



ORION CONSULTING ENGINEERS

PO BOX 7936 BAULKHAM HILLS NSW 2153
ABN NO. 25 604 069 981
EMAIL: INFO@ORIONCONSULTENG.COM
SUITE 4.04, 12 CENTURY CIRCUIT, NORWEST NSW 2153

MAINTENANCE SCHEDULE FOR WATER QUALITY AND DETENTION BASINS

PROJECT REFERENCE: 2022-21-0262-02

REVISION: A

DA No:

PROJECT TYPE: Industrial Warehouse


LOCATION: 813 Wallgrove Road, Eastern Creek, NSW

MAINTENANCE ACTION	FREQUENCY	PROCEDURE
Sediment Basin		
Check for litter within the basin and inlet.	3 Monthly	Carry out visual inspection and remove off site.
Check overflow structure integrity.	3 Monthly	Carry out visual inspection. Check for erosion and scouring around overflow. Carry out rectification works to meet Council standards.
Check for sediment storage levels within basin & record depth. Remove sediment once levels reach 50% of designed storage.	3 Monthly	Keep records of sediment levels with basin. Flocculate any water and pump out in accordance with council and authority guidelines. Remove silt from basin.
Dewater	Immediately after rainfall event	Add flocculant to sediment basin in accordance with site engineer's specifications. Pump out in accordance with Council and authorities guidelines.
Discharge Control Pit (DCP)		
Inspect & remove any blockage of orifice	Six Monthly	Remove grate & screen to inspect orifice. See plan for location of DCP
Check attachment of orifice plate to wall of pit (gaps less than 5 mm)	Annually	Remove grate and screen. Ensure plate mounted securely, tighten fixings if required. Seal gaps as required.
Check orifice diameter correct and retains sharp edge	Five yearly	Compare diameter to design (see Works-as-executed) and ensure edge is not pitted or damaged.
Inspect screen and clean	Six monthly	Remove grate and screen if required to clean it.

Check attachment of screen to wall of pit	Annually	Remove grate and screen. Ensure screen fixings secure. Repair as required.
Check screen for corrosion	Annually	Remove grate and examine screen for rust or corrosion, especially at corners or welds.
Inspect overflow weir and remove any blockage	Six monthly	Remove grate and open cover to ventilate underground storage if present. Ensure weir clear of blockages.
Inspect DCP walls (internal and external, if appropriate) for cracks or spalling	Annually	Remove grate to inspect internal walls. Repair as required. Clear vegetation from external walls if necessary and repair as required.
Inspect DCP sump & remove any sediment/sludge	Six monthly	Remove grate and screen. Remove sediment/sludge build-up and check orifice and flap valve clear.
Inspect grate for damage or blockage.	Six monthly	Check both sides of grate for corrosion, (especially corners and welds) damage or blockage.
Inspect return pipe from storage & remove any blockage	Six monthly	Remove grate and screen. Ventilate underground storage if present. Open flap valve and remove any blockages in return line. Check for sludge/debris on upstream side of return line.
Inspect outlet pipe and remove any blockage	Six monthly	Remove grate and screen. Ventilate underground storage if present. Check orifice and remove any blockages in outlet pipe. Flush outlet pipe to confirm it drains freely. Check for sludge/debris on upstream side of return line.
Check step irons for corrosion	Annually	Remove grate. Examine step irons and repair any corrosion or damage.
Check fixing of step irons is secure	Six monthly	Remove grate and ensure fixings secure prior to placing weight on step iron.
Storage		
Inspect return pit and remove any sediment/Sludge in pit	Six monthly	Remove grate and screen. Remove sediment/sludge build-up.
Inspect internal walls of return pit (and external, if appropriate for cracks or spalling)	Annually	Remove grate to inspect internal walls. Repair as required. Clear vegetation from external walls if necessary and repair as required.
Inspect & remove any debris/litter/mulch etc blocking grates of return pit	Six monthly	Remove blockages from grate and check if pit blocked.
Inspect storage areas & remove debris/mulch/litter etc likely to block screens/grates	Six monthly	Remove debris and floatable material likely to be carried to grates
Compare storage volume to volume approved. (Rectify if loss >5%)	Annually	Compare actual storage available with Works-as-Executed plans. If volume loss is greater than 5%, arrange for reconstruction to replace the volume lost. Council to be notified of the proposal.
Inspect storage areas walls & reseal flexible all weather seals	Annually	Check all seals along detention walls and reapply to manufacturers specifications for a watertight and all weather finish

Inspect storages for subsidence near pits	Annually	Check along drainage lines and at pits for subsidence likely to indicate leakages.
Sediment and Oil Units		
Clean any sediment or oil pits.	Manufacturers specifications	To manufacturers specifications
StormFilter Chamber and Cartridges		
Inspect cartridges and chamber and clean	Six monthly	Visual inspection of cartridges and chamber. Remove larger gross pollutants. Perform minimal rectification works (if required)
Minor Service	Annually	Evaluation of cartridges and media. Removal of accumulated sediment (if required). Wash-down of StormFilter chamber (if required)
Major Service	As required	Replacement of StormFilter cartridge media
Rainwater Tanks		
Inspect roof, gutters, screens and clean	1 - 3 months	Check and clean roof and gutters, rain heads, tanks inlets and screens. Clean and check the first flush device and all filters. Check for torn or loose mosquito screens and replace if necessary. Place screens back carefully, ensuring they are tightly fitted.
Inspect and clean roof, gutters, tank walls, internal tank, and pump.	3 - 6 months	Check roof gutters and remove accumulated debris, including leaf and other plant material. Check tanks for defects and repair and replace as required. Check for evidence of animal, bird, or insect access, including mosquito larvae and algal growth inside tank. Check and clean the pump, filters, and strainers.
Inspect tank & remove any sediment/sludge	Annually	Remove accumulated sediment and sludge and clean out as necessary

Designer: Danya Leiva

Signature: 

Date: 23rd September 2022