

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 2012/2013 annual reporting period, which covered the period between 6 December 2012 and 5 December 2013.

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	(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) Phosphorus Sorption	(mg/kg)	Annual	1				
Capacity Total Organic	(mg/kg)	Annual	1				
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
Conductivity	(dS/m)	Annual	1						
Exchangeable									
Calcium	(mg/kg)	Annual	1						
Exchangeable									
Magnesium	(mg/kg)	Annual	1						
Exchangeable	(// //)	. 1	4						
Potassium	(mg/kg)	Annual	<u> </u>						
Exchangeable	(*** ~/1* ~)	A	1						
Sodium	(mg/kg)	Annual	1						
Exchangeable Sodium Percentage	Percent	Annual	1						
Extractable	1 CICCIII	Alliqui	1						
Phosphorus	(mg/kg)	Annual	1						
Thosphorus	(1118/118)	1 IIII W	-						
Nitrate	(mg/kg)	Annual	1						
Nitrogen (total)	(mg/kg)	Annual	1						
pН	рН	Annual	1						
pii	pii	Alliqui	1						
Phosphorus (total)	(mg/kg)	Annual	1						
Phosphorus									
Sorption Capacity	(mg/kg)	Annual	1						
Total Organic	(/1)	A	1						
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.

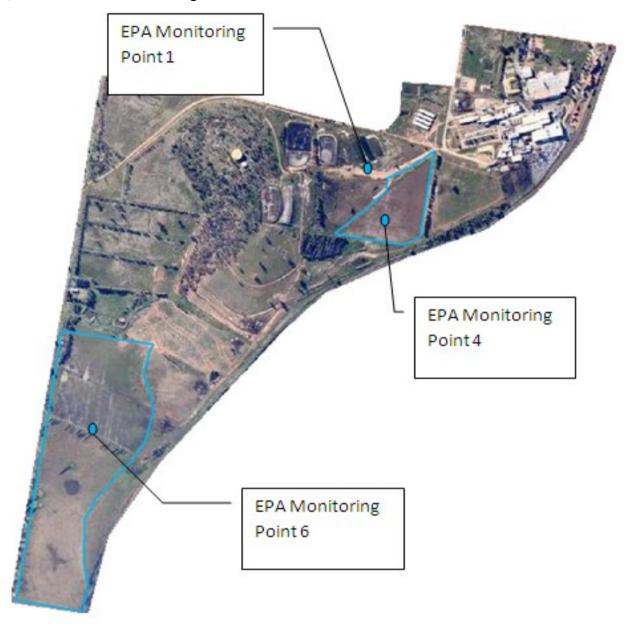
Table 3: Summary of results for waste water applied to irrigation areas (monitoring point 1) under Environmental Protection Licence 2262 (monthly sample – required only when irrigating)

	Unit of	Monitoring	No. of times	100	Data of	Data data	Date		Engadana
Pollutant	Unit of measure	frequency required by Licence	measured during month	percentile limit	Date of Sampling	Date data obtained	Published	Value	Exceedance (Yes/no)
Biochemical									
Oxygen Demand	(mg/L)	Monthly	1	200	December	20/12/12	21/12/12	8	No
Biochemical									
Oxygen Demand	(mg/L)	Monthly	1	200	January	11/01/13	17/01/13	94	No
Biochemical									
Oxygen Demand	(mg/L)	Monthly	1	200	February	27/02/13	4/03/13	21	No
Biochemical									
Oxygen Demand	(mg/L)	Monthly	1	200	March	22/03/13	25/03/13	17	No
Biochemical									
Oxygen Demand	(mg/L)	Monthly	1	200	April	17/04/13	18/04/13	6	No
Biochemical									
Oxygen Demand	(mg/L)	Monthly	1	200	May	N/A	N/A	N/A	N/A
Biochemical									
Oxygen Demand	(mg/L)	Monthly	1	200	June	N/A	N/A	N/A	N/A
Biochemical	(/T)	M 41	1	200	т 1	3.7/4	3 .T/A	3.7/4	3.7/4
Oxygen Demand	(mg/L)	Monthly	1	200	July	N/A	N/A	N/A	N/A
Biochemical	(/T.)	M41-1	1	200	A t				
Oxygen Demand	(mg/L)	Monthly	<u> </u>	200	August				
Biochemical	(m a/I)	Monthly	1	200	Cantambar				
Oxygen Demand Biochemical	(mg/L)	Monthly	1	200	September				
Oxygen Demand	(mg/L)	Monthly	1	200	October				
Biochemical	(IIIg/L)	ivionumy	1	200	October				
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.

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

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.