

Texas Commission on Environmental Quality

CHECKLIST WORKSHEET

MSW GROUNDWATER

Reg Ent Name : _____

Date : _____

Add ID _____

Investigator Name _____

Item No	Description	Answer	Citations	Notes
	SECTION A: Applicability			
1	Did the landfill cease receiving waste prior to October 9, 1993 and has no groundwater (GW) monitoring requirements specified in its permit per 330.5(c-e)? If "yes", remainder of checklist is NOT APPLICABLE.			
2	Does the landfill (LF) have an arid exemption per 330.5 (b)? If "yes", answer Item #3.			
3	Is the arid exempt landfill compliant with applicable exemption requirements per 330.5(b) (1) (A-D)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially	330.5(b)(1) 330.5(b)(1)(D) 330.5(b)(1)(B) 330.5(b)(1)(A) 330.5(b)(1)(C)	
4	Is the LF a Type IV landfill and not required to install a GW monitoring system per 330.5(a) (2). If "yes", answer Item #5.			
5	Is the type IV Landfill compliant with applicable exemption requirements per 330.5(b) (1) (A-D)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially	330.5(b)(1)(D) 330.5(b)(1)(C) 330.5(b)(1)(A) 330.5(b)(1)(B) 330.5(b)(1)	
6	Has the MSWLF unit had its GW monitoring requirements suspended per 330.5(b)(4)? If "yes", answer Item #7.			
7	Is the MSW LF unit compliant with applicable exemption requirements per 330.5(d)?		330.5(d)	
8	If the LF is not a Type I or Type IV, but has been required to establish a GW monitoring program, is the LF unit in compliance with those established requirements per 330.5(c)?		330.5(c)	
	SECTION B: Groundwater Monitoring at Type IV Site			
9	Has a ground water monitoring system been installed in accordance with 30 TAC 330.417(b) (2) w/ref. to 330.403?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially	330.417(b)(2) 330.403	
10	Is GW sampling and analysis being conducted in accordance with 30 TAC 330.417(b) (3) w/ref. to 330.405(a)-(d)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially	330.405(b)(3)(C) 330.405(b) 330.417(b)(3) 330.405(b)(3) 330.405(b)(3)(A) 330.405 330.405(b)(2) 330.405(c) 330.405(b)(3)(B) 330.405(d) 330.405(a) 330.405(b)(1)	

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MSW GROUNDWATER (Cont)

11	Is each monitoring well or other sampling point being sampled annually or on some other schedule but not less frequent than annual & being analyzed for chloride, iron, manganese, cadmium, zinc, TDS, specific conductance (field & lab measurements), PH (field & lab measurements), and non-purgeable organic compounds?		330.417(b)(4)	
12	Has the owner or operator submitted a report containing the results of the analyses to the Agency within 60 days after the sampling event?		330.417(b)(5)	
	SECTION C: Groundwater Monitoring at Type I Sites			
13	Has the owner or operator submitted a certification to the Agency that the GW monitoring system is in compliance with the requirements of 330.403 for any units which are receiving waste?		330.403	
14	If the LF is active or in the post-closure care period, is GW monitoring being conducted per 330.405?		330.405	
15	Has the GW monitoring system been certified by a qualified groundwater scientist?		330.403(e)	
16	Has the GW monitoring system certification been submitted to the Agency?		330.403(e)	
17	Is a copy of the GW monitoring system certification in the operating record?		330.403(e)	
18	Has the GW monitoring system been approved by the Agency?		330.403(e)	
19	Has the GW monitoring system been constructed in accordance with the plans and specs contained in the approved Site Development Plan (including any modifications)?	<ul style="list-style-type: none"> - - - - - - - - - 	330.403(b)(1) 330.403(a) 330.403(b) 330.403(b)(2) 330.403(a)(2) 330.403(b)(4) 330.403(c) 330.403(b)(5) 330.403(a)(1) 330.403(b)(3)	
20	Are the tops of the well casing at least 2 feet above ground level?		330.421(a)(2)(A)	
21	Is the concrete pad present at each well, in good condition, at least 6 inches thick, at least 4 feet square or 5 feet in diameter, and slopes away from the casing or collar?		330.421(a)(3)	
22	Is there a protective collar present around the casing "stickup" of each well, which extends at least three inches above the top of the casing and/or top cap, with a hinged lid that is installed with a sturdy lock which is in good working order and kept locked except when sampling or purging?		330.421(a)(4)	
23	Is the well number or other designation marked permanently on the protective steel collar?		330.421(a)(4)	
24	Are protective barriers (bumper poles) installed around each of the wells and are they in good condition?		330.421(a)(5)	
25	Is each well casing permanently marked at the surveyed elevation point?		330.421(d)	

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26	Were complete monitoring well installation and construction details submitted to the Agency on commission forms within 60 days of well completion?		330.421(e)	
27	Does any well appear to have been damaged to the extent that it is not suitable for sampling? If so, has a report been submitted to the Agency for determination about whether to repair or replace the well?		330.421(f)	
28	If any monitoring well is no longer being used, has the abandonment of the well been approved by the Agency in writing?		330.421(g)	
29	Has the abandoned well been properly plugged in accordance with 16 TAC 76.702 & 76.1004?		330.421(g)	
	SECTION D: Groundwater Sampling and Analysis			
30	Has a Groundwater Sampling and Analysis Plan (GWSAP) been submitted to the Agency for review and approval prior to commencement of sampling activities?		330.405(b)	
31	Is a current copy of the approved GWSAP being maintained in the operating records?		330.405(b)	
32	Were the groundwater sampling activities conducted during this investigation? If "yes", answer Item #33.			
33	Were the groundwater sampling activities conducted in accordance with the current approved GWSAP?		330.405(b)	
33A	Follows stated procedures and techniques for sample collection, conducting field measurements, sample preservation, analytical procedures, shipment, chain-of-custody controls, quality assurance, and quality control per 330.405(b)(1).			
33B	Provides for proper measurement of groundwater elevations at each sampling point prior to bailing or purging per 330.405(b)(3).			
33C	Provides for proper sampling and analytical methods that are appropriate for groundwater sampling and that accurately measure hazardous constituents and other monitoring parameters in groundwater samples per 330.405(b)(3).			
33D	Ensures that the groundwater samples are not field-filtered prior to lab analysis for constituents listed in 30 TAC 330.405(c) unless previously authorized in writing by the Agency.			
33E	Sampling procedures and frequency must be protective of human health and the environment per 330.405(b)(1) (e.g. a health and safety plan is followed, non-dedicated sampling equipment is properly decontaminated before and after each use, proper procedures are followed to prevent introduction of contaminants into the groundwater, contaminated purge water is properly handled).			
34	Are groundwater samples analyzed for the constituents identified in the approved GWSAP or as otherwise specified by the Agency?		330.419(a) 330.405(b)(3)	
35	Is groundwater monitoring conducted at the frequency identified in the approved GWSAP or as otherwise specified by the Agency?		330.407(a)	

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36	Are the results of each groundwater sampling event submitted to the Agency within 60 days after the sampling event or otherwise specified by the Agency?		330.407(b)	
	SECTION E: Status of Groundwater Monitoring Activities			
37	If required, has the entity met the Detection Monitoring Program requirements?		330.407	
38	If required, has the entity met the Assessment Monitoring Program requirements according to the stated time schedules?		330.409	
39	Is the entity currently under Groundwater Corrective Action? If "Yes", answer Items #40, #41, and #42.			
40	If under Corrective Action, has the entity met the less than 90 days initiation deadline for assessment of corrective measures?		330.411(a)	
41	If under Corrective Action, has the entity met the less than 30 days submitting deadline for the "Selection of Remedy" report following the completion of the assessment corrective action described in 30 TAC 330.413(a)?		330.413(a)	
42	If under corrective Action, does the implementation of the corrective program meet the requirement of 30 TAC 330.415?		330.415	