

Texas Commission on Environmental Quality

CHECKLIST WORKSHEET

IHW RCRA PERMITTED FACILITY CME CHECKLIST 7 SECTION A

Regulating Entity Name

Date :

Additional I D:

Investigator Name:

Item Number	Description	Answer	Citations	Notes
	SECTION A: SAMPLING PROCEDURES FOR PERMITTED STATUS FACILITY [Guidance Documents: SW-846; RCRA Ground-water Draft Technical Guidance]			
Item Number 1	Description Has the facility developed a Sampling & Analysis Plan (SAP)?	Answer	264.97(d)(4)	Notes
Item Number 1A	Description Is a SAP maintained at the facility?	Answer	335.163(4)	Notes
Item Number 1AI	Description Specify date of SAP evaluated during this investigation:	Answer		Notes
Item Number 1B	Description Does the SAP address the following items:	Answer		Notes
Item Number 1BI	Description Sample collection procedures?	Answer	335.163(4)	Notes
Item Number 1BII	Description Sample preservation & shipment?	Answer	335.163(4)	Notes
Item Number 1BIII	Description Analytical procedures?	Answer	264.97(d)(3)	Notes
Item Number 1BIV	Description Chain of Custody procedures?	Answer	335.163(4)	Notes
Item Number 1C	Description Is the Company following the requirements of the SAP?	Answer		Notes
Item Number 2	Description Has the facility developed methods of Measurement of Water Depths?	Answer	335.163(1)(A)	Notes
Item Number 2A	Description Are measurements of depth to standing water in the well obtained prior to well evacuation?	Answer		Notes
Item Number 2B	Description Are measurements taken to the nearest 0.01 foot?	Answer		Notes
Item Number 2C	Description What device is used?	Answer		Notes
Item Number 2D	Description Is the monitoring equipment properly cleaned between well locations to prevent cross-contamination?	Answer		Notes
Item Number 3	Description Has the facility developed methods of measurement of total depth of well:	Answer	335.163(1)(A)	Notes
Item Number 3A	Description Are measurements of the depth to the bottom of the well obtained?	Answer		Notes
Item Number 3B	Description How frequently are the measurements made?	Answer		Notes
Item Number 3C	Description What device is used?	Answer		Notes

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		Answer	Citations	Notes
Item Number 3D	Description	If total depth of well is found to be decreasing, what action is taken by the facility?		
		Answer	Citations	Notes
Item Number 4	Description	Has the facility developed methods of measurement & sampling of immiscible layers?		
		Answer	Citations	Notes
Item Number 4A	Description	Are procedures used which will detect light phase immiscible layers?		
		Answer	Citations	Notes
Item Number 4B	Description	Are procedures used which will detect heavy immiscible layers?		
		Answer	Citations	Notes
Item Number 4C	Description	Are the detected immiscible layers sampled separately prior to well evacuation?		
		Answer	Citations	Notes
Item Number 4D	Description	Do the procedures used minimize mixing with water soluble phases?		
		Answer	Citations	Notes
Item Number 5	Description	Are wells evacuated before sampling?		
		Answer	Citations	Notes
Item Number 5A	Description	Are wells evacuated to dryness or evacuated so that at least three casing volumes are removed?		
		Answer	Citations	Notes
Item Number 5B	Description	How is well volume to be evacuated calculated?		
		Answer	Citations	Notes
Item Number 5C	Description	How is evacuated water measured?		
		Answer	Citations	Notes
Item Number 5D	Description	What device is used to evacuate the wells?		
		Answer	Citations	Notes
Item Number 5E	Description	How is evacuated water disposed?		
		Answer	Citations	Notes
Item Number 5F	Description	Is dedicated evacuation equipment used?		
		Answer	Citations	Notes
Item Number 5G	Description	Is care taken to avoid placing clean evacuation equipment on the ground or other contaminated surfaces prior to insertion into the well?		
		Answer	Citations	Notes
Item Number 6	Description	Are wells allowed to stabilize before sample withdrawal?		
		Answer	Citations	Notes
Item Number 6A	Description	How long does the operator allow the well to recover before sampling is conducted?		
		Answer	Citations	Notes
Item Number 6B	Description	Are samples for volatiles and semi-volatiles obtained first, after the well recovers?		
		Answer	Citations	Notes
Item Number 6C	Description	What sampling device is used?		
		Answer	Citations	Notes
Item Number 6D	Description	Is the sampling device a non-dedicated sampling equipment?		
		Answer	Citations	Notes
Item Number 6DI	Description	If non-dedicated sampling equipment is used, is equipment disassembled and thoroughly cleaned between samples?		
		Answer	Citations	Notes

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Item Number 6DII	Description How is the device decontaminated?		
	Answer	Citations	Notes
Item Number 6DIII	Description Are equipment blanks taken to ensure that sample cross-contamination has not occurred?		
	Answer	Citations 335.163(4)	Notes
Item Number 6E	Description Are volatile samples taken with a positive gas displacement bladder pump, pumping at rates below 100 ml/min?		
	Answer	Citations 335.163(4)	Notes
Item Number 6F	Description Are bailers used for sample collection?		
	Answer	Citations	Notes
Item Number 6FI	Description Are they lowered slowly to prevent de-gassing of the water?		
	Answer	Citations 335.163(4)	Notes
Item Number 6FII	Description Are the contents transferred to the sample container in a way that will minimize agitation and aeration?		
	Answer	Citations 335.163(4)	Notes
Item Number 7	Description Are field analyses conducted to measure chemically unstable parameters?		
	Answer	Citations 264.97(d)	Notes
Item Number 7A	Description Does the field analysis for chemically unstable parameters include the following:		
	Answer	Citations	Notes
Item Number 7AI	Description pH?		
	Answer	Citations	Notes
Item Number 7AII	Description Temperature?		
	Answer	Citations	Notes
Item Number 7AIII	Description Specific conductivity?		
	Answer	Citations	Notes
Item Number 7AIV	Description Other?		
	Answer	Citations	Notes
Item Number 7B	Description Are in-situ determinations made BEFORE or AFTER well purging?		
	Answer	Citations	Notes
Item Number 7C	Description Are in-situ determinations made BEFORE or AFTER well sampling?		
	Answer	Citations	Notes
Item Number 7D	Description Is measuring equipment calibrated according to manufacturers' specifications and consistent with SW-846?		
	Answer	Citations 264.97(d)(1)	Notes
Item Number 7E	Description Is the equipment calibration date, procedure, and maintenance documented in the field logbook?		
	Answer	Citations	Notes
Item Number 8	Description Are appropriate sample containers used?		
	Answer	Citations 335.163(4)	Notes
Item Number 8A	Description Are samples transferred from the sampling device directly to their containers?		
	Answer	Citations	Notes
Item Number 8B	Description Are sample containers for metals analysis polyethylene with polypropylene caps?		
	Answer	Citations 264.97(d)(1)	Notes
Item Number 8C	Description If glass bottles are used for metals samples, are the caps Teflon-lined?		
	Answer	Citations 335.163(4)	Notes

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Item Number 8D	Description How are the sample containers for metals analysis cleaned?	Answer	Citations	Notes
Item Number 8E	Description Are sample containers for organics analysis glass bottles with Teflon-lined caps?	Answer	Citations 264.97(d)(1)	Notes
Item Number 8F	Description How are sample containers for organics analysis cleaned?	Answer	Citations	Notes
Item Number 8G	Description Is a trip blank prepared and analyzed for samples being analyzed for volatile organics?	Answer	Citations 264.97(d)(1)	Notes
Item Number 9	Description Are appropriate sample preservation procedures followed?	Answer	Citations 264.97(d)(3)	Notes
Item Number 9A	Description Are all samples refrigerated or cooled immediately after sampling?	Answer	Citations 264.97(d)(1)	Notes
Item Number 9B	Description Are samples for metals/radioactivity analysis acidified to pH <2 with HNO ₃ ?	Answer	Citations 264.97(d)(1)	Notes
Item Number 9C	Description Are samples for the following analyses acidified to pH <2 with H ₂ SO ₄ : total phenolics; oil and grease; nitrate/nitrite; other?	Answer	Citations	Notes
Item Number 9D	Description Is the sample for TOC analysis acidified to pH <2 with HCl or H ₂ SO ₄ ?	Answer	Citations 335.163(4)	Notes
Item Number 9E	Description Is the sample for TOX analysis preserved with 1 ml of 1.1 M sodium sulfite?	Answer	Citations 335.163(4)	Notes
Item Number 9F	Description Is the sample for cyanide analysis preserved with NaOH to pH >12?	Answer	Citations 335.163(4)	Notes
Item Number 9G	Description Are samples preserved in the field at the time of sampling?	Answer	Citations 335.163(4)	Notes
Item Number 9H	Description What other procedures are used?	Answer	Citations	Notes
Item Number 10	Description Are special handling considerations required for the sampling?	Answer	Citations	Notes
Item Number 10A	Description Are organic samples handled without filtration?	Answer	Citations 264.97(d)(1)	Notes
Item Number 10B	Description Are samples for volatile organics analysis collected such that all headspace over the sample is eliminated?	Answer	Citations 264.97(d)(1)	Notes
Item Number 10C	Description Are samples analyzed for dissolved metals?	Answer	Citations	Notes
Item Number 10CI	Description Are they filtered prior to preservation in the field with HNO ₃ to pH<2?	Answer	Citations 264.97(d)(2)	Notes
Item Number 10CII	Description Are they not preserved in the field and filtered in the lab?	Answer	Citations 264.97(d)(2)	Notes
Item Number 10CIII	Description If the sample is to be analyzed for total metals, is it unfiltered and preserved with HNO ₃ to pH<2?	Answer	Citations 335.163(4)	Notes