

Annexure 1 RC-2024-0136 Soil Monitoring Regime for Bio-solid Application

Site / location	Sampling Frequency	Analysis Parameters
Areas subject to effluent application but before first application event	Once	As per the contaminants listed within the table contained within Annexure 2
Areas that have received effluent in the previous 12 months	Annually	

The soil sampling protocol will consist of:

- Ten composite soil samples, from 10 representative paddocks per farm. Existing monitor paddocks and associated sampling points are to be retained in the expanded programme.
- Each soil sample is a composite of 15 soil cores, collected to a depth of 75mm, along a transect from within each representative paddock (or blocks of paddocks). Each sample (i.e. 15 cores) will be homogenized to produce a sample per paddock.
- Transects and sample sites should be recorded with GPS, or an accurate farm map with field markers. When selecting sample sites, avoid gateways, fences, tree lines, hedges, water troughs, obvious dung and urine patches and any unrepresentative sites.

Annexure 2 RC-2024-0136 Contaminant Monitoring Parameters

Class	Contaminant	Proposed Resource Consent soil contaminant ceiling limits Mg/kg dry weight	Source
Inorganics	Arsenic	20	Biosolids Guidelines (2003) Table 7.1 (page 137)
	Cadmium	1	
	Chromium	600	
	Cooper	100	
	Lead	300	
	Mercury	1	
	Nickel	60	
	Zinc	300	
Organics	DDT/DDD/DDE	0.5	Biosolids Guidelines (2003) Table 7.1 (page 137)
	Aldrin	0.02	
	Dieldrin	0.02	
	Chlordane	0.02	
	Heptachlor & Heptachlor epoxide	0.02	
	Hexachlorobenzene (HCB)	0.02	
	Hexachlorocyclohexane (Lindane)	0.02	
	Benzene hexachloride (BHC)	0.02	
	Total polychlorinated biphenyls (PCBs)	0.1	