

Texas Commission on Environmental Quality

CHECKLIST WORKSHEET

MSW GROUNDWATER

Regulating Entity Name

Date:

Additional I D:

Investigator Name:

Item Number	Description	Answer	Citations	Notes
	SECTION A: Applicability			
Item Number 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.			
Item Number 2	Does the landfill (LF) have an arid exemption per 330.5 (b)? If "yes", answer Item #3.			
Item Number 3	Is the arid exempt landfill compliant with applicable exemption requirements per 330.5(b) (1) (A-D)?			
Item Number 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.			
Item Number 5	Is the type IV Landfill compliant with applicable exemption requirements per 330.5(b) (1) (A-D)?		330.5(b)(1)(B)	
Item Number 6	Has the MSWLF unit had its GW monitoring requirements suspended per 330.5(b)(4)? If "yes", answer Item #7.			
Item Number 7	Is the MSW LF unit compliant with applicable exemption requirements per 330.5(d)?			
Item Number 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)?			
Item Number 9	SECTION B: Groundwater Monitoring at Type IV Site			
Item Number 9	Has a ground water monitoring system been installed in accordance with 30 TAC 330.417(b) (2) w/ref. to 330.403?			
Item Number 10	Is GW sampling and analysis being conducted in accordance with 30 TAC 330.417(b) (3) w/ref. to 330.405(a)-(d)?			
Item Number 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)	

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Item Number 12	Description Has the owner or operator submitted a report containing the results of the analyses to the Agency within 60 days after the sampling event? Answer Citations 330.417(b)(5) Notes
Item Number	Description SECTION C: Groundwater Monitoring at Type I Sites Answer Citations Notes
Item Number 13	Description 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? Answer Citations 330.403 Notes
Item Number 14	Description If the LF is active or in the post-closure care period, is GW monitoring being conducted per 330.405? Answer Citations 330.405 Notes
Item Number 15	Description Has the GW monitoring system been certified by a qualified groundwater scientist? Answer Citations 330.403(e) Notes
Item Number 16	Description Has the GW monitoring system certification been submitted to the Agency? Answer Citations 330.403(e) Notes
Item Number 17	Description Is a copy of the GW monitoring system certification in the operating record? Answer Citations 330.403(e) Notes
Item Number 18	Description Has the GW monitoring system been approved by the Agency? Answer Citations 330.403(e) Notes
Item Number 19	Description Has the GW monitoring system been constructed in accordance with the plans and specs contained in the approved Site Development Plan (including any modifications)? Answer Citations 330.403(c) Notes
Item Number 20	Description Are the tops of the well casing at least 2 feet above ground level? Answer Citations 330.421(a)(2)(Notes
Item Number 21	Description 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? Answer Citations 330.421(a)(3) Notes
Item Number 22	Description 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? Answer Citations 330.421(a)(4) Notes
Item Number 23	Description Is the well number or other designation marked permanently on the protective steel collar? Answer Citations 330.421(a)(4) Notes
Item Number 24	Description Are protective barriers (bumper poles) installed around each of the wells and are they in good condition? Answer Citations 330.421(a)(5) Notes
Item Number 25	Description Is each well casing permanently marked at the surveyed elevation point? Answer Citations 330.421(d) Notes
Item Number 26	Description Were complete monitoring well installation and construction details submitted to the Agency on commission forms within 60 days of well completion? Answer Citations 330.421(e) Notes

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Item Number 27	Description	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?	
	Answer	Citations 330.421(f)	Notes
Item Number 28	Description	If any monitoring well is no longer being used, has the abandonment of the well been approved by the Agency in writing?	
	Answer	Citations 330.421(g)	Notes
Item Number 29	Description	Has the abandoned well been properly plugged in accordance with 16 TAC 76.702 & 76.1004?	
	Answer	Citations 330.421(g)	Notes
Item Number	Description	SECTION D: Groundwater Sampling and Analysis	
	Answer	Citations	Notes
Item Number 30	Description	Has a Groundwater Sampling and Analysis Plan (GWSAP) been submitted to the Agency for review and approval prior to commencement of sampling activities?	
	Answer	Citations 330.405(b)	Notes
Item Number 31	Description	Is a current copy of the approved GWSAP being maintained in the operating records?	
	Answer	Citations 330.405(b)	Notes
Item Number 32	Description	Were the groundwater sampling activities conducted during this investigation? If "yes", answer Item #33.	
	Answer	Citations	Notes
Item Number 33	Description	Were the groundwater sampling activities conducted in accordance with the current approved GWSAP?	
	Answer	Citations 330.405(b)	Notes
Item Number 33A	Description	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).	
	Answer	Citations	Notes
Item Number 33B	Description	Provides for proper measurement of groundwater elevations at each sampling point prior to bailing or purging per 330.405(b)(3).	
	Answer	Citations	Notes
Item Number 33C	Description	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).	
	Answer	Citations	Notes
Item Number 33D	Description	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.	
	Answer	Citations	Notes
Item Number 33E	Description	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).	
	Answer	Citations	Notes
Item Number 34	Description	Are groundwater samples analyzed for the constituents identified in the approved GWSAP or as otherwise specified by the Agency?	
	Answer	Citations 330.419(a)	Notes

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Item Number 35	Description Is groundwater monitoring conducted at the frequency identified in the approved GWSAP or as otherwise specified by the Agency?	Answer	Citations 330.407(a)	Notes
Item Number 36	Description 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?	Answer	Citations 330.407(b)	Notes
Item Number	Description SECTION E: Status of Groundwater Monitoring Activities	Answer	Citations	Notes
Item Number 37	Description If required, has the entity met the Detection Monitoring Program requirements?	Answer	Citations 330.407	Notes
Item Number 38	Description If required, has the entity met the Assessment Monitoring Program requirements according to the stated time schedules?	Answer	Citations 330.409	Notes
Item Number 39	Description Is the entity currently under Groundwater Corrective Action? If "Yes", answer Items #40, #41, and #42.	Answer	Citations	Notes
Item Number 40	Description If under Corrective Action, has the entity met the less than 90 days initiation deadline for assessment of corrective measures?	Answer	Citations 330.411(a)	Notes
Item Number 41	Description 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)?	Answer	Citations 330.413(a)	Notes
Item Number 42	Description If under corrective Action, does the implementation of the corrective program meet the requirement of 30 TAC 330.415?	Answer	Citations 330.415	Notes