

CLOSURE PLAN REVIEW FORM

WASTE PILE/SURFACE IMPOUNDMENT

Last Updated: July 2005

Facility Name		Reviewer / District Office	
Facility ID Number		Date Review of Plan Completed	
Date of Plan		Date Reviewed by Closure Coordinator	
Plan is: New, Amended, Revised		Date Reviewed by DDAGW (if applicable)	

This Closure Plan Review Form is #		of		forms completed in the review of this closure plan.
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Relevant Guidance Document Closure Plan Review Guidance for RCRA Facilities - OEPA/DHWM <http://epa.ohio.gov/portals/32/pdf/2008CPRG.pdf>

	YES	NO	N/A	Page #	Notes - NOD Comment #
I. <u>General</u>					
A) Facility Permit Status:					
Part A?					
Part B?					
Unpermitted Treatment, Storage, and Disposal Facility?					
B) Type of Closure:					
Full?					
Partial? If yes, list the other regulated units remaining (unclosed) at the facility in the Notes.					
C) Does the submitted plan describe closure for more than one unit? If yes, a separate closure plan review form shall be completed for each individual unit.					

	YES	NO	N/A	Page #	Notes - NOD Comment #
D) Is a summary and a description of unique features regarding the waste pile(s)/surface impoundment(s) provided? If yes, please include in the Notes.					
II. Description of Facility					
A) Is a description of the type of industry, size, and products included? If yes, please include in the Notes.					
B) Is a description of the process(es) that generate(s) the hazardous waste included? If yes, please include in the Notes.					
C) Is a description of the facility's hazardous waste management methods included? If yes, please include in the Notes.					
III. Map of Facility					
A) Does the plan include a topographic and/or county map including a north arrow?					
B) Does the plan include a detailed facility map showing the location of each of the hazardous waste management units, including a north arrow, scale, and legend?					
IV. Description of Unit to be Closed					
A) Is the following information regarding the surface impoundment included (go to IV.B. for waste piles)? If yes, please include in the Notes.					
1) The surface area of the surface impoundment (in acres, square yards, etc...)					
2) Other operating permits for this surface impoundment (e.g., NPDES, wastewater discharge permit for leachate, zoning permit, air)					

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	YES	NO	N/A	Page #	Notes - NOD Comment #
3) Approximate volume and/or dimensions of the waste and contaminated media to be removed or capped					
4) Has a run-on and/or run-off control system been constructed to manage storm water at a volume equivalent to a 24-hour, 25-year storm? If yes, please include in the Notes.					
B) Is the following information regarding the waste pile included? If yes, please include in the Notes.					
1) The size of the waste pile (width by length by height or depth).					
2) Is the waste pile in compliance with Subpart L of 40 CFR 264 or 265?					
3) Is the waste pile located within a "containment building" in accordance to Subpart DD of 40 CFR 264 or 265 with an authorized exemption under ORC 3734.02(G)?					
C) Does the plan state the maximum waste inventory of the unit (in cubic yards or tons)? If yes, please include in the Notes.					
D) Does the plan state the period of use for hazardous waste management? If yes, please include in the Notes.					
E) Have construction details been provided (e.g., drawings, blueprints) and if so, are those adequate?					
F) Does the plan describe in detail any other structures associated with this waste pile/surface impoundment? If yes, please include information in the Notes.					

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	YES	NO	N/A	Page #	Notes - NOD Comment #
G) Does the plan provide the summary of geologic and hydrogeologic information? If yes, please include in the Notes.					
H) Does the plan state the proximity (depth) to ground-water? If yes, please include in the Notes..					
I) Has the ground-water plan review form been completed? It must be completed, if it's not, provide the reason.					
J) If a liner exists beneath the waste pile or surface impoundment, is the following information included? If yes, please include in the Notes.					
1) A description of what the liner is composed of (e.g., plastic liners with curbing, concrete) and the thickness of the liner.					
2) An engineering analysis of the waste pile or impoundment foundation demonstrating that the foundation is capable of supporting the pile and resisting pressure gradients.					
3) A description of the leak detection system that is in place.					
4) Information on if the leachate depth over the liner exceeds 30 centimeters.					
5) Detailed drawings, blueprints, or a text description of the liner structure. If yes, did the drawings, blueprints or text description contain adequate information?					
V. List of Hazardous Wastes					
A) Are the types of hazardous waste(s) currently managed in the waste pile or surface impoundment included? List below with appropriate U.S. EPA Codes; include potential degradation products; App. VIII constituent(s).					

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Waste Description	U.S. EPA waste code(s)	Constituents and Degradation Products	CAS Number

	YES	NO	N/A	Page #	Notes - NOD Comment #
B) Were the method(s) used to characterize the waste(s) listed? If yes, please include in the Notes.					
C) Is the characterization adequate? If no, please include in the Notes.					
VI. Removal of Hazardous Waste					
A) Is the amount of waste present (in this unit only) at beginning of closure included? If yes, please include in the Notes.					
B) Are the disposal facility(ies) included? If yes, please include in the Notes.					
C) Are the transporter(s) included? If yes, please include in the Notes.					
D) Is the staging & loading described? If yes, please include in the Notes.					

	YES	NO	N/A	Page #	Notes - NOD Comment #
E) Will the waste be treated on-site or sent to a permitted TSD Facility? Please include information in the Notes.					
VII. Schedule for Closure					
A) Does the plan detail all critical milestones for closure and state when a Professional Engineer (licensed and registered in the state of Ohio) will be present?					
B) Does the plan list which activities the inspector will be notified of?					
C) Does the plan state that Ohio EPA will be given five working days notice before activities occur as listed in the above question?					
D) Does the closure plan indicate how long closure activities will take and is this time frame realistic?					
VIII. Other Permits					
A) Will other permits be required for successful implementation of this plan? If yes, please include in the Notes.					
B) Does the plan address NPDES, air emission, or other permit requirements?					
IX. Health and Safety Plan					
A) Does the closure plan indicate that the facility will comply with applicable OSHA requirements, including a Health and Safety Plan?					

	YES	NO	N/A	Page #	Notes - NOD Comment #
X. Decontamination					
A) If a secondary containment exists for the waste pile, is it required to be decontaminated to meet rinsate standards? List the decontamination methods and standards for the secondary containment and equipment in the table below:					

Decontamination of structures and equipment		
Structure or Equipment	Method	Standard

	YES	NO	N/A	Page #	Notes - NOD Comment #
X. Decontamination (continued)					
C) Is the structure or equipment subject to a triple wash? If yes, please include the type of solvent to be used in the Notes.					
D) Does the plan state the volume of rinsate and debris expected to be generated? If yes, please include in the Notes.					
E) Does the plan state that the rinsate and debris will be managed as hazardous waste?					

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	YES	NO	N/A	Page #	Notes - NOD Comment #
1) If yes, please include a description of how the rinsate and debris will be managed and disposed in the Notes.					
2) If no, please include how that determination was made in the Notes.					
F) Is a description of the release control (decontamination pad) included in the plan? If yes, please include in the Notes.					

XI. Closure Strategy/Remediation Standards

Does the closure plan propose strategies for addressing contaminated media (i.e., soil, ground water)? Identify which strategies below:

Strategy (choose all that apply)	Describe how strategy will be applied below	Links to other Plan Review Forms (PRFs)
A) Closure by removal to background conditions for naturally occurring compounds (using either the CPRG's alternate metal standards or site-specific background remediation standards). Complete Remediation Standards Table below.		- Complete Data Collection and Analysis PRF http://epa.ohio.gov/portals/32/pdf/dca-prf.PDF
B) Closure by removal to method detection limits for non-naturally occurring compounds. Complete Remediation Standards Table below.		- Complete Data Collection and Analysis PRF http://epa.ohio.gov/portals/32/pdf/dca-prf.PDF
C) Closure by removal or decontamination to risk-based standards (site-specific or generic cleanup numbers from the CPRG). Complete Remediation Standards Table below.		- Complete Data Collection and Analysis PRF http://epa.ohio.gov/portals/32/pdf/dca-prf.PDF - Complete Risk Assessment PRF http://epa.ohio.gov/portals/32/pdf/risk-prf.PDF
1) Does the closure plan include language regarding the owner/operator's commitment to file a use restriction agreement and willingness to enter into an order? Note: If the facility proposes to use an industrial cleanup standard with a use restriction to the property, then obtain legal involvement as soon as possible.		

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Strategy (choose all that apply)	Describe how strategy will be applied below	Links to other Plan Review Forms (PRFs)
D) Waste In Place Closure		- Complete Ground Water PRF http://epa.ohio.gov/portals/32/pdf/gw-prf.PDF

Remediation Standards		
Constituent *	Numeric Remediation Standard(s) for Contaminated Media (if applicable)	Type of Standard (MDL, Risk-based, Background, BRS, AMS)

* This list should match the list of hazardous waste constituents as stated in Section V.

	YES	NO	N/A	Page #	Notes - NOD Comment #
XII. Sampling Plan and Analytical Procedures					
A) Does the plan include a soil Sampling and Analysis Plan as detailed in Section 3.11 of the 2005 CPRG - including sampling of cracks/holes, sump areas and areas of runoff/visible staining? If yes, the Data Collection and Analysis (http://epa.ohio.gov/portals/32/pdf/dca-prf.PDF) and Data Validation PRFs (http://epa.ohio.gov/portals/32/pdf/TierIDVManual.pdf) should be completed along with this form.					

	YES	NO	N/A	Page #	Notes - NOD Comment #
B) Does the plan state that the full nature and extent of contamination will be determined and addressed?					
XIII. Description of Removal Efforts and Treatment Processes					
A) Does the closure plan propose removal/excavation of contaminated media? If yes, please include the following information in the Notes:					
1) Type of contaminated media known/anticipated (this would include soil, fill material, etc.).					
2) Estimated volume of contaminated soil/fill to be removed (include units).					
3) Disposal Facility(ies).					
4) Transporter(s).					
5) Is the waste subject to the land disposal restrictions (LDRs) of OAC chapter 3745-270 and does it meet the universal treatment standards?					
6) Description of the staging & loading.					
B) Is the goal of this removal stated (i.e., removal of "hot spots" only, closure by removal, closure demonstrated by risk assessment, other)? If yes, please include in the Notes.					
C) Does the plan state whether the media will be treated on-site or sent to a permitted TSD Facility? If yes, please include in the Notes.					
XIV. Certification					
A) Does the closure plan indicate that the certification will include the wording found in OAC rule 3745-50-42(D)?					

	YES	NO	N/A	Page #	Notes - NOD Comment #
B) Does the closure plan state the status (e.g., post-closure) of the unit and the facility upon completion of closure? If yes, please include in the Notes.					
C) Does the plan state what documentation will be submitted with the closure certification? If yes, please include in the Notes.					
XV. <u>Financial Assurance Documentation</u>					
A) Was a closure cost estimate submitted to Central Office or included with this closure plan submittal?					