

Inspection and Maintenance Requirements for Infiltration Trenches



Maintenance Checklist

Maintenance Component	Defect	Conditions When Maintenance is Needed	Results Expected When Maintenance Is Performed	Satisfactory	Unsatisfactory	Comments
General	Trash & debris	<ul style="list-style-type: none"> Any trash and debris which exceed 1 cubic foot per 1,000 square feet. In general, there should be no visual evidence of dumping. If less than threshold, remove trash and debris as part of next scheduled maintenance. 	<ul style="list-style-type: none"> Trash and debris cleared from site 			
	Poisonous vegetation and noxious weeds	<ul style="list-style-type: none"> Any poisonous or nuisance vegetation which may constitute a hazard to maintenance personnel or the public. Any evidence of noxious weeds as defined by State or local regulations. <p><i>Apply requirements of adopted IPM policies for the use of herbicides.</i></p>	<ul style="list-style-type: none"> No danger of poisonous vegetation where maintenance personnel or the public might normally be. <p><i>Coordinate with the local health department.</i></p> <ul style="list-style-type: none"> Complete eradication of noxious weeds may not be possible. Compliance with State or local eradication policies required. 			
	Contaminants and pollution	<ul style="list-style-type: none"> Any evidence of oil, gasoline, contaminants or other pollutants. <p><i>Coordinate removal/cleanup with local water quality response agency.</i></p>	<ul style="list-style-type: none"> No contaminants or pollutants 			

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General (cont.)	Rodent holes	<ul style="list-style-type: none"> Any evidence of rodent holes if facility is acting as a dam or berm, or any evidence of water piping through dam or berm via rodent holes. 	<ul style="list-style-type: none"> Rodents destroyed and dam or berm repaired. <p><i>Coordinate with local health department; coordinate with Ecology Dam Safety Office if pond exceeds 10 acre-feet.</i></p>			
Storage area	Sediment accumulation	<ul style="list-style-type: none"> Water ponding in infiltration pond after rainfall ceases and appropriate time allowed for infiltration. Treatment basins should infiltrate Water Quality Design Storm Volume within 48 hours, and empty within 24 hours after cessation of most rain events. <p><i>A percolation test pit or test of facility indicates facility is only working at 90% of its designed capabilities. Test every 2 to 5 years. If two inches or more of sediment is present, remove.</i></p>	<ul style="list-style-type: none"> Sediment is removed and/or facility is cleaned so that infiltration system works according to design. 			
Filter bags (if applicable)	Filled with sediment and debris	<ul style="list-style-type: none"> Sediment and debris fill bag more than 1/2 full. 	<ul style="list-style-type: none"> Filter bag is replaced or system is redesigned. 			
Rock filters	Sediment and debris	<ul style="list-style-type: none"> By visual inspection, little or no water flows through filter during heavy rain storms. 	<ul style="list-style-type: none"> Gravel in rock filter is replaced. 			

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Side slopes of pond	Erosion	<ul style="list-style-type: none"> Eroded damage over 2 inches deep where cause of damage is still present or where there is potential for continued erosion. Any erosion observed on a compacted berm embankment. 	<ul style="list-style-type: none"> Slopes should be stabilized using appropriate erosion control measures; e.g., rock reinforcement, planting of grass, compaction. If erosion is occurring on compacted berms, a licensed civil engineer should be consulted to resolve source of erosion. 			
Emergency overflow spillway and berms over 4 feet in height	Tree growth	<ul style="list-style-type: none"> Tree growth on emergency spillways creates blockage problems and may cause failure of the berm due to uncontrolled overtopping. Tree growth on berms over 4 feet in height may lead to piping through the berm which could lead to failure of the berm. 	<ul style="list-style-type: none"> Trees should be removed. If root system is small (base less than 4 inches), the root system may be left in place. Otherwise the roots should be removed and the berm restored. A licensed civil engineer should be consulted for proper berm/ spillway restoration. 			
	Piping	<ul style="list-style-type: none"> Discernable water flow through pond berm. Ongoing erosion with potential for erosion to continue. <p><i>Recommend a Geotechnical engineer be called in to inspect and evaluate condition and recommend repair of condition.</i></p>	<ul style="list-style-type: none"> Piping eliminated. Erosion potential resolved. 			

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Emergency overflow/spillway side slopes of pond	Rock missing	<ul style="list-style-type: none"> Only one layer of rock exists above native soil in area five square feet or larger, or any exposure of native soil at the top of out flow path of spillway. 	<ul style="list-style-type: none"> Rocks and pad depth are restored to design standards. <p><i>Rip-rap on inside slopes need not be replaced.</i></p>			
	Erosion	<ul style="list-style-type: none"> Eroded damage over 2 inches deep where cause of damage is still present or where there is potential for continued erosion. Any erosion observed on a compacted berm embankment. 	<ul style="list-style-type: none"> Slopes should be stabilized using appropriate erosion control measure(s); e.g., rock reinforcement, planting of grass, compaction. If erosion is occurring on compacted berms a licensed civil engineer should be consulted to resolve source of erosion. 			
Pre-settling ponds and vaults	Facility or sump filled with sediment and/or debris	<ul style="list-style-type: none"> 6 inches or designed sediment trap depth of sediment. 	<ul style="list-style-type: none"> Sediment is removed. 			