Rainwater Harvesting Maintenance Requirements

Important operation and maintenance procedures:

- The roof area will be maintained to reduce the debris and sediment load to the system. Excess debris can clog the system and lead to bypass of the design storm, and reduced reuse volume.
- To ensure proper operation as designed, a licensed Professional Engineer, Landscape Architect, or other qualified professional will inspect the system annually.
- The system components will be repaired or replaced whenever they fail to function properly.
- If the outlet is metered, use must be recorded at least monthly. These records shall be kept on site.

After the system is installed, it shall be inspected **monthly and within 24 hours after every storm event**. Records of operation and maintenance shall be kept in a known set location and shall be available upon request.

Inspection activities shall be performed as follows. Any problems that are found shall be repaired immediately.

SCM element:	Potential problem:	How to remediate the problem:
The entire rainwater harvesting system	A component of the system is damaged or leaking.	Make any necessary repairs or replace the system if damage is too much for repair.
	Water is flowing out of the overflow pipe during a design rainfall or smaller event when there has not been another rainfall event during the past five days.	Check system for clogging and damage. Repair as needed so the design volume is stored properly without discharging during a design storm.
		Check that the pump is operating properly and that the water is actually being used at the volume designed.
		If it is still not operating properly, then consult an appropriate professional.
The captured roof area	Excess debris or sediment is present on the rooftop.	Remove the debris or sediment as soon as possible.
The gutter system	Gutters are clogged, or water is backing up out of the gutter system.	Unclog and remove debris. Install gutter screens to prevent future clogging if necessary.
	Rooftop runoff is not making it into gutter system.	Correct the positioning or installation of gutters. Replace if necessary to capture the roof runoff.
The cistern	Sediment accumulation of 5% or more of the design volume.	Remove sediment.
	Algae growth is present inside the cistern.	Do not allow sunlight to penetrate the cistern. Treat the water to remove/prevent algae.
	Mosquitoes are present in the cistern.	Check screens for damage and repair/replace them if necessary. Treat with 'mosquito dunks' if necessary.
The screens and filters	Debris and/or sediment has accumulated. Screens and filters are clogged.	Search for the source of the debris/sediment and remedy the problem if possible. Clean/clear debris/sediment from screen or filter. Replace if it cannot be cleaned.
The pump (if applicable)	The pump is not operating properly	Check to see if the system is clogged and flush if necessary. If it is still not operating, then consult an appropriate professional.

Rainwater Harvesting Maintenance Requirements (continued)		
SCM element:	**Potential problem:**	**How to remediate the problem:**
The overflow pipe	Erosion is evident at the overflow discharge point.	Stabilize immediately.
	The overflow pipe is clogged.	Unclog the pipe, or replace it if it cannot be unclogged.
	The outflow pipe is damaged.	Repair or replace the pipe.
The secondary water supply	The secondary water supply is not operating properly.	Consult an appropriate professional.