

Teys Australia Wagga Wagga Dampier Street Wagga Wagga NSW 2650

Teys Australia Southern Property Pty Ltd (Teys Australia Wagga Wagga)

Environmental Monitoring Data Summary

Environmental Protection Licence number 2262

Executive Summary

Teys Australia Wagga is the holder of Environmental Protection Licence (EPL) 2262. This Licence is administered by the *NSW Environmental Protection Authority* (*EPA*), and includes conditions relevant to the site's operation, including environmental monitoring, as is outlined in this report. All environmental monitoring results required under EPL 2262 are submitted to the *EPA* each year in a formal annual return, and interpreted, and submitted to the *NSW Department of Planning and Infrastructure* in an Annual Environmental Management Review (AEMR).

All monitoring specified under EPL 2262 was completed in the 2011/2012 annual reporting period, which covered the period between 6 December 2011 and 5 December 2012.

Nil instances of non – compliance with any of the conditions in EPL 2262 occurred during the reporting period.

Further information is available by contacting the Teys Corporate Environmental team on (07) 3287 2188.

A full copy of EPL 2262 can be obtained on the EPA website from the following URL using the search function for licence number "2262":

http://www.environment.nsw.gov.au/prpoeoapp/

EPA Monitoring Point 4: Summary of results for soil monitoring on CFA High irrigation paddock (EPA Monitoring Point 4)

Pollutant	Units of measure	Monitoring frequency required by licence	No of times measured during year	Date of Sampling	Date data obtained	Date Published	Value
Conductivity	(45/)	A	1				
Conductivity	(dS/m)	Annual	1				
Exchangeable Calcium	(mg/kg)	Annual	1				
Exchangeable Magnesium	(mg/kg)	Annual	1				
Exchangeable Potassium	(mg/kg)	Annual	1				
Exchangeable Sodium	(mg/kg)	Annual	1				
Exchangeable Sodium Percentage	Percent	Annual	1				
Extractable Phosphorus	(mg/kg)	Annual	1				
Nitrate	(mg/kg)	Annual	1				
Nitrogen (total)	(mg/kg)	Annual	1				
pН	рН	Annual	1				
Phosphorus (total)	(mg/kg)	Annual	1				
Phosphorus Sorption Capacity	(L/kg)	Annual	1				
Total Organic Carbon	(mg/kg)	Annual	1				

The monitoring data in the table above has been taken from monitoring point 4 in EPL 2262. The monitoring point has been established to monitor the soil on which treated wastewater is applied. The monitoring point is located within in the 'CFA High' irrigation area.

EPA Monitoring Point 6: Summary of results for soil monitoring on CFA Low irrigation paddock (EPA Monitoring point 6).

Pollutant	Units of measure	Monitoring frequency required by licence	No of times measured during year	Date of Sampling	Date data obtained	Minimum Value	Maximum Value	Mean Value	Median Value
				1 0		1			-
Conductivity	(dS/m)	Annual	1				,		
Exchangeable Calcium	(mg/kg)	Annual	1						
Exchangeable Magnesium	(mg/kg)	Annual	1						
Exchangeable Potassium	(mg/kg)	Annual	1						
Exchangeable Sodium	(mg/kg)	Annual	1						
Exchangeable Sodium Percentage	Percent	Annual	1						
Extractable Phosphorus	(mg/kg)	Annual	1						
Nitrate	(mg/kg)	Annual	1						
Nitrogen (total)	(mg/kg)	Annual	1						,
рН	рН	Annual	1						
Phosphorus (total)	(mg/kg)	Annual	1						
Phosphorus Sorption Capacity	(L/kg)	Annual	1						
Total Organic Carbon	(mg/kg)	Annual	1						

The monitoring data in the table above has been taken from monitoring point 6 in EPL 2262. The monitoring point has been established to monitor the soil on which treated wastewater is applied. The monitoring point is located within in the 'CFA Low' irrigation area.

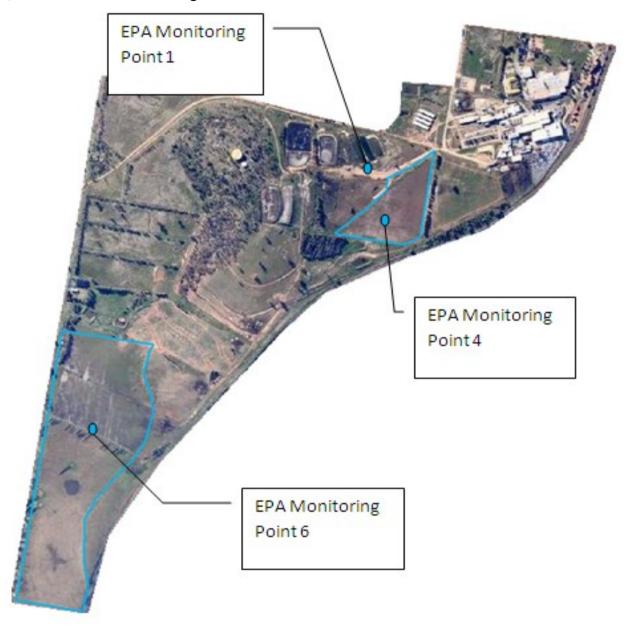
EPA Monitoring Point 1: Summary of results for waste water applied to irrigation areas (monitoring point 1) under Environmental Protection Licence 2262 (monthly sample – required only when irrigating)

D-H-david	Unit of	Monitoring frequency required	No. of times measured	100 percentile	Date of	Date data	Date Date	I/I	Exceedance
Pollutant	measure	by Licence	during month	limit	Sampling	obtained	Published	Value	(Yes/no)
Biochemical	(77)		_						
Oxygen Demand	(mg/L)	Monthly	1	200	December				
Biochemical									
Oxygen Demand	(mg/L)	Monthly	1	200	January				
Biochemical									
Oxygen Demand	(mg/L)	Monthly	1	200	February				
Biochemical									
Oxygen Demand	(mg/L)	Monthly	1	200	March	NA*	NA*	NA*	NA*
Biochemical				,			,		,
Oxygen Demand	(mg/L)	Monthly	1	200	April	NA*	NA*	NA*	NA*
Biochemical									
Oxygen Demand	(mg/L)	Monthly	1	200	May	NA*	NA*	NA*	NA*
Biochemical									
Oxygen Demand	(mg/L)	Monthly	1	200	June	NA*	NA*	NA*	NA*
Biochemical									
Oxygen Demand	(mg/L)	Monthly	1	200	July				
Biochemical									
Oxygen Demand	(mg/L)	Monthly	. 1	200	August		,		
Biochemical									
Oxygen Demand	(mg/L)	Monthly	1	200	September				
Biochemical									
Oxygen Demand	(mg/L)	Monthly	1	200	October				
Biochemical									
Oxygen Demand	(mg/L)	Monthly	1	200	November				

The monitoring data in the table above has been taken from monitoring point 1 from EPL 2262. The monitoring point has been established to monitor effluent quality at the discharge from the wastewater treatment system, to the effluent utilisation area on the Teys site. The monitoring point is located at the equalisation pond, downstream of the biological nutrient removal (BNR) system.

The 100 percentile limit refers to a maximum concentration, which BOD concentrations must be below, in order for the water to be irrigated on site. *NA – no irrigation occurred in given month. No monitoring required.

Locations of monitoring points 1, 4 and 6 are shown in the Figure 1 below.



Units of measure – Abbreviations outlined in full

mg/L = Concentration in milligrams per litre, which is equivalent unit of measure to parts per million (ppm)

dS/m = Decisiemens per metre, a measure of electrical conductivity, which gives an indication of the concentration of dissolved ions

mg/kg = Milligrams per kilogram, a measure of concentration of different parameters within a soil sample

L/kg = Litres per kilogram, a measure of the amount of mineral retained by the soil

Correction Log

This section is included to correct any incorrect data which may have been published in good faith.

Teys Australia Southern Property Pty Ltd T/A Teys Australia Wagga Wagga EPL number 2262 Pollutant:

Table 4: Correction log

Sample date and time	Original data	Corrected data	Date corrected	Date originally published	Reason

Note: No corrections required to date.