

January 2014

**Wastewater Treatment and Disposal System - Sandspit Motor Camp, 1334 Sandspit Rd
Sandspit
Management Plan
ARC Permit No: 41252**

Summary

A Logbook to be kept on site to record the following;

- Contact Details for Maintenance Contractor, Wastewater Consultant and Septic tank pump out contractor.
- Flow meter readings
- Occupancy estimates (when occupancy exceeds 15 persons)
- Maintenance visits and notes on any remedial works required during regular or special maintenance visits.
- Notes on any other problems encountered.

The site manager shall be responsible for keeping the Logbook up to date.

Monthly Maintenance Schedule

January	February	March	April	May	June
• Visual Inspections • Record Flows and Occupancy	• Visual Inspections • Record Flows and Occupancy	• Visual Inspections • Record Flows and Occupancy	• Visual Inspections • Record Flows and Occupancy • Six monthly Maintenance • Take and analyse sample (within first 2 weeks)	• Visual Inspections • Record Flows and Occupancy • Send flow records and Occupancy Data.	• Visual Inspections • Record Flows and Occupancy
July	August	September	October	November	December
• Visual Inspections • Record Flows and Occupancy	• Visual Inspections • Record Flows and Occupancy	• Visual Inspections • Record Flows and Occupancy •	• Visual Inspections • Record Flows and Occupancy • 6 monthly maintenance	• Visual Inspections • Record Flows and Occupancy	• Visual Inspections • Record Flows and Occupancy

Details

2. Inspection Programme

Inspection	Frequency	Description	Responsibility
Visual Inspection	Weekly	Visually inspect treatment plant and disposal areas to check there are no signs of leakage or breakout (wet areas)	Property Manager / Caretaker
Full system Inspection	6 Monthly	- Visual inspection of all components. Remove lids on all tanks to verify levels are normal and components such as clarifier and pumps are secure. - Check sludge levels in all tanks using a probe. - Remove and check all filters (septic tank outlet filter and irrigation filter). - Thorough inspection of disposal area for boggy or wet patches.	Experienced Wastewater Service Person or trained member of site staff.

Any problems identified in the inspections should, where possible, be remedied immediately or reported to the service person or Wastewater Consultant so remedial action can be arranged as soon as practical.

3. Maintenance Schedule

As stated above a maintenance check or Full System Inspection shall be carried out at six month intervals.

Item	Frequency	Description
Clean Septic Tank Filter(s)	(as required)	Remove filter elements and clean with pressure hose and return wash water to septic.
Remove Sludge Build Up in Septic Tanks.	When sludge build up is 25% of tank capacity or every 5 years	Sludge to be removed via vacuum truck and disposed of at an authorised disposal facility off site.
Remove Sludge Build Up in other tanks	When sludge build up is 10% of tank capacity or every 5 years.	Sludge to be removed via vacuum truck and disposed of at an authorised disposal facility off site.
Clean Irrigation Effluent Filter	Weekly or when required during peak times	Remove filter and clean with a pressure hose or replace filter element. Return wash and solids to septic tank.
Confirm pump operation.	6 monthly	Visual.
Confirm aeration operation.	6 monthly	Run blower and visually inspect each aeration chamber (3) to confirm aeration is occurring
Flush Disposal Field	Weekly or when required during peak times	Open irrigation flush valve (located in first septic tank) run pump and flush all irrigation fields.
Confirm function of High Level Alarms.	6 monthly	Lift float switch in irrigation tank and pump chamber to simulate alarm. Reset and lower float.

4. Procedure for Review of Maintenance Requirements

In the event of exceedances of water quality parameters or other recurrent problems (such as high level alarms, overflows, pump failures, effluent field breakout). An experienced Wastewater Consultant shall be engaged to review the maintenance schedule and recommend changes accordingly. Any proposed changes shall be approved by the ARC.

5. Procedure for recording Flow Meter Readings and Occupancy Numbers

Flow meter readings shall be taken and recorded (this will occur at a weekly frequency). During periods where the site occupancy exceeds 15 people an estimate of Occupancy numbers shall be recorded in a logbook that shall be kept on site.

A record of the flow readings and occupancy numbers for the previous 12 months shall be sent to the ARC each year.

The property manager shall be responsible for ensuring that the records are kept of records are submitted to the ARC each year

6. Sample Collection and Testing

Samples of the treated effluent shall be collected and tested by an approved laboratory for the following:

- Biochemical Oxygen Demand (BOD₅)
- Total Suspended Solids (TSS)
- Ammonia (NH₃)

Samples shall be collected either by submerging an open a sample container in the irrigation chamber or filling a container from the filter drain valve (filter drain valve should be flushed and cleaned prior to taking sample).

Samples containers should be sealed and kept cool and delivered to an approved laboratory within 12 hours.

Records of all sample results shall be kept on site in a logbook.

One sample shall be taken in the first two weeks of April each year.

Sample results shall be better than:

- 30mg/l BOD₅
- 30mg/l TSS

Where results exceed these levels the cause of the exceedances shall be investigated as soon as possible. The investigation shall be carried out by an experienced service person and where required a wastewater consultant. As soon as practical the Manager, ARC, shall be informed of any exceedance along with details of measures that were undertaken to investigate and correct any faults.

7. Contingency Plans

Item	Action
Pump Failure	• Contact service person to arrange a replacement pump. • Reduce water use in household. • Place septic tank pump out contractor on standby. • If pump cannot be replaced promptly such that there is potential for an overflow arrange for septic tank pump out on an ongoing basis until pump is replaced.
Effluent breakout	• Turn off Irrigation Pump. • Contact maintenance contractor or consultant. • Isolate area within disposal field that is problematic. • Place septic tank pump out contractor on standby. • If a significant portion of irrigation field cannot be used arrange for septic tank pump out on an ongoing basis until problem is remedied. • Advise ARC.

8. Chemical Use on the Property

The wastewater treatment system installed on the site relies on biological processes to treat the wastewater generated on the site. The use of strong chemicals or excessive use of regular household products (bleaches, detergents etc.) can harm the system and result in inefficient operation, inadequate treatment and unpleasant odours. Cleaning staff, gardeners and other persons that may use significant levels of chemicals on the site shall be advised of this and adopt practices that limit the toxicity of waste. Where necessary signage should be used to ensure people are advised of this.

For further details of recommended practices and the types of chemicals to avoid please call Laser Plumbing Warkworth