

Texas Commission on Environmental Quality

CHECKLIST WORKSHEET

IHW CEI LANDFILL

REG ENT NAME:

Date :

Add ID:

Investigator Name:

Item No	Description	Answer	Citations	Notes
	SECTION A: DESIGN AND OPERATING REQUIREMENTS			
1	Has the landfill been granted a waiver or an exemption to the Minimum Technology requirements (MTR)?			
2	For landfills meeting the MTR, does the landfill consist of double liner system meeting the following requirements:		265.301(a) 264.301(a) 264.301(c) 335.112(a)(13) 335.173(c)	
A	Upper liner comprised of a material that prevents migration of waste into the liner? Reference 335.112(a)(13), 265.301(a), 335.173(c) & 264.301(c)(1)(i)(A)			
B	Lower liner consists of a minimum of 3 feet compacted clay overlain by a geomembrane? Reference 335.112(a)(13), 265.301(a), 335.173(c) & 264.301(c)(1)(i)(B)			
C	Constructed of appropriate materials to prevent failure? Reference 335.112(a)(13), 265.301(a), 335.173(c) & 264.301(a)(1)(i)			
D	Placed on a foundation or base capable of providing support? Reference 335.112(a)(13), 265.301(a), 335.173(c) & 264.301(a)(1)(ii)			
E	Covers all of the area to be in contact with waste or leachate? Reference 335.112(a)(13), 265.301(a), 335.173(c) & 264.301(a)(1)(iii)			
3	For landfills meeting MTR, does the leachate collection system meet the following requirements:		264.301(c)(3) 264.301(c)(3)(i) 264.301(c)(3)(ii) 264.301(c)(3)(iii) 264.301(c)(3)(iv) 264.301(c)(3)(v) 264.301(c)(5) 265.301(a) 264.301(c) 335.173(c) 335.112(a)(13)	
A	Located between the liners and immediately above the lower composite liner?			
B	Capable of detecting, collecting, and removing leaks of hazardous waste through all areas of the upper liner?			
C	Located above the seasonal high water table?			
4	For landfills meeting MTR, and if the flow rate into the leak detection system exceeded the established Action Leakage Rate, were proper and timely notifications and reports submitted?		265.303(b) 265.304(b) 335.152(a)(12) 335.112(a)(13)	
5	For existing Permitted landfills and MTR exempt landfills, does the liner meet the following requirements:		335.173(a)(3)(A) 335.171(1)(A) 335.173(a)(2) 335.173(a)(3)	

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		· ·	335.173(a) 335.173(a)(1) 264.301(a)(1) 264.301(a)(1)(i) 264.301(a)(1)(ii) 264.301(a)(1)(iii) 335.173(a)(1)(A) 335.173(a)(1)(B) 335.173(a)(2)(B) 335.173(a)(3)(A)(i) 335.173(a)(3)(A)(ii) 335.173(a)(3)(B) 335.173(a)(1)(C) 335.173(a)(2)(A)	
A	Prevents migration of wastes out of landfill?			
B	Constructed of appropriate materials to prevent failure?			
C	Placed upon a foundation or base capable of providing support?			
D	Covers all of the area to be in contact with waste or leachate?			
6	For existing permitted landfills and MTR exempt landfills, does the leachate collection and removal system meet the following requirements:	· · ·	335.173(a)(2) 264.301(a)(2) 335.173(a)(2)(B) 335.173(a)(2)(A)	
A	Located immediately above the liner?			
B	Designed and operated to ensure that leachate depth over liner is less than 30 cm.?			
C	Constructed of materials that are chemically resistant to waste and leachate?			
D	Capable of preventing collapse due to overburden of waste, cover, and equipment?			
E	Capable of functioning without clogging?			
7	For Permitted Units, is the landfill compliant with all other design and operating requirements as authorized by Permit?			
8	Does the owner or operator maintain a run-on control system capable of preventing flow onto the active landfill from at least a 100-year storm?	·	335.173(g) 335.124(a)	
9	Does the owner or operator maintain a run-off control system capable of collecting and controlling the water volume of a 24-hour, 100-year storm?	·	335.173(h) 335.124(b)	
10	Are the storm water collection and retention systems managed expeditiously after storms to maintain design capacity?	· · ·	265.301(h) 264.301(i) 335.173(i) 335.124(c)	
11	Is the landfill covered or otherwise managed to control wind dispersal of particulate matter?	· · ·	264.301(j) 265.301(i) 335.124(d) 335.173(j)	
SECTION B: MONITORING AND INSPECTION				
1	For permitted landfills, is the landfill inspected weekly and after all storms to detect the following:	·	264.303(b) 335.152(a)(13)	
A	Deterioration, malfunction, or improper operations of run-on and run-off control systems? Reference 335.152(a)(13)/264.303(b)(1)			
B	Proper functioning of the wind dispersal control system, if applicable? Reference 335.152(a)(13)/264.303(b)(2)			

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C	Presence of leachate in leachate collection/removal systems and proper functioning of the systems, if applicable. Reference 335.152(a)(13)/264.303(b)(3)			
2	For permitted landfills, does the owner/operator record the amount of liquids removed from the leak detection system sump at least once per week during the active life and closure period?		264.303(c) 335.152(a)(13)	
3	For interim status landfills, does the owner/operator record the amount of liquids removed from the leak detection system sump at least once per week during the active life and closure period?		265.304(a) 335.112(a)(13)	
	SECTION C: SURVEYING AND RECORD KEEPING (Permitted and Interim Status landfills)			
1	Does the operating record contain the following information:			
A	On a map, the exact location and dimensions, including depth of each cell, referenced to permanent bench marks?		265.309(a) 264.309(a) 335.152(a)(12) 335.112(a)(13)	
B	The contents of each cell and the approximate location of each hazardous waste type within each cell?		265.309(b) 335.152(a)(12) 335.112(a)(13)	
	SECTION D: IGNITABLE OR REACTIVE WASTES (Permitted and Interim Status landfills)			
1	Are ignitable or reactive wastes placed in the landfill? (If YES, complete questions 2 through 5 below)			
2	Does the resulting waste, mixture, or dissolution or material no longer meet the definition of ignitable or reactive waste?		265.312(a)(1) 264.312(a)(1) 335.152(a)(12) 335.112(a)(13)	
3	AND Has the owner or operator taken precautions to prevent accidental ignition or reaction of waste as per 264.17(b) or 265.17(b)?		265.312(a)(1) 264.312(a)(2) 335.152(a)(12) 335.112(a)(13)	
4	Are containerized, ignitable wastes that are not prohibited wastes subject to Part 268 Subpart D treatment standards placed in the landfill?		265.312(b) 264.312(b) 335.152(a)(12) 335.112(a)(13)	
5	If yes, does the disposal method provide for:			
A	Disposal in non-leaking containers?			
B	Handling and placement to avoid heat, sparks, rupture, etc...?			
C	Daily coverage with soil or other non-combustible material?			
D	No disposal in cells with other wastes which may generate heat sufficient to cause ignition?			
	SECTION E: INCOMPATIBLE WASTES (Permitted and Interim Status landfills)			
1	Are incompatible wastes or wastes and materials placed in the landfill? (If YES, complete question 2 below)			
2	Has the owner or operator taken precautions to prevent accidental ignition or reaction of waste as per 264.17(b) or 265.17(b)?		335.152(a)(12) 335.112(a)(13)	
	SECTION F: LIQUID WASTE (Permitted and Interim Status landfills)			
1	Have bulk or non-containerized liquid hazardous wastes or wastes containing free liquids been placed in the landfill? Reference 335.125(a)/265.314(a); 335.175(a)/264.314(a)			

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2	If YES, was the hazardous waste treated or stabilized so that the liquids are no longer present?	· · ·	265.314(a)(2) 335.175(a) 335.125(a) 264.314(a)(2)	
3	If YES, did the owner or operator demonstrate to the TCEQ that: a. No reasonable alternative other than a landfill or unlined surface impoundment exists; AND b. Such placement will not risk contamination of a source of drinking water.	· · · · · · ·	265.314(f) 335.175(d)(1) 335.175(d)(2) 335.125(f)(1) 335.125(f)(2) 335.175(d) 335.125(f) 264.314(f)	
4	Does the owner or operator use EPA Method 9095 (Paint Filter Liquids Test) to demonstrate the presence or absence of free liquids?	· · ·	265.314(c) 335.175(c) 335.125(d) 264.314(c)	
5	Containers holding free liquids are very small, such as an ampule;	· · ·	265.314(c)(2) 335.175(e)(1) 335.125(c)(1) 264.314(c)(2)	
6	Containers are designed to hold free liquids for use other than storage (such as a battery or capacitor);	· · ·	265.314(c)(3) 335.175(e)(1) 335.125(c)(2) 264.314(c)(3)	
7	The container holding free liquids is disposed of as a lab pack.	· · ·	265.314(c)(4) 335.175(e)(3) 335.125(c)(3) 264.314(c)(4)	
SECTION G: DISPOSAL OF SMALL CONTAINERS IN LAB PACKS (Permitted and Interim Status landfills)				
1	Do records indicate that small containers of hazardous waste in over-pack drums (lab packs) are disposed of in the landfill? (If YES, complete question 2)			
2	If YES, do the lab packs meet the following requirements:			
A	Are hazardous wastes packaged in non-leaking inside containers?	· · ·	265.316(a) 264.316(a) 335.152(a)(12) 335.112(a)(13)	
B	Are inside containers over-packed in an open head metal shipping container that has less than 110 gallon capacity and meets DOT requirements?	· · ·	265.316(b) 264.316(b) 335.152(a)(12) 335.112(a)(13)	
C	Is the metal outer container full after packing with inside containers and sorbent?	· · ·	265.316(b) 264.316(b) 335.152(a)(12) 335.112(a)(13)	
D	Is proper non-reactive packing material used?	· · ·	265.316(c) 264.316(c) 335.152(a)(12) 335.112(a)(13)	
E	Are only compatible or non-reactive wastes in inside containers (except cyanide-or sulfide-bearing wastes)?	· · ·	265.316(e) 264.316(e) 335.152(a)(12) 335.112(a)(13)	

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	SECTION H: DIOXIN WASTES (Permitted facilities which manage F020, F021, F022, F023, F026 and F027 waste in landfills)			
1	Are dioxin wastes placed in the landfill? (If YES, complete question 2)			
2	If YES, does the owner or operator manage the landfill in accordance with a TCEQ approved management plan?		264.317(a) 335.152(a)(12)	
	SECTION I: CLOSURE AND POST-CLOSURE (Facilities that managed hazardous waste in Permitted and Interim Status landfills which are closed or undergoing post-closure)			
1	Does this facility include a landfill or cell that has been closed? (If YES, complete questions 2 and 3)			
2	Has the owner or operator established an adequate cover which:		265.310(a) 265.310(a)(1) 265.310(a)(2) 265.310(a)(3) 265.310(a)(4) 265.310(a)(5) 335.174(a) 264.310(a)(4) 264.310(a)(5) 264.310(a) 264.310(a)(1) 264.310(a)(2) 264.310(a)(3) 335.112(a)(13) 335.174(a)(1) 335.174(a)(2) 335.174(a)(3) 335.174(a)(4) 335.174(a)(5)	
A	Minimizes the migration of liquids through the closed landfill? 335.112(a)(13)/ 265.310(a)(1)			
B	Functions with minimum maintenance? 335.112(a)(13)/265.310(a)(2)			
C	Promotes drainage and minimizes erosion of final cover? 335.112(a)(13)/265.310(a)(3)			
D	Accommodates settling and subsidence to maintain cover integrity? 335.112(a)(13)/ 265.310(a)(4)			
E	Has a permeability less than or equal to that of the liner or natural subsoil? 335.112(a)(13)/ 265.310(a)(5)			
3	After final closure, has the owner or operator complied with all post-closure requirements, including the requirements to:			
A	Maintain the integrity and effectiveness of the final cover, including any necessary repairs?		265.310(b)(1) 264.310(b)(1) 335.112(a)(13) 335.174(b)(1)	
B	Maintain and monitor the leak detection system for double-lined landfills?		265.310(b)(2) 264.310(b)(3) 335.112(a)(13) 335.174(b)(3)	
C	Maintain and monitor the ground-water monitoring system in compliance with all applicable regulations and Permit requirements?		265.310(b)(3) 264.310(b)(4) 335.112(a)(13) 335.174(b)(4)	
D	Prevent run-on or run-off from eroding or damaging the final cover?		265.310(b)(4) 335.174(b)(5)	

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		·	264.310(b)(5) 335.112(a)(13)	
E	Maintain surveyed benchmarks?	· · ·	265.310(b)(5) 335.174(b)(6) 264.310(b)(6) 335.112(a)(13)	
F	For Permitted units only, continue to operate leachate collection/removal system until no leachate is detected?	·	335.174(b)(6) 264.310(b)(2)	