsite measures to address such releases will be determined on a case-by-case basis. Assurances of financial responsibility for such corrective action must be provided.

4. This does not apply to remediation waste management sites unless they are part of a facility subject to a permit for treating, storing, or disposing of hazardous wastes that are not remediation wastes.

History: Effective October 1, 1986; amended effective January 1, 1994; December 1, 2003.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-59. Applicability of closure and postclosure requirements. Except as section 33-24-05-01 provides otherwise:

1. Sections 33-24-05-60 through 33-24-05-64 (which concern closure) apply to the owners and operators of all hazardous waste management facilities;

2. Sections 33-24-05-65 through 33-24-05-69 (which concern postclosure care) apply to the owners and operators of:

   a. All hazardous waste disposal facilities;

   b. Waste piles and surface impoundments from which the owner or operator intends to remove the wastes at closure to the extent that these sections are made applicable to such facilities in section 33-24-05-119 or 33-24-05-135;

   c. Tank systems that are required under section 33-24-05-110 to meet the requirements for landfills; and

   d. Containment buildings that are required under section 33-24-05-477 to meet the requirement for landfills.

History: Effective January 1, 1984; amended effective December 1, 1988; January 1, 1994.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-60. Closure performance standard. The owner or operator shall close the owner's or operator's facility in a manner that:

1. Minimizes the need for further maintenance;

2. Controls, minimizes, or eliminates, to the extent necessary to protect human health and the environment, postclosure escape of hazardous waste, hazardous constituents, leachate, contaminated runoff, or hazardous waste decomposition products to the ground or surface waters or to the atmosphere; and

3. Complies with the closure requirements of sections 33-24-05-59 through 33-24-05-73, including the requirements of sections 33-24-05-97, 33-24-05-110, 33-24-05-122, 33-24-05-135, 33-24-05-151, 33-24-05-167, 33-24-05-180, 33-24-05-301 through 33-24-05-303, and section 33-24-05-477.

History: Effective January 1, 1984; amended effective December 1, 1988; December 1, 1991; January 1, 1994; July 1, 1997.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-61. Closure plan - Amendment of plan.

1. **Written plan.**

   a. The owner or operator of a hazardous waste management facility shall have a written closure plan. In addition, certain surface impoundments and waste piles from which the owner or operator intends to remove or decontaminate the hazardous waste at partial or final closure are required by paragraph 1 of subdivision a of subsection 3 of section 33-24-05-122 and paragraph 1 of subdivision a of subsection 3 of section 33-24-05-135 to have contingent closure plans. The plan must be submitted with the permit application, in accordance with subdivision m of subsection 2 of section 33-24-06-17, and approved by the department as part of the permit issuance procedure under chapter 33-24-07. In accordance with section 33-24-06-05, the approved closure plan will become a condition of any hazardous waste permit.

   b. The department's approval of the plan must ensure that the approved closure plan is consistent with sections 33-24-05-60 through 33-24-05-64 and the applicable requirements of sections 33-24-05-47 through 33-24-05-58, 33-24-05-97, 33-24-05-110, 33-24-05-122, 33-24-05-135, 33-24-05-151, 33-24-05-167, 33-24-05-180, 33-24-05-301, and 33-24-05-477. Until final closure is completed and certified in accordance with section 33-24-05-64, a copy of the approved plan and all approved revisions must be furnished to the department upon request, including requests by mail.

2. **Content of plan.** The plan must identify steps necessary to perform partial or final, or both, closure of the facility at any point during its active life. The closure plan must include, at least:

   a. A description of how each hazardous waste management unit at the facility will be closed in accordance with section 33-24-05-60;

b. A description of how final closure of the facility will be conducted in accordance with section 33-24-05-60. The description must identify the maximum extent of the operations which will be unclosed during the active life of the facility;

c. An estimate of the maximum inventory of hazardous wastes ever onsite over the active life of the facility and a detailed description of the methods to be used during partial closures and final closure, including, but not limited to, methods for removing, transporting, treating, storing, or disposing of all hazardous wastes, and identification of the types of the offsite hazardous waste management units to be used, if applicable;

d. A detailed description of the steps needed to remove or decontaminate all hazardous waste residues and contaminated containment system components, equipment, structures, and soils during partial and final closure, including, but not limited to, procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils, and criteria for determining the extent of decontamination required to satisfy the closure performance standards;

e. A detailed description of other activities necessary during the closure period to ensure that all partial closures and final closures satisfy the closure performance standards, including, but not limited to, ground water monitoring, leachate collection, and run-on and runoff control;

f. A schedule for closure of each hazardous waste management unit and for final closure of the facility. The schedule must include, at a minimum, the total time required to close each hazardous waste management unit and the time required for intervening closure activities which will allow tracking of the progress of partial and final closure. (For example, in the case of a landfill unit, estimates of the time required to treat or dispose of all hazardous waste inventory and of the time required to place a final cover must be included.);

g. For facilities that use trust funds or establish financial assurance under section 33-24-05-77 and that are expected to close prior to the expiration of the permit, an estimate of the expected year of final closure; and

h. A closure cost estimate.

3. **Amendment of plan.** The owner or operator must submit a written notification of, or request for, a permit modification to authorize a change in operating plans, facility design, or the approved closure plan in accordance with the applicable procedures in chapters 33-24-06 and

33-24-07. The written notification or request must include a copy of the amended closure plan for review or approval by the department.

a. The owner or operator may submit a written notification or request to the department for a permit modification to amend the closure plan at any time prior to the notification of partial or final closure of the facility.

b. The owner or operator must submit a written notification of, or request for, a permit modification to authorize a change in the approved closure plan when:

   (1) Changes in operating plans or facility design affect the closure plan;

   (2) There is a change in the expected year of closure, if applicable; or

   (3) In conducting partial or final closure activities, unexpected events require a modification of the approved closure plan.

c. The owner or operator shall submit a written request for a permit modification, including a copy of the amended closure plan for approval at least sixty days prior to the proposed change in facility design or operation, or no later than sixty days after an unexpected event has occurred which has affected the closure plan. If an unexpected event occurs during the partial or final closure period, the owner or operator shall request a permit modification no later than thirty days after the unexpected event. An owner or operator of a surface impoundment or waste pile that intends to remove all hazardous waste at closure and is not otherwise required to prepare a contingent closure plan under paragraph 1 of subdivision a of subsection 3 of section 33-24-05-122 or paragraph 1 of subdivision a of subsection 3 of section 33-24-05-135 shall submit an amended closure plan to the department no later than sixty days from the date that the owner or operator or department determines that the hazardous waste management unit must be closed as a landfill, subject to the requirements of section 33-24-05-180, or no later than thirty days from that date if the determination is made during partial or final closure. The department will approve, disapprove, or modify this amended plan in accordance with the procedures in chapters 33-24-06 and 33-24-07. In accordance with section 33-24-06-05, the approved closure plan will become a condition of the hazardous waste permit issued.

d. The department may request modifications to the plan under the conditions described in subdivision b. The owner or operator shall submit the modified plan within sixty days of the department's

request, or within thirty days if the change in facility conditions occurs during partial or final closure. Any modifications requested by the department will be approved in accordance with procedures in chapters 33-24-06 and 33-24-07.

4. **Notification of partial closure and final closure.**

   a. The owner or operator shall notify the department in writing at least sixty days prior to the date on which the owner or operator expects to begin closure of a surface impoundment, waste pile, land treatment or landfill unit, or final closure of a facility with such a unit. The owner or operator shall notify the department in writing at least forty-five days prior to the date on which the owner or operator expects to begin final closure of a facility with only treatment or storage tanks, container storage, or incinerator units to be closed. The owner or operator must notify the department in writing at least forty-five days prior to the date which the owner or operator expects to begin partial or final closure of a boiler or industrial furnace, whichever is earlier.

   b. The date when the owner or operator "expects to begin closure" must be either no later than thirty days after the date on which any hazardous waste management unit receives the known final volume of hazardous wastes or, if there is a reasonable possibility that the hazardous waste management unit will receive additional hazardous waste, no later than one year after the date on which the unit received the most recent volume of hazardous waste. If the owner or operator of a hazardous waste management unit can demonstrate to the department that the hazardous waste management unit or facility has the capacity to receive additional hazardous wastes and the owner or operator has taken and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements, the department may approve an extension to this one-year limit.

   c. If the facility's permit is terminated, or if the facility is otherwise ordered, by judicial decree or final order under North Dakota Century Code section 23-20.3-08, to cease receiving hazardous waste or to close, then the requirements of this section do not apply. However, the owner or operator shall close the facility in accordance with the deadlines established in section 33-24-05-62.

5. **Removal of wastes and decontamination or dismantling of equipment.** Nothing in this section precludes the owner or operator from removing hazardous wastes and decontaminating or dismantling

equipment in accordance with the approved partial or final closure plan at any time before or after notification of partial or final closure.

History: Effective January 1, 1984; amended effective October 1, 1986; December 1, 1988; December 1, 1991; January 1, 1994; July 1, 1997; December 1, 2003.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-62. Closure - Time allowed for closure.

1. Within ninety days after receiving the final volume of hazardous wastes at a hazardous waste management unit or facility, the owner or operator shall treat, remove from the unit or facility, or dispose of onsite, all hazardous wastes in accordance with the approved closure plan. The department may approve a longer period if the owner or operator complies with all applicable requirements for requesting a modification to the permit and demonstrates that one or both of the following subdivisions apply:

   a. The activities required to comply with this section will, of necessity, take longer than ninety days to complete; or

   b. All of the following apply:

      (1) The hazardous waste management unit or facility has the capacity to receive additional hazardous waste;

      (2) There is a reasonable likelihood that the owner or operator or another person will recommence operation of the hazardous waste management unit or the facility within one year;

      (3) Closure of the hazardous waste management unit or facility would be incompatible with continued operation of the site; and

      (4) The owner or operator has taken and will continue to take all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements.

2. The owner or operator shall complete partial and final closure activities in accordance with the approved closure plan and within one hundred eighty days after receiving the final volume of hazardous wastes at the hazardous waste management unit or facility. The department may approve an extension to the closure period if the owner or operator complies with all applicable requirements for requesting a modification to the permit and demonstrates that one or both of the following subdivisions apply:

a. The partial or final closure activities will, of necessity, take longer than one hundred eighty days to complete; or

b. All the following apply:

(1) The hazardous waste management unit or facility has the capacity to receive additional hazardous waste;

(2) There is reasonable likelihood that the owner or operator or another person will recommence operation of the hazardous waste management unit or the facility within one year;

(3) Closure of the hazardous waste management unit or facility would be incompatible with continued operation of the site; and

(4) The owner or operator has taken and will continue to take all steps to prevent threats to human health and the environment from the unclosed but not operating hazardous waste management unit or facility including compliance with all applicable permit requirements.

3. The demonstrations referred to in subsections 1 and 2 of section 33-24-05-62 must be made as follows: The demonstrations in subsection 1 must be made at least thirty days prior to expiration of the ninety-day period in subsection 1; and the demonstration in subsection 2 must be made at least thirty days prior to the expiration of the one hundred eighty-day period in subsection 2.

History: Effective January 1, 1984; amended effective December 1, 1988; December 1, 2003.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-63. Disposal or decontamination of equipment, structures, and soils. During the partial and final closure periods, all contaminated equipment, structures, and soils must be properly disposed of or decontaminated unless otherwise specified in sections 33-24-05-110, 33-24-05-122, 33-24-05-135, 33-24-05-167, or 33-24-05-180. By removing any hazardous wastes or hazardous constituents during partial and final closure, the owner or operator may become a generator of hazardous waste and shall handle that waste in accordance with all applicable requirements of chapter 33-24-03.

History: Effective January 1, 1984; amended effective December 1, 1988; December 1, 1991; January 1, 1994; July 1, 1997.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-64. Certification of closure. Within sixty days of completion of closure of each hazardous waste surface impoundment, waste pile, land treatment, and landfill unit, and within sixty days of the completion of final closure, the owner or operator shall submit to the department, by registered mail, a certification that the hazardous waste management unit or facility, as applicable, has been closed in accordance with the specifications in the approved closure plan. The certification must be signed by the owner or operator and by an independent registered professional engineer. Documentation supporting the independent registered professional engineer's certification must be furnished to the department upon request until the department releases the owner or operator from the financial assurance requirements for closure under subsection 9 of section 33-24-05-77.

History: Effective January 1, 1984; amended effective December 1, 1988; December 1, 1991.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-65. Survey plat. No later than the submission of the certification of closure of each hazardous waste disposal unit, the owner or operator shall submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the department, a survey plot indicating the location and dimensions of landfills cells, or other hazardous waste disposal units with respect to permanently surveyed benchmarks. This plat must be prepared and certified by a professional land surveyor, the plat filed with a local zoning authority or the authority with jurisdiction over local land use, must contain a note, prominently displayed, which states the owner's or operator's obligation to restrict disturbance of the hazardous waste disposal unit in accordance with the applicable regulations under sections 33-24-05-59 through 33-24-05-69.

History: Effective January 1, 1984; amended effective December 1, 1988.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-66. Postclosure care and use of property.

1. Postclosure care requirements.

    a. Postclosure care for each hazardous waste management unit subject to the requirements of sections 33-24-05-66 through 33-24-05-69 must begin after completion of closure of the unit and continue for thirty years after that date and must consist of at least the following:

        (1) Monitoring and reporting in accordance with the requirements of sections 33-24-05-47 through 33-24-05-58, sections 33-24-05-115 through 33-24-05-186, and sections 33-24-05-300 through 33-24-05-303; and

(2) Maintenance and monitoring of waste containment systems in accordance with the requirements of sections 33-24-05-47 through 33-24-05-58, sections 33-24-05-115 through 33-24-05-186, and sections 33-24-05-300 through 33-24-05-303.

b. Anytime preceding partial closure of a hazardous waste management unit subject to postclosure care requirements or final closure, or anytime during the postclosure period for a particular unit, the department may, in accordance with the permit modification procedures in chapters 33-24-06 and 33-24-07:

(1) Shorten the postclosure care period applicable to the hazardous waste management unit, or facility, if all disposal units have been closed, if the owner or operator finds that the reduced period is sufficient to protect human health and the environment (for example, leachate or ground water monitoring results, characteristics of the hazardous waste, application of advanced technology or alternative disposal, treatment, or reuse techniques indicate that the hazardous waste management unit or facility is secure); or

(2) Extend the postclosure care period applicable to the hazardous waste management unit or facility if the owner or operator finds that the extended period is necessary to protect human health or the environment (for example, leachate or ground water monitoring results indicate a potential for migration of hazardous waste at levels which may be harmful to human health or the environment).

2. The department may require, at partial and final closure, continuation of any of the security requirements of section 33-24-05-05 during part or all of the postclosure period when:

a. Hazardous wastes may remain exposed after completion of partial or final closure; or

b. Access by the public or domestic livestock may pose a hazard to human health.

3. Postclosure use of property on or in which hazardous wastes remain after partial or final closure must never be allowed to disturb the integrity of the final cover, liners, or any other components of the containment system, or the function of the facility's monitoring systems, unless the department finds that the disturbance:

a. Is necessary to the proposed use of the property, and will not increase the potential hazard to human health or the environment; or

b. Is necessary to reduce a threat to human health or the environment.

4. All postclosure care activities must be in accordance with the provisions of the approved postclosure plan as specified in section 33-24-05-67.

History: Effective January 1, 1984; amended effective December 1, 1988; December 1, 1991; July 1, 1997.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-67. Postclosure plan - Amendment of plan.

1. Written plan. The owner or operator of a hazardous waste disposal unit shall have a written postclosure plan. In addition, certain surface impoundments and waste piles from which the owner or operator intends to remove or decontaminate the hazardous wastes at partial or final closure are required by paragraph 2 of subdivision a of subsection 3 of section 33-24-05-122 and paragraph 2 of subdivision a of subsection 3 of section 33-24-05-135 to have contingent postclosure plans. Owners or operators of surface impoundments and waste piles not otherwise required to prepare contingent postclosure plans under paragraph 2 of subdivision a of subsection 3 of section 33-24-05-122 and paragraph 2 of subdivision a of subsection 3 of section 33-24-05-135 shall submit a postclosure plan to the department within ninety days from the date that the owner or operator or department determines that the hazardous waste management unit must be closed as a landfill, subject to the requirements of sections 33-24-05-66 through 33-24-05-69. The plan must be submitted with the permit application in accordance with section 33-24-06-17, and approved by the department as part of the permit issuance procedure under chapter 33-24-07. In accordance with section 33-24-06-05, the approved postclosure plan will become a condition of any hazardous waste permit issued.

2. For each hazardous waste management unit subject to the requirements of this section, the postclosure plan must identify the activities that will be carried on after closure of each disposal unit and the frequency of these activities, and include at least:

   a. A description of the planned monitoring activities and frequencies at which they will be performed to comply with sections 33-24-05-47 through 33-24-05-58, sections 33-24-05-115 through 33-24-05-186, and sections 33-24-05-300 through 33-24-05-303 during the postclosure care period;

   b. A description of the planned maintenance activities, and frequencies at which they will be performed to ensure:

(1) The integrity of the cap and final cover or other containment systems in accordance with the requirements of sections 33-24-05-47 through 33-24-05-58, sections 33-24-05-115 through 33-24-05-186, and sections 33-24-05-300 through 33-24-05-303;

(2) The function of the monitoring equipment in accordance with the requirements of sections 33-24-05-47 through 33-24-05-58, sections 33-24-05-115 through 33-24-05-186, and sections 33-24-05-300 through 33-24-05-303; and

c. The name, address, and telephone number of the persons or office to contact about the hazardous waste disposal unit or facility during the postclosure care period.

3. Until final closure of the facility, a copy of the approved postclosure plan must be furnished to the department upon request, including request by mail. After final closure has been certified, the person or office specified in subdivision c of subsection 2 of section 33-24-05-67 shall keep the approved postclosure plan during the remainder of the postclosure period.

4. The owner or operator must submit a written notification of, or request for, a permit modification to authorize a change in the approved postclosure plan in accordance with the applicable requirements in chapters 33-24-06 and 33-24-07. The written notification or request must include a copy of the amended postclosure plan for review or approval by the department.

a. The owner or operator may submit a written notification or request to the department for a permit modification to amend the postclosure plan at any time during the active life of the facility or during the postclosure care period.

b. The owner or operator must submit a written notification of, or request for, a permit modification to authorize a change in the approved postclosure plan whenever:

(1) Changes in operating plans or facility design affect the approved postclosure plan;

(2) There is a change in the expected year of final closure, if applicable; or

(3) Events which occur during the active life of the facility, including partial and final closures, affect the approved postclosure plan.

c. The owner or operator shall submit a written request for a permit modification at least sixty days prior to the proposed change in facility design or operation, or no later than sixty days after an unexpected event has occurred which has affected the postclosure plan. An owner or operator of a surface impoundment or waste pile that intends to remove all hazardous waste at closure and is not otherwise required to submit a contingent postclosure plan under paragraph 2 of subdivision a of subsection 3 of section 33-24-05-122 and paragraph 2 of subdivision a of subsection 3 of section 33-24-05-135 shall submit a postclosure plan to the department no later than ninety days after the date that the owner or operator or department determine that the hazardous waste management unit must be closed as a landfill, subject to the requirements of section 33-24-05-180. The department will approve, disapprove, or modify this plan in accordance with the procedures in chapters 33-24-06 and 33-24-07. In accordance with section 33-24-06-05, the approved postclosure plan will become a permit condition.

d. The department may request modifications to the plan under the conditions described in subdivision b of subsection 4 of section 33-24-05-67. The owner or operator shall submit the modified plan no later than sixty days after the department's request, or no later than ninety days if the unit is a surface impoundment or waste pile not previously required to prepare a contingent postclosure plan. Any modifications requested by the department will be approved, disapproved, or modified in accordance with the procedures in chapters 33-24-06 and 33-24-07.

History: Effective January 1, 1984; amended effective December 1, 1988; December 1, 1991; July 1, 1997.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-68. Postclosure notices.

1. No later than sixty days after certification of closure of each hazardous waste disposal unit, the owner or operator shall submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the department a record of the type, location, and quantity of hazardous wastes disposed of within each cell or other disposal unit of the facility. For hazardous waste disposed of before January 12, 1981, the owner or operator shall identify the type, location, and quantity of the hazardous wastes to the best of his knowledge and in accordance with any records the owner or operator has kept.

2. Within sixty days of certification of closure of the first hazardous waste disposal unit and within sixty days of certification of closure of the last hazardous waste disposal unit, the owner or operator shall:

a. Record, in accordance with state law, a notation on the deed to the facility property - or on some other instrument which is normally examined during title search - that will in perpetuity notify any potential purchaser of the property that:

(1) The land has been used to manage hazardous waste;

(2) Use of the land is restricted under sections 33-24-05-59 through 33-24-05-73; and

(3) The survey plat and record of the type, location, and quantity of hazardous wastes disposed of within each cell or other hazardous waste disposal unit of the facility required by section 33-24-05-65 and subsection 1 of section 33-24-05-68 have been filed with the local zoning authority or the authority with jurisdiction over local land use and with the department; and

b. Submit a certification, signed by the owner or operator, that the owner or operator has recorded the notation specified in subdivision a of subsection 2, including a copy of the document in which the notation has been placed, to the department.

3. If the owner or operator or any subsequent owner or operator of the land upon which a hazardous waste disposal unit is located wishes to remove hazardous wastes and hazardous waste residues, the liner, if any, or contaminated soils, the owner or operator shall request a modification to the postclosure permit in accordance with the applicable requirements in chapters 33-24-06 and 33-24-07. The owner or operator shall demonstrate that the removal of the hazardous waste will satisfy the criteria of subsection 3 of section 33-24-05-66. By removing hazardous waste, the owner or operator may become a generator of hazardous waste and shall manage it in accordance with all applicable requirements of this article. If the owner or operator is granted a permit modification or otherwise granted approval to conduct such removal activities, the owner or operator may request that the department approve either:

a. The removal of the notation on the deed to the facility property or other instrument normally examined during title search; or

b. In addition of a notation to the deed or instrument indicating the removal of the hazardous waste.

History: Effective January 1, 1984; amended effective December 1, 1988; December 1, 1991.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-69. Certification of completion of postclosure care. No later than sixty days after completion of the established postclosure care period for each hazardous waste disposal unit, the owner or operator shall submit to the department, by registered mail, a certification that the postclosure care period for the hazardous waste disposal unit was performed in accordance with the specifications in the approved postclosure plan. The certification must be signed by the owner or operator and an independent registered professional engineer. Documentation supporting the independent registered professional engineer certification must be furnished to the department upon request until the department releases the owner or operator from the financial assurance requirements for postclosure care under subsection 9 of section 33-24-05-77.

History: Effective December 1, 1988; amended effective December 1, 1991.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

~~**33-24-05-70. [Reserved]**~~

~~**33-24-05-71. [Reserved]**~~

~~**33-24-05-72. [Reserved]**~~

~~**33-24-05-73. [Reserved]**~~

33-24-05-74. Applicability of financial requirements.

1. The requirements of sections 33-24-05-76, 33-24-05-77, and 33-24-05-79 through 33-24-05-81 apply to owners and operators of all hazardous waste facilities, except as provided otherwise in this section or in section 33-24-05-01.

2. The requirements of sections 33-24-05-76 and 33-24-05-77 apply only to owners and operators of:

   a. Disposal facilities;

   b. Piles, and surface impoundments from which the owner or operator intends to remove the wastes at closure, to the extent that these sections are made applicable to such facilities in sections 33-24-05-122 and 33-24-05-135;

   c. Tank systems that are required under section 33-24-05-110 to meet the requirements for landfills; and

   d. Containment buildings that are required under section 33-24-05-477 to meet the requirements for landfills.

3. Federal agencies and agencies of the government of the state of North Dakota are exempt from the financial requirements.

History: Effective January 1, 1984; amended effective December 1, 1988; January 1, 1994; July 1, 1997.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-75. Definitions of terms used in this chapter.

1. "Closure plan" means the plan for closure prepared in accordance with the requirements of section 33-24-05-61.

2. "Current closure cost estimate" means the most recent of the closure cost estimates prepared in accordance with subsections 1, 2, and 3 of section 33-24-05-76.

3. "Current postclosure cost estimate" means the most recent of the postclosure cost estimates prepared in accordance with subsections 1, 2, and 3 of section 33-24-05-76.

4. "Parent corporation" means a corporation which directly owns at least fifty percent of the voting stock of the corporation which is the facility owner or operator; the latter corporation is deemed a "subsidiary" of the parent corporation.

5. "Postclosure plan" means the plan for postclosure care prepared in accordance with the requirements of sections 33-24-05-65 through 33-24-05-68.

6. The following terms are used in the specifications for the financial tests for closure, postclosure care and liability coverage. The definitions are intended to assist in the understanding of this chapter and are not intended to limit the meanings of terms in a way that conflicts with generally accepted accounting practices.

   "Assets" means all existing and all probable future economic benefits obtained or controlled by a particular entity.

   "Current assets" means cash or other assets or resources commonly identified as those which are reasonably expected to be realized in cash or sold or consumed during the normal operating cycle of the business.

   "Current liability" means obligations whose liquidation is reasonably expected to require the use of existing resources properly classifiable as current assets or the creation of other current liabilities.

"Current plugging and abandonment cost estimate" means the most recent of the estimates prepared in accordance with 40 CFR part 144.62(a), (b), and (c).

"Independently audited" refers to an audit performed by an independent certified public accountant in accordance with generally accepted auditing standards.

"Liabilities" means probable future sacrifices of economic benefits arising from present obligations to transfer assets or provide services to other entities in the future as a result of past transactions or events.

"Net working capital" means current assets minus current liabilities.

"Net worth" means total assets minus total liabilities and is equivalent to owners equity.

"Tangible net worth" means the tangible assets that remain after deducting liabilities; such assets would not include intangibles such as goodwill and rights to patents or royalties.

7. In the liability insurance requirements, the terms "bodily injury" and "property damage" have the meanings given these terms by applicable state law. However, these terms do not include those liabilities which, consistent with standard industry practices, are excluded from coverage and liability policies for bodily injury and property damage. The department intends the meanings of other terms used in the liability insurance requirements to be consistent with their common meanings within the insurance industry. The definitions given below of several of the terms are intended to assist in the understanding of these regulations and are not intended to limit their meanings in any way that conflicts with general insurance industry usage.

"Accidental occurrence" means an accident, including continuous or repeated exposure to conditions, which results in bodily injury or property damage, neither expected nor intended from the standpoint of the insured.

"Legal defense costs" means any expenses that an insurer incurs in defending against claims of third parties brought under the terms and conditions of an insurance policy.

"Nonsudden accidental occurrence" means an occurrence which takes place over time and involves continuous or repeated exposure.

"Sudden accidental occurrence" means an occurrence which is not continuous or repeated in nature.

8. "Substantial business relationship" means the extent of a business relationship necessary under applicable state law to make a guarantee contract issued incident to that relationship valid and enforceable. A "substantial business relationship" must arise from a pattern of recent or ongoing business transactions, in addition to the guarantee itself, such that a currently existing business relationship between the guarantor and the owner or operator is demonstrated to the satisfaction of the department.

History: Effective January 1, 1984; amended effective December 1, 1988; December 1, 1991; January 1, 1994.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-76. Cost estimates for closure and postclosure care.

1. **The cost estimates for closure.**

   a. The owner or operator must have a detailed written estimate, in current dollars, of the cost of closing the facility in accordance with the requirements in sections 33-24-05-60 through 33-24-05-64 and applicable closure requirements in sections 33-24-05-97, 33-24-05-110, 33-24-05-122, 33-24-05-135, 33-24-05-151, 33-24-05-167, 33-24-05-180, sections 33-24-05-301 through 33-24-05-303, and section 33-24-05-477.

      (1) The estimate must equal the cost of final closure at the point in the facility's active life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan (see subsection 2 of section 33-24-05-61).

      (2) The closure cost estimate must be based on the costs to the owner or operator of hiring a third party to close the facility. A third party is a party who is neither a parent nor a subsidiary of the owner or operator. (See definition of parent corporation in subsection 4 of section 33-24-05-75.) The owner or operator may use costs for onsite disposal if the owner or operator can demonstrate that onsite disposal capacity will exist at all times over the life of the facility.

      (3) The closure cost estimate may not incorporate any salvage value that may be realized with the sale of hazardous wastes, facility structures or equipment, land, or other assets associated with the facility at the time of partial or final closure.

      (4) The owner or operator may not incorporate a zero cost for hazardous wastes that might have economic value.

b. During the active life of the facility, the owner or operator shall adjust the closure cost estimate for inflation within sixty days prior to the anniversary date of the establishment of the financial instruments used to comply with section 33-24-05-77. For owners and operators using the financial test or corporate guarantee, the closure cost estimate must be updated for inflation within thirty days after the close of the firm's fiscal year and before submission of updated information to the department as specified in subdivision c of subsection 6 of section 33-24-05-77. The adjustment may be made by recalculating the maximum costs of closure in current dollars, or by using an inflation factor derived from the most recent implicit price deflator for gross national product published by the United States department of commerce in its survey of current business as specified in paragraphs 1 and 2. The inflation factor is the result of dividing the latest published annual deflator by the deflator for the previous year.

(1) The first adjustment is made by multiplying the closure cost estimates by the inflation factor. The result is the adjusted closure cost estimate.

(2) Subsequent adjustments are made by multiplying the latest adjusted closure cost estimates by the latest inflation factor.

c. During the active life of the facility, the owner or operator shall revise the closure cost estimate no later than thirty days after the department has approved the request to modify the closure plan, if the change in the closure plan increases the cost of closure. The revised closure cost estimate must be adjusted for inflation as specified in subdivision b.

d. The owner or operator shall keep the following at the facility during the operating life of the facility: The latest closure cost estimate prepared in accordance with subdivisions a and c and, when this estimate has been adjusted in accordance with subdivision b, the latest adjusted closure cost estimate.

2. **Cost estimate for postclosure care.**

a. The owner or operator of a disposal surface impoundment, disposal miscellaneous unit, land treatment, or landfill unit, or a surface impoundment or waste pile required under sections 33-24-05-122 and 33-24-05-135 to prepare a contingent closure and postclosure plan, shall have a detailed written estimate in current dollars, of the annual cost of postclosure monitoring and maintenance of the facility in accordance with the applicable postclosure rules in sections 33-24-05-65 through 33-24-05-69, sections 33-24-05-122, 33-24-05-135, 33-24-05-167, 33-24-05-180, and 33-24-05-303.

(1) The postclosure cost estimate must be based on the cost to the owner or operator of hiring a third party to conduct postclosure care activities. A third party is a party who is neither a parent or subsidiary of the owner or operator. (See definition of parent corporation in subsection 4 of section 33-24-05-75.)

(2) The postclosure cost estimate is calculated by multiplying the annual postclosure cost estimate by the number of years of postclosure care required under section 33-24-05-66.

b. During the active life of the facility, the owner or operator shall address the postclosure cost estimate for inflation within sixty days prior to the anniversary date of the establishment of the financial instruments used to comply with section 33-24-05-77. For owners or operators using the financial test or corporate guarantee, the postclosure cost estimate must be updated for inflation within thirty days after the close of the firm's fiscal year and before the submission of updated information to the department as specified in subdivision e of subsection 6 of section 33-24-05-77. The adjustment may be made by recalculating the postclosure cost estimate in current dollars or by using an inflation factor derived from the most recent implicit price deflator for gross national product published by the United States department of commerce in a survey of current business as specified in subdivisions a and b of subsection 2 of section 33-24-05-77. The inflation factor is the result of dividing the latest annual published deflator by the deflator for the previous year.

(1) The first adjustment is made by multiplying the postclosure cost estimate by the inflation factor. The result is the adjusted postclosure cost estimate.

(2) Subsequent adjustments are made by multiplying the latest adjusted postclosure cost estimate by the latest inflation factor.

c. During the active life of the facility, the owner or operator shall revise the postclosure cost estimate within thirty days after the department has approved a request to modify the postclosure plan, if the change in the postclosure plan increases the cost of postclosure care. The revised postclosure cost estimate must be adjusted for inflation as specified in subdivision b.

d. The owner or operator shall keep the following at the facility during the operating life of the facility: The latest postclosure cost estimate prepared in accordance with subdivisions a and c of subsection 2 and, when this estimate has been adjusted in accordance with

subdivision d of subsection 2, the latest adjusted postclosure cost estimate.

History: Effective January 1, 1984; amended effective December 1, 1988; December 1, 1991; January 1, 1994; July 1, 1997.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-77. Financial assurance for closure and postclosure care. In accordance with section 33-24-05-74, an owner or operator of each facility shall establish financial assurance for closure and postclosure of the facility. The owner or operator of a hazardous waste management unit subject to the postclosure requirements of section 33-24-05-76 shall establish financial assurance for postclosure care in accordance with the approved postclosure plan for the facility sixty days prior to the initial receipt of hazardous waste or the effective date of the regulations, whichever is later. The owner or operator shall choose from the options as specified in subsections 1 through 6.

1. **Closure and postclosure trust fund.**

   a. An owner or operator may satisfy the requirements of this section by establishing a closure and postclosure trust fund which conforms to the requirements of this subsection and submitting an originally signed duplicate of the trust agreement to the department. An owner or operator of the new facility shall submit the originally signed duplicate of the trust agreement to the department at least sixty days before the day on which hazardous waste is first received for treatment, storage, or disposal. The trustee must be an entity which has the authority to act as a trustee in this state and whose trust operations are regulated and examined by a federal agency or by the state department of financial institutions.

   b. The wording of the trust agreement must be identical to the wording specified in subdivision a of subsection 1 of section 33-24-05-81 and the trust agreement must be accompanied by a formal certification of acknowledgment (for example see subdivision b of subsection 1 of section 33-24-05-81). Schedule A of the trust agreement must be updated within sixty days after a change in the amount of the current closure and postclosure cost estimate covered by the agreement.

   c. Payments into the trust fund must be made annually by the owner or operator over the term of the initial hazardous waste permit or over the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter; this period is hereinafter referred to as the "pay-in period". The payments into the trust fund must be made as follows:

(1) For a new facility the first payment must be made before the initial receipt of hazardous waste for treatment, storage, or disposal. A receipt from the trustee for this payment must be submitted by the owner or operator to the department before the initial receipt of hazardous waste. The first payment must be at least equal to the current closure and postclosure cost estimate, except as provided in subsection 7, divided by the number of years in the pay-in period. Subsequent payments must be made no later than thirty days after each anniversary date of the first payment. The amount of each subsequent payment must be determined by this formula:

$$\text{Next Payment} = \frac{CE-CV}{Y}$$

Where CE is the current closure and postclosure cost estimate, CV is the current value of the trust fund and Y is the number of years remaining in the pay-in period.

(2) If an owner or operator establishes a trust fund as specified in 40 CFR part 265.143(a) or 265.145(a) of the federal hazardous waste regulations and the value of that trust fund is less than the current closure and postclosure cost estimate when a permit is awarded to the facility, the amount of the current closure and postclosure cost estimate still to be paid into the trust fund must be paid in over the pay-in period as defined in subdivision c. Payments must continue to be made no later than thirty days after each anniversary date of the first payment made pursuant to 40 CFR part 265. The amount of each payment must be determined by this formula:

$$\text{Next Payment} = \frac{CE-CV}{Y}$$

Where CE is the current closure and postclosure cost estimate, CV is the current value of the trust fund and Y is the number of years remaining in the pay-in period.

d. The owner or operator may accelerate payments into the trust fund or the owner or operator may deposit the full amount of the current closure and postclosure cost estimate at the time the fund is established. However, the owner or operator shall maintain the value of the fund at no less than the value that the fund would have if annual payments were made as specified in subdivision c.

e. If the owner or operator establishes a closure and postclosure trust fund after having used one or more alternate mechanisms specified in this section (or in 40 CFR part 265.143 or 265.145), the first payment must be in at least the amount that the fund would contain if the trust fund were established initially and annual payments were made according to the specifications of this subsection.

f. After the pay-in period is completed, when the current closure and postclosure cost estimate changes, the owner or operator shall compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator within sixty days after the change in the cost estimate shall either deposit an amount into the fund so that its value after the deposit at least equals the amount of the current closure and postclosure cost estimate or obtain other financial assurance as specified in this section to cover the difference.

g. If the value of the trust fund is greater than the total amount of the current closure and postclosure cost estimate, the owner or operator may submit a written request to the department for release of the amount in excess of the current closure and postclosure cost estimate.

h. If an owner or operator substitutes other financial assurance as specified in this section for all or part of the trust fund, the owner or operator may submit a written request to the department for release of the amount in excess of the current closure and postclosure cost estimate covered by the trust fund.

i. Within sixty days after receiving a request from the owner or operator for release of funds as specified in subdivision g or h, the department will instruct the trustee to release to the owner or operator such funds as the department specifies in writing.

j. During the period of postclosure care, the department may approve a release of funds if the owner or operator demonstrates to the department that the value of the trust fund exceeds the remaining cost of the postclosure care.

k. After beginning partial or final closure or during the postclosure care period, or both, an owner or operator or any other person authorized to perform partial or final closure or postclosure activities may request reimbursement for expenditures incurred during these activities by submitting itemized bills to the department. The owner or operator may request reimbursements for partial closure only if sufficient funds are remaining in the trust fund to cover the maximum cost of closing the facility over its remaining operating life. Within sixty days after receiving bills for partial or final closure

or postclosure activities, the department will determine whether the expenditures are in accordance with the closure or postclosure plans or otherwise justified and if so, it will instruct the trustee to make reimbursement in such amounts as the department specifies in writing. If the department has reason to believe that the cost of closure will be significantly greater than the value of the trust fund, it may withhold reimbursement of such amounts as it deems prudent until it determines in accordance with subsection 9 that the owner or operator is no longer required to maintain financial assurance for final closure. If the department does not instruct the trustee to make such reimbursements, it will provide the owner or operator with a detailed written statement of reasons.

l. The department will agree to termination of the trust when:

(1) An owner or operator substitutes alternate financial assurance as specified in this section; or

(2) The department releases the owner or operator from the requirements of this section in accordance with subsection 9.

2. **Surety bond guaranteeing payment into a closure and postclosure trust fund.**

a. An owner or operator may satisfy the requirements of this section by obtaining a surety bond which conforms to the requirements of this subsection and submitting the bond to the department. An owner or operator of a new facility must submit the bond to the department at least sixty days before the date on which hazardous waste is first received for treatment, storage, or disposal. The bond must be effective before this initial receipt of hazardous waste. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on federal bonds in Circular 570 of the United States department of treasury and be authorized to do business within this state. If the surety is using reinsurance, a treasury reinsurance form must be submitted with the bond or within forty-five days thereafter. If cosureties are being used, the original bond must reflect that fact.

b. The wording of the surety bond must be identical to the wording specified in subsection 2 of section 33-24-05-81.

c. The owner or operator who uses a surety bond to satisfy the requirements of this section shall also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the department. This standby trust fund must meet the requirements specified in subsection 1 except that:

(1) An originally signed duplicate of the trust agreement must be submitted to the department with the surety bond; and

(2) Until the standby trust fund is funded pursuant to the requirements of this section, the following are not required by this chapter:

(a) Payments into the trust fund as specified in subsection 1.

(b) Updating of schedule A of the trust agreement to show current closure and postclosure cost estimates.

(c) Annual evaluations as required by the trust agreement.

(d) Notices of nonpayment as required by the trust agreement.

d. The bond must guarantee that the owner or operator will:

(1) Fund the standby trust fund in an amount equal to the penal sum of the bond before the beginning of final closure of the facility;

(2) Fund the standby trust fund in an amount equal to the penal sum within fifteen days after an order to begin final closure is issued by the department or a United States district court or other court of competent jurisdiction; or

(3) Provide alternate financial assurance as specified in this section and obtain the department's written approval of the assurance provided within ninety days after receipt by both the owner or operator of a notice of cancellation of the bond from the surety.

e. Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.

f. The penal sum of the bond must be in an amount at least equal to the current closure and postclosure cost estimate, except as provided in subsection 7.

g. Whenever the current closure and postclosure cost estimate increases to an amount greater than the penal sum, the owner or operator within sixty days after the increase must either cause the penal sum to be increased to an amount at least equal to the current closure and postclosure cost estimate and submit evidence of such increase to the department or obtain other

financial assurance as specified in this section to cover the increase. Whenever the current closure and postclosure cost estimate decreases, the penal sum may be reduced to the amount of the current closure and postclosure cost estimate following written approval by the department.

h. Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the department. Cancellation may not occur, however, during the one hundred twenty days beginning on the date of receipt of cancellation by both the owner or operator and the department as evidenced by the return receipts.

i. The owner or operator may cancel the bond if the department has given prior written consent based on its receipt of evidence of alternate financial assurance as specified in this section.

3. **Surety bond guaranteeing performance of closure and postclosure care.**

a. An owner or operator may satisfy the requirements of this section by obtaining a surety bond which conforms to the requirements of this subsection and submitting the bond to the department. An owner or operator of a new facility shall submit the bond to the department at least sixty days before the date on which hazardous waste is first received for treatment, storage, or disposal. The bond must be effective before this initial receipt of hazardous waste. The surety company issuing the bond must, at a minimum, be among those acceptable sureties on federal bonds in Circular 570 of the United States department of treasury and be authorized to do business within the state of North Dakota. If the surety is using reinsurance a treasury reinsurance form must be submitted with the bond or within forty-five days thereafter. If cosureties are being used, the original bond must reflect that fact.

b. The wording of the surety bond must be identical to the wording specified in subsection 3 of section 33-24-05-81.

c. The owner or operator who uses a surety bond to satisfy the requirements of this section shall also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the department. This standby trust fund must meet the requirements specified in subsection 1 except that:

(1) An originally signed duplicate of the trust agreement must be submitted to the department with the surety bond; and

(2) Until the standby trust fund is funded pursuant to the requirements of this section, the following are not required by this chapter:

(a) Payments into the trust fund as specified in subsection 1.

(b) Updating of schedule A of the trust agreement to show current closure and postclosure cost estimates.

(c) Annual valuations as required by the trust agreement.

(d) Notices of nonpayment as required by the trust agreement.

d. The bond must guarantee that the owner or operator will:

(1) Perform postclosure care and final closure in accordance with the postclosure and closure plan and other requirements of the permit for the facility when required to do so; or

(2) Provide alternate financial assurance as specified in this section and obtain the department's written approval of the assurance provided within ninety days after receipt by both the owner or operator and the department of a notice of cancellation of the bond from the surety.

e. Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. Following a determination by the department that the owner or operator has failed to perform postclosure care or final closure in accordance with the closure or postclosure plan and other permit requirements when required to do so, under the terms of the bond the surety will perform the postclosure care or final closure as guaranteed by the bond or will deposit the amount of the penal sum into the standby trust fund.

f. The penal sum of the bond must be in an amount at least equal to the current closure or postclosure cost estimate, or both.

g. Whenever the current closure or postclosure cost estimate, or both, increases to an amount greater than the penal sum, the owner or operator within sixty days after the increase must either cause the penal sum to be increased to an amount at least equal to the current closure or postclosure cost estimate, or both, and submit evidence of such increase to the department or obtain other financial assurance as specified in this section. Whenever the current closure or postclosure cost estimate, or both, decreases the penal sum may be reduced to the amount of the current closure

or postclosure cost estimate, or both, following written approval by the department.

h. During the period of postclosure care, the department may approve a decrease in the penal sum if the owner or operator demonstrates to the department that the amount exceeds the remaining cost of postclosure care.

i. Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the department. Cancellation may not occur, however, during the one hundred twenty days beginning on the date of receipt of this notice of cancellation by both the owner or operator and the department as evidenced by the return receipts.

j. The owner or operator may cancel the bond if the department has given prior written consent. The department will provide such written consent when:

(1) An owner or operator substitutes alternate financial assurance as specified in this section; or

(2) The department releases the owner or operator from the requirements of this section in accordance with subsection 9.

k. The surety will not be liable for deficiencies in the performance of closure or postclosure care by the owner or operator after the department releases the owner or operator from the requirements of this section in accordance with subsection 9.

4. **Closure and postclosure letter of credit.**

a. An owner or operator may satisfy the requirements of this section by obtaining an irrevocable standby letter of credit which conforms to the requirements of this subsection and submitting the letter to the department. An owner or operator of a new facility must submit the letter of credit to the department at least sixty days before the date on which hazardous waste is first received for disposal. The letter of credit must be effective before this initial receipt of hazardous waste. The issuing institution must be an entity which has the authority to issue letters of credit in this state and whose letters of credit operations are regulated and examined by a federal agency or by the state department of financial institutions.

b. The wording of the letter of credit must be identical to the wording specified in subsection 4 of section 33-24-05-81.

c. An owner or operator who uses a letter of credit to satisfy the requirements of this section shall also establish a standby trust

fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the department will be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the department. This standby trust fund must meet the requirements of the trust fund specified in subsection 1 except that:

(1) An originally signed duplicate of the trust agreement must be submitted to the department with the letter of credit.

(2) Unless the standby trust fund is funded pursuant to the requirements of this section the following are not required by this chapter:

(a) Payments into the trust fund as specified in subsection 1.

(b) Updating of schedule A of the trust agreement to show current or postclosure, or both, cost estimates.

(c) Annual valuations as required by the trust agreement; and

(d) Notices of nonpayment as required by the trust agreement.

d. The letter of credit must be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution and date and providing the following information: The identification number, name, and address of the facility and the amount of funds assured for closure and postclosure care of the facility by the letter of credit.

e. The letter of credit must be irrevocable and issued for a period of at least one year. The letter of credit must provide that the expiration date will be automatically extended for a period of at least one year unless at least one hundred twenty days before the current expiration date, the issuing institution notifies both the owner or operator and the department by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the one hundred twenty days will begin on the date when both the owner or operator and the department have received notice as evidenced by the return receipts.

f. The letter of credit must be issued in an amount at least equal to the current closure or postclosure, or both, cost estimate, except as provided in subsection 7.

g. Whenever the current closure or postclosure or both, cost estimate, increases to an amount greater than the amount of the letter of credit during the operating life of the facility, the owner or operator within sixty days after the increase shall either cause the amount of the letter of credit to be increased so that it at least equals the current closure or postclosure, or both, cost estimate, and submit evidence of such increase to the department, or obtain other financial assurance as specified in this section to cover the increase. Whenever the current closure or postclosure, or both, cost estimate decreases, the amount of the credit may be reduced to the amount of the current estimate following written approval by the department.

h. During the period of postclosure care, the department may approve a decrease in the amount of the letter of credit if the owner or operator demonstrates to the department that the amount exceeds the remaining cost of postclosure care.

i. Following a determination by the department that the owner or operator has failed to perform closure or postclosure care in accordance with the closure or postclosure plan or other permit requirements, the department may draw on the letter of credit.

j. If the owner or operator does not establish alternate financial assurance as specified in this section and obtain written approval of such alternate assurance from the department within ninety days after receipt by both the owner or operator and the department of a notice from the issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, the department will draw on the letter of credit. The department may delay the drawing if the issuing institution grants an extension of the term of the credit. During the last thirty days of any such extension, the department will draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in this section and obtain written approval of such assurance from the department.

k. The department will return the letter of credit to the issuing institution when:

(1) An owner or operator substitutes alternate financial assurance as specified in this section; or

(2) The department releases the owner or operator from requirements of this section in accordance with subsection 9.

5. **Closure and postclosure insurance.**

a. An owner or operator may satisfy the requirements of this section by obtaining closure and postclosure insurance which conforms to the requirements of this subsection and submitting a certificate of such insurance to the department. An owner or operator of a new facility must submit the certificate of insurance to the department at least sixty days before the date on which hazardous waste is first received for treatment, storage, or disposal. The insurance must be effective before this initial receipt of hazardous waste. At a minimum, the insurer must be licensed to transact the business of insurance in this state or eligible to provide insurance as an excess or surplus lines insurer in one or more states.

b. The wording of the certificate of insurance must be identical to the wording specified in subsection 5 of section 33-24-05-81.

c. The closure and postclosure insurance policy must be issued for a face amount of at least equal to the current closure or postclosure, or both, cost estimate, except as provided in subsection 7. The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer will not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.

d. The closure and postclosure insurance policy must guarantee that funds will be available to close the facility or perform postclosure final care, or both, when final closure or the postclosure period begins. The policy must also guarantee that once final closure or postclosure begins the insurer will be responsible for paying out funds up to an amount equal to the face amount of the policy upon the direction of the department to such party or parties as the department specifies.

e. After beginning partial or final closure or during the postclosure period, or both, an owner or operator or any other person authorized to perform closure or postclosure may request reimbursement for closure or postclosure expenditures by submitting itemized bills to the department. The owner or operator may request reimbursement for partial closure only if the remaining value of the policy is sufficient to cover the maximum cost of closing the facility over its remaining operating life. Within sixty days after receiving bills for closure or postclosure activities, the department will determine whether the expenditures are in accordance with the partial or final closure or postclosure plan or otherwise justified and if so, the department will instruct the insurer to make reimbursement in such amounts as the department specifies in writing. If the department has reason to believe that the maximum cost of closure over the remaining life of the facility will be significantly greater than the face amount of the policy, the department may withhold reimbursement of such amounts as the

department deems prudent until the department determines, in accordance with subsection 9, that the owner or operator is no longer required to maintain financial assurance for final closure of the facility. If the department does not instruct the insurer to make such reimbursement, the department will provide the owner or operator with a detailed written statement of reasons.

f. The owner or operator shall maintain the policy in full force and effect until the department consents to termination of the policy by the owner or operator as specified in subdivision k. Failure to pay the premium without substitution of alternate financial assurance, as specified in this section, will constitute a significant violation of this chapter warranting such remedy as the department deems necessary. Such violation will be deemed to begin upon receipt by the department of a notice of future cancellation, termination, or failure to renew due to nonpayment of the premium, rather than upon the date of expiration.

g. Each policy must contain a provision allowing assignment of the policy to a successor, owner, or operator. Such assignment may be conditional upon consent of the insurer, provided such consent is not unreasonably refused.

h. The policy must provide that the insurer may not cancel, terminate, or fail to renew the policy, except for failure to pay the premium. The automatic renewal of the policy must, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail to the owner or operator and the department. Cancellation, termination, or failure to renew may not occur, however, during the one hundred twenty days beginning with the date of receipt of a notice by the department and the owner or operator as evidenced by the return receipts. Cancellation, termination, or failure to renew may not occur and the policy will remain in full force and effect in the event that on or before the date of expiration:

(1) The department deems the facility abandoned;

(2) The permit is terminated or revoked or a new permit is denied;

(3) Closure is ordered by the department or a state court or other court of competent jurisdiction;

(4) The owner or operator is named as debtor in a voluntary or involuntary proceeding under United States Code title 11 (bankruptcy); or

(5) The premium due is paid.

i. Whenever the current closure or postclosure, or both, cost estimate increases to an amount greater than the face amount of the policy, the owner or operator within sixty days after the increase must either cause the face amount to be increased to an amount at least equal to the current closure or postclosure, or both, cost estimate and submit evidence of such increase to the department, or obtain other financial assurance as specified in this section to cover the increase. Whenever the current closure or postclosure, or both, cost estimate decreases, the face amount may be reduced to the amount of the current closure or postclosure, or both, cost estimate following a written approval by the department.

j. For postclosure insurance only, commencing on the date that liability to make payments pursuant to a postclosure policy accrues, the insurer will thereafter annually increase the face amount of the policy. Such increase must be equivalent to the face amount of the policy less any payments made, multiplied by an amount equivalent to eighty-five percent of the most recent investment rate or of the equivalent coupon-issue yield announced by the United States treasury for twenty-six-week treasury securities.

k. The department will give written consent to the owner or operator that it may terminate the insurance policy when:

(1) An owner or operator substitutes alternate financial assurance as specified in this section; or

(2) The department releases the owner or operator from the requirements of this section in accordance with subsection 9.

6. **Financial test and corporate guarantee for closure and postclosure care.**

a. An owner or operator may satisfy the requirements of this section by demonstrating that he passes a financial test as specified in this subsection. To pass this test, the owner or operator must meet the criteria of either paragraph 1 of subdivision a of subsection 6 or paragraph 2 of subdivision a of subsection 6.

(1) The owner or operator must have:

(a) Two of the following three ratios: A ratio of total liabilities to net worth less than two; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than one-tenth; and a ratio of

current assets to current liabilities greater than one and five-tenths;

(b) Net working capital and tangible net worth each at least six times the sum of the current closure and postclosure cost estimates and the current plugging and abandonment cost estimate;

(c) Tangible net worth of at least ten million dollars; and

(d) Assets in the United States amounting to at least ninety percent of owner's or operator's total assets or at least six times the sum of the current closure and postclosure cost estimates, and the current plugging and abandonment cost estimates.

(2) The owner or operator must have:

(a) A current rating for the owner's or operator's most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's;

(b) Tangible net worth at least six times the sum of the current closure and postclosure cost estimates and the current plugging and abandonment cost estimates;

(c) Tangible net worth of at least ten million dollars; and

(d) Assets located in the United States amounting to at least ninety percent of the owner's or operator's total assets or at least six times the sum of the current closure and postclosure cost estimates and the current plugging and abandonment cost estimates.

b. The phrase "current closure and postclosure cost estimates" as used in subdivision a of subsection 6 refers to the cost estimates required to be shown in paragraphs 1 through 4 of the letter from the owner's or operator's chief financial officer (subsection 6 of section 33-24-05-81). The phrase "current plugging and abandonment cost estimates" as used in subdivision a of subsection 6 refers to the cost estimates required to be shown in paragraphs 1 through 3 of the letter from the owner's or operator's chief financial officer (40 CFR 144.70(f)).

c. To demonstrate that the owner or operator meets the financial test, the owner or operator must submit the following items to the department:

(1) A letter signed by the owner's or operator's chief financial officer and worded as specified in subsection 6 of section 33-24-05-81;

(2) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and

(3) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating that:

(a) The accountant has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

(b) In connection with that procedure, no matters came to the accountant's attention which caused the accountant to believe that the specified data should be adjusted.

d. An owner or operator of a new facility must submit the items specified in subdivision c of subsection 6 to the department at least sixty days before the date on which hazardous waste is first received for treatment, storage, or disposal.

e. After the initial submission of items specified in subdivision c of subsection 6, the owner or operator must send updated information to the department within ninety days after the close of each succeeding fiscal year. This information must consist of all three items specified in subdivision c of subsection 6.

f. If the owner or operator no longer meets the requirements of subdivision a of subsection 6, the owner or operator must send notice to the department of intent to establish alternate financial assurance as specified in this section. The notice must be sent by certified mail within ninety days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements. The owner or operator must provide the alternate financial assurance within one hundred twenty days after the end of each fiscal year.

g. The department may, based on a reasonable belief that the owner or operator may no longer meet the requirements of subdivision a of subsection 6, require reports of financial condition at any time from the owner or operator in addition to those specified in subdivision c of subsection 6. If the department finds, on the basis of such reports or other information, that the owner or operator no longer meets

the requirements of subdivision a of subsection 6, the owner or operator must provide alternate financial assurance specified in this section within thirty days after notification of such a finding.

h. The department may disallow use of this test on the basis of qualification in the opinion expressed by the independent certified public accountant in the accountant's report on examination of the owner's or operator's statements (see paragraph 2 of subdivision c of subsection 6). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The department will evaluate other qualifications on an individual basis. The owner or operator must provide alternate financial assurance as specified in this section within thirty days after notification of the disallowance.

i. The owner or operator is no longer required to submit the items specified in subdivision c of subsection 6 when:

(1) An owner or operator substitutes alternate financial assurance as specified in this section; or

(2) The department releases the owner or operator from the requirements of this section in accordance with subsection 9.

j. An owner or operator may meet the requirements of this section by obtaining a written guarantee. The guarantor must be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator. The guarantor must meet the requirements for owners or operators in subdivisions a through h of subsection 6 and must comply with the terms of the guarantee. The wording of the guarantee must be identical to the wording specified in subdivision a of subsection 8 of section 33-24-05-81. The certified copy of the guarantee must accompany the items sent to the department as specified in subdivision c of subsection 6. One of these items must be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, the letter must describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter must describe this "substantial business relationship" and the value received in consideration of the guarantee. The terms of the guarantee must provide that:

(1) If the owner or operator fails to perform final closure or postclosure, or both, of a facility covered by the corporate guarantee in accordance with the closure or postclosure, or both, plan and other permit requirements when required

to do so, the guarantor will do so or establish a trust fund as specified in subsection 1 in the name of the owner or operator.

(2) The corporate guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the department. Cancellation may not occur, however, during the one hundred twenty days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the department, as evidenced by the return receipts.

(3) If the owner or operator fails to provide alternate financial assurance as specified in this section and fails to obtain the written approval of such alternate assurance from the department within ninety days after receipt by both the owner or operator and the department of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor will provide such alternate financial assurance in the name of the owner or operator.

k. Companies not required to submit an audited financial statement to the United States securities and exchange commission must have an auditor's opinion prepared by an auditor licensed in this state.

7. **The use of multiple financial mechanisms.** An owner or operator may satisfy the requirements of this section by establishing more than one financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds guaranteeing payment into a trust fund, letters of credit, and insurance. The mechanisms must be as specified in this section, except that it is the combination of mechanisms, rather than the single mechanism which must provide financial assurance for an amount at least equal to the current closure or postclosure, or both, cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or a letter of credit, the owner or operator may use the trust fund as the standby trust fund for the other mechanisms. A single standby trust fund may be established for two or more mechanisms. The department may use any or all of the mechanisms to provide for closure or postclosure, or both, care of the facility.

8. **Use of a financial mechanism for multiple facilities.** An owner or operator may use a financial assurance mechanism specified in this section to meet the requirements of this section for more than one facility. Evidence of financial assurance submitted to the department must include a list showing for each facility the identification number, name, address, and the amount of funds for closure or postclosure, or both, care assured by the mechanism. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established

and maintained for each facility. In directing funds available through the mechanism for closure or postclosure care of any of the facilities covered by the mechanism, the department may direct only the amount of funds designated for that facility unless the owner or operator agrees to the use of additional funds available under the mechanism.

9. **Release of the owner or operator from the requirements of this section.** Within sixty days after receiving certifications from the owner or operator and an independent registered professional engineer that final closure or postclosure care, or both, has been completed in accordance with an approved closure or postclosure care plan, the department will notify the owner or operator in writing that the owner or operator is no longer required by this section to maintain financial assurance for final closure or postclosure care, or both, of the facility, unless the department has reason to believe that final closure or postclosure care, or both, has not been in accordance with the approved closure or postclosure care plans. The department shall provide the owner or operator a detailed written statement of any such reason to believe that closure or postclosure, or both, has not been in accordance with the approved closure or postclosure plans.

History: Effective January 1, 1984; amended effective October 1, 1986; December 1, 1988; December 1, 1991; January 1, 1994; July 1, 1997.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-78. Use of a financial mechanism for both closure and postclosure care. An owner or operator may satisfy the requirements for financial assurance for both closure and postclosure care for one or more facilities by using a trust fund, surety bond, letter of credit, insurance, financial test, or corporate guarantee that meets the specifications for the mechanism in section 33-24-05-77. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for financial assurance of closure and of postclosure care.

History: Effective January 1, 1984.
General Authority: NDCC 23-20.3-03
Law Implemented: NDCC 23-20.3-03, 23-20.3-04

33-24-05-79. Liability requirements.

1. **Coverage for sudden accidental occurrences.** An owner or operator of a hazardous waste treatment, storage, or disposal facility, or a group of facilities, must demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must have and maintain liability coverage for sudden accidental occurrences in the amount of at least one million