Environmental Monitoring Report
Harwood Sugar Mill and Refinery
Mill Road, Harwood, NSW 2465

100%
Locally grown
Australian owned
Certified sustainable

Licencee	NSW Sugar Milling Co-operative Ltd and Manildra Stockfeeds (Manufacturing) Pty Ltd	
Address	Suite 1, Level 1, Cnr Martin & River Streets Ballina NSW 2478	
EPL No	171	http://www.epa.nsw.gov.au/prpoeoapp/

This data is provided under section 66(6) of the
Protection of the Environment Operations Act 1997

ENVIRONMENTAL MONTORING SUMMARY REPORT

Last Published: 19/11/2026

Licencee: Manildra Harwood Sugars

Location: **Harwood Sugar Mill**

Address: Harwood Island, Harwood

EPL No: **171**

Limits:

1. 90% means 90th percentile for which 90% of results must be below the prescribed 90% limit. 2. Max limit is the maximum permissible discharge value. 3. The 90th percentile limit for monitoring point 4 temperature is reduced to 45°C when both mill and refinery are operating which is typically between June and December. 4. n/a = no limit applicable.

> bgd: The results for parameters BOD and TSS at Point 4 are reported as level above background or ambient river levels. The results are determined by subtracting riverwater background monitoring values at point 5 from the results of Mill Torri Drain at point 4 which sometimes results in a negative value meaning the quality of the discharge is better than the background or ambient source.

Summary Report Period: **20-Nov-25** **19-Nov-26**

2024 Mill Season Start Date: 25-Jun-24 **End Date** 07-Jan-25

2025 Mill Season Start Date: 19-Jun-25 **End Date** 23-Jan-26 estimated

Monitoring Point ID	Source	Parameter	Sampling Frequency	Unit	Samples Required	Limits			Samples Obtained	Results			Exceed Limit Counts	
						Min	90%	Max		Min	Mean	Max	90%	Max
1	Boiler Stack	Total Solid Particles	Quarterly	mg/m^3	6	n/a	n/a	250	3	191.0	834.0	1307.0	-	2
1	Boiler Stack	Opacity	Continuous	%	Continuous	n/a	n/a	n/a	Continuous	-5.0	64.1	99.6	-	-
3	Refinery Heat Exchanger	Temperature	Monthly Representative	°C	12	n/a	35	40	25	19.3	29.1	39.4	Yes (8)	0
3	Refinery Heat Exchanger	Volume	Continuous Inline	kL/day	Continuous	n/a	n/a	2,000	Continuous	0	322	519	-	0
4	Mill Torri Drain	BOD_5	Fortnightly Composite	mg/L	26	n/a	45	50	33	-2.4	13.9	48.4	No	0
4	Mill Torri Drain	TSS	Fortnightly Composite	mg/L	26	n/a	20	25	33	-17	2	22	No	0
4	Mill Torri Drain	pH	Fortnightly Representative	pH	26	6.5	n/a	8.5	33	7.4	7.7	7.9	-	0
4	Mill Torri Drain	Temperature	Fortnightly Representative	°C	26	45	50	55	33	32.8	42.4	50.1	No	0
4	Mill Torri Drain	Volume	Continuous Online	kL/day	Continuous	n/a	n/a	90,000	Continuous	0	24036	61078	-	0
5	River Water - Background	BOD_5	Fortnightly Composite	mg/L	26	n/a	n/a	n/a	33	0.0	1.7	9.6	-	-
5	River Water - Background	TSS	Fortnightly Composite	mg/L	26	n/a	n/a	n/a	33	2.0	10.5	27.0	-	-
5	River Water - Background	pH	Fortnightly Representative	pH	26	n/a	n/a	n/a	33	7.3	7.8	8.1	-	-
5	River Water - Background	Temperature	Fortnightly Representative	°C	26	n/a	n/a	n/a	33	17.3	23.1	28.1	-	-

Sampling Point:	**Monitoring Point 1 - No 1 Boiler Stack Emissions**
Licencee	Manildra Harwood Sugars
Location	Harwood Island, Harwood
EPL No	171
Parameter/s Measured	Total Solid Particles
Monitoring Frequency	Quarterly
Limit	See Table

RESULTS TABLE 2022-23

Test ID Number			AE14575	AE14689	AE14862	AE14912
Sampling Date			18-Oct-22	16-Nov-22	08-Mar-23	23-May-23
Date Results Obtained			01-Nov-22	23-Nov-22	27-Mar-23	13-Jun-23
Date Published Results			11-Nov-22	16-Dec-22	18-Apr-23	17-Jul-23
Measured Parameters dry @ STP and corrected to 12% O2	**Unit of measure**	**EPL Limit**				
Average stack gas temperature	°C	Not Applicable	134.0	135.0	137.0	122.0
Average velocity at sampling plane	m/s	Not Applicable	9.8	9.7	7.5	7.2
Gas Volumteric Flowrate	m^3/sec	Not Applicable	56.3	54.3	48.7	45.7
Dry Gas Density	kg/m^3	Not Applicable	1.35	1.34	1.31	1.31
Molecular Weight of Stack Gases	g/g mole	Not Applicable	30.2	30.0	29.3	29.3
Moisture content	%	Not Applicable	19.5	20.6	7.6	14.3
Concentration of carbon dioxide	%	Not Applicable	11.1	9.8	4.0	3.9
Total Solid Particles (@12%CO_2)	mg/m^3	**250**	**965.4**	**584.0**	**372.0**	**686.0**

Notes and Date	
18-Oct-22	Extremely wet field conditions from unprecedented rainfall are causing signficant amount of mud being attached to harvested cane brought in for processing
16-Nov-22	

			Sampling Point:	**Monitoring Point 1 - No 1 Boiler Stack Emissions**			Sampling Point:	**Monitoring Point 1 - No 1 Boiler Stack Emissions**	
			Licencee	Manildra Harwood Sugars			Licencee	Manildra Harwood Sugars	
			Location	Harwood Island, Harwood			Location	Harwood Island, Harwood	
			EPL No	171			EPL No	171	
			Parameter/s Measured	Total Solid Particles			Parameter/s Measured	Total Solid Particles	
			Monitoring Frequency	Quarterly			Monitoring Frequency	Quarterly	
			Limit	See Table			Limit	See Table	
			RESULTS TABLE 2023-24				**RESULTS TABLE 2023-24**		
Test ID Number			AE15184	AE15394	AE15415	AE15627	AE15736	AE16192	AE16572	AE16908
Sampling Date			12-Sep-23	09-Nov-23	18-Jan-24	02-May-24	19-Jun-24	12-Sep-24	21-Jan-25	21-May-25
Date Results Obtained			26-Sep-23	15-Apr-24	15-Apr-24	20-Jun-24	03-Jul-24	11-Nov-24	21-Feb-25	12-Jun-25
Date Published Results			13-Oct-23	14-Oct-23	15-Oct-23	26-Jul-24	26-Jul-24	18-Nov-24	14-Mar-25	10-Jul-25
Measured Parameters dry @ STP and corrected to 12% O2	**Unit of measure**	**EPL Limit**								
Average stack gas temperature	°C	Not Applicable	132.0	131.0	128.0	122.0	125.0	125.0	126.0	95.0
Average velocity at sampling plane	m/s	Not Applicable	7.4	8.2	7.0	9.4	8.5	8.5	9.6	9.3
Gas Volumteric Flowrate	m^3/sec	Not Applicable	56.3	54.0	40.7	62.1	56.3	56.6	63.8	72.1
Dry Gas Density	kg/m^3	Not Applicable	1.35	1.31	1.31	1.31	1.35	1.33	1.31	1.31
Molecular Weight of Stack Gases	g/g mole	Not Applicable	29.60	29.30	29.40	29.30	29.50	29.90	29.30	29.30
Moisture content	%	Not Applicable	18.10	8.50	18.20	10.30	7.50	8.50	7.10	11.60
Concentration of carbon dioxide	%	Not Applicable	6.45	4.10	4.53	4.60	6.00	9.20	4.10	4.60
Total Solid Particles (@12%CO2)	mg/m^3	**250**	172.0	**405.0**	**275.0**	**592.0**	**640.0**	**334.0**	**913.0**	**538.0**
			Notes and Date				**Notes and Date**			

			Sampling Point:	**Monitoring Point 1 - No 1 Boiler Stack Emissions**			Sampling Point:	**Monitoring Point 1 - No 1 Boiler Stack Emissions**		
			Licencee	Manildra Harwood Sugars			Licencee	Manildra Harwood Sugars		
			Location	Harwood Island, Harwood			Location	Harwood Island, Harwood		
			EPL No	171			EPL No	171		
			Parameter/s Measured	Total Solid Particles			Parameter/s Measured	Total Solid Particles		
			Monitoring Frequency	Quarterly			Monitoring Frequency	Quarterly		
			Limit	See Table			Limit	See Table		
Test ID Number			AE 16909	AE17654	AE17654_R2	AE18170	AE17654 R3	AE18645		
Sampling Date			09-Sep-25	17-Feb-26	25-Mar-26	09-Jun-26	02-Sep-26	13-Oct-26		
Date Results Obtained			27-Oct-25	18-Mar-26	14-Apr-26	30-Jun-26	16-Sep-26	13-Nov-26		
Date Published Results			14-Nov-25	20-Mar-26	15-May-26	17-Jul-26	17-Jul-26	19-Nov-26		
Measured Parameters dry @ STP and corrected to 12% O2	**Unit of measure**	**EPL Limit**								
Average stack gas temperature	°C	Not Applicable	149.0	133.0	133.0	132.0	139.0	141.0		
Average velocity at sampling plane	m/s	Not Applicable	10.1	9.6	9.1	7.3	9.2	8.5		
Gas Volumteric Flowrate	m^3/sec	Not Applicable	55.8	59.5	59.3	46.6	48.7	48.1		
Dry Gas Density	kg/m^3	Not Applicable	1.31	1.31	1.30	1.31	1.38	1.31		
Molecular Weight of Stack Gases	g/g mole	Not Applicable	29.30	29.30	29.20	29.40	31.00	29.40		
Moisture content	%	Not Applicable	19.40	12.70	8.30	12.40	24.60	19.00		
Concentration of carbon dioxide	%	Not Applicable	10.70	2.04	3.85	5.10	13.80	4.80		
Total Solid Particles (@12%CO2)	mg/m^3	**250**	**618.0**	**1004.0**	**1307.0**	191.0	**320.0**	**736.0**		
			Notes and Date							
			18-Mar-26	Excess tramp air getting into the system. Maintence work is planned for May shutdown to address this issue						

Sampling Point:	**Monitoring Point 1 - No 1 Boiler Stack Emissions - Opacity**
Licencee	Manildra Harwood Sugars
Location	**Harwood Island, Harwood**
EPL No	170
Parameter Monitored	**OPACITY (%)**
Monitoring Frequency	Continuous Online
Limit	No Limits Prescribed
Comments	The results in the table provide a summary of the minimum, maximum and mean reading for the period and include the number of exceedences recorded if applicable

MONITORING PERIOD

Date start	Date finish	Date Published	Minimum Reading	Maximum Reading	Mean Reading	Notes
30-Oct-22	12-Nov-22	16-Dec-22	17.8	83.7	49.2	
13-Nov-22	26-Nov-22	16-Dec-22	19.7	85.8	40.0	
27-Nov-22	10-Dec-22	16-Dec-22	20.7	85.3	35.7	
11-Dec-22	24-Dec-22	16-Jan-23	10.9	83.6	32.7	
25-Dec-22	7-Jan-23	16-Jan-23	0.0	96.7	28.8	
8-Jan-23	21-Jan-23	17-Feb-23	14.6	84.9	22.8	
22-Jan-23	4-Feb-23	17-Feb-23	0.0	84.1	-21.0	Opacity Meter Failure - New Unit ordered - Some delays with international source/supply issues
5-Feb-23	18-Feb-23	17-Mar-23	0.0	0.0	0.0	Monitoring meter failed
19-Feb-23	4-Mar-23	17-Mar-23	0.0	0.0	0.0	Monitoring meter failed
5-Mar-23	18-Mar-23	18-Apr-23	0.0	-25.0	-25.0	Monitoring meter failed
19-Mar-23	1-Apr-23	18-Apr-23	0.0	-25.0	-25.0	Monitoring meter failed
2-Apr-23	15-Apr-23	18-Apr-23	0.0	-25.0	-25.0	Monitoring meter failed
16-Apr-23	29-Apr-23	13-Oct-23	0.0	-25.0	-25.0	Monitoring meter failed
30-Apr-23	13-May-23	13-Oct-23	0.0	-25.0	-25.0	Monitoring meter failed
14-May-23	27-May-23	13-Oct-23	0.0	-25.0	-25.0	Monitoring meter failed
28-May-23	10-Jun-23	13-Oct-23	0.0	-25.0	-25.0	Monitoring meter failed
11-Jun-23	24-Jun-23	13-Oct-23	0.0	99.7	-11.8	New monitor and system being installed
25-Jun-23	8-Jul-23	13-Oct-23	14.7	99.4	44.8	
9-Jul-23	22-Jul-23	13-Oct-23	19.1	98.5	48.1	
23-Jul-23	5-Aug-23	13-Oct-23	24.6	99.3	54.5	
6-Aug-23	19-Aug-23	13-Oct-23	18.0	99.3	43.8	
20-Aug-23	2-Sep-23	13-Oct-23	17.4	99.4	36.9	
3-Sep-23	16-Sep-23	13-Oct-23	16.6	97.4	42.1	
17-Sep-23	30-Sep-23	13-Oct-23	11.9	99.4	39.8	Personnel change caused backlog of IT
1-Oct-23	14-Oct-23	15-Dec-23	12.8	98.2	42.5	issues so there were delays extracting
15-Oct-23	28-Oct-23	15-Dec-23	18.1	98.4	42.1	the data from the DCS into this report
29-Oct-23	11-Nov-23	15-Dec-23	20.2	98.2	50.9	
12-Nov-23	25-Nov-23	15-Dec-23	14.9	99.3	42.4	
26-Nov-23	9-Dec-23	15-Dec-23	18.2	97.9	44.9	
10-Dec-23	23-Dec-23	15-Jan-24	21.0	99.4	46.7	
24-Dec-23	6-Jan-24					Shutdown
7-Jan-24	20-Jan-24	12-Feb-24	22.0	98.4	51.6	
21-Jan-24	3-Feb-24	12-Feb-24	18.4	94.9	48.9	
4-Feb-24	17-Feb-24	18-Mar-24	17.8	92.3	51.1	
18-Feb-24	2-Mar-24	18-Mar-24	9.6	92.8	50.8	
3-Mar-24	16-Mar-24	18-Mar-24	25.6	93.3	50.0	
17-Mar-24	30-Mar-24	17-May-24	30.7	91.1	53.7	
31-Mar-24	13-Apr-24	17-May-24	18.8	89.6	59.8	
14-Apr-24	27-Apr-24	17-May-24	32.2	99.1	58.6	
28-Apr-24	11-May-24	17-May-24	28.8	87.7	57.1	
12-May-24	25-May-24	14-Jun-24	24.7	90.5	56.8	
26-May-24	8-Jun-24	14-Jun-24	7.3	93.9	52.7	
9-Jun-24	22-Jun-24	26-Jul-24	10.3	94.0	56.9	
23-Jun-24	6-Jul-24	26-Jul-24	24.7	93.8	50.5	
7-Jul-24	20-Jul-24	26-Jul-24	19.5	94.6	59.7	
21-Jul-24	3-Aug-24	16-Aug-24	15.1	93.9	56.9	
4-Aug-24	17-Aug-24	18-Sep-24	18.2	97.1	52.0	
18-Aug-24	31-Aug-24	18-Sep-24	-3.0	97.7	56.9	
1-Sep-24	14-Sep-24	18-Sep-24	24.1	98.9	52.1	
15-Sep-24	28-Sep-24	18-Oct-24	19.8	99.2	50.1	
29-Sep-24	12-Oct-24	18-Oct-24	26.1	98.3	53.4	
13-Oct-24	26-Oct-24	18-Nov-24	33.0	96.8	60.4	

Sampling Point:	**Monitoring Point 1 - No 1 Boiler Stack Emissions - Opacity**
Licencee	Manildra Harwood Sugars
Location	**Harwood Island, Harwood**
EPL No	170
Parameter Monitored	**OPACITY (%)**
Monitoring Frequency	Continuous Online
Limit	No Limits Prescribed
Comments	The results in the table provide a summary of the minimum, maximum and mean reading for the period and include the number of exceedences recorded if applicable

MONITORING PERIOD

Date start	Date finish	Date Published	Minimum Reading	Maximum Reading	Mean Reading	Notes
27-Oct-24	9-Nov-24	18-Nov-24	7.8	97.3	58.1	
10-Nov-24	23-Nov-24	20-Dec-24	30.0	96.6	59.2	
24-Nov-24	7-Dec-24	20-Dec-24	37.4	96.5	64.7	
8-Dec-24	21-Dec-24	14-Jan-25	31.2	97.7	64.3	
22-Dec-24	4-Jan-25	14-Jan-25	29.8	97.7	52.1	
5-Jan-25	18-Jan-25	14-Feb-25	32.5	96.4	59.5	
19-Jan-25	1-Feb-25	14-Feb-25	13.5	98.0	63.9	
2-Feb-25	15-Feb-25	14-Mar-25	-25.0	87.7	61.8	
16-Feb-25	1-Mar-25	14-Mar-25	39.1	91.8	63.9	
2-Mar-25	15-Mar-25	11-Apr-25	29.5	95.1	65.7	
16-Mar-25	29-Mar-25	11-Apr-25	31.1	93.3	69.0	
30-Mar-25	12-Apr-25	9-May-25	36.5	99.1	71.7	
13-Apr-25	26-Apr-25	9-May-25	28.7	29.5	28.9	
27-Apr-25	10-May-25	12-Jun-25	0.0	0.0	0.0	Boiler and Refinery Shutdown
11-May-25	24-May-25	12-Jun-25	-25.0	99.0	76.1	
25-May-25	7-Jun-25	12-Jun-25	30.9	99.2	77.8	
8-Jun-25	21-Jun-25	10-Jul-25	-2.6	97.0	77.2	
22-Jun-25	5-Jul-25	10-Jul-25	54.8	98.2	79.2	
6-Jul-25	19-Jul-25	15-Aug-25	59.0	96.4	78.0	
20-Jul-25	2-Aug-25	15-Aug-25	53.0	98.3	77.4	
17-Aug-25	30-Aug-25	15-Sep-25	58.1	97.1	75.5	
31-Aug-25	13-Sep-25	15-Sep-25	17.9	98.0	79.6	
14-Sep-25	27-Sep-25	9-Oct-25	59.9	98.7	79.4	
28-Sep-25	11-Oct-25	14-Nov-25	-25.0	98.7	72.4	
12-Oct-25	25-Oct-25	14-Nov-25	37.9	98.5	65.8	
26-Oct-25	8-Nov-25	14-Nov-25	-25.0	98.6	63.8	
9-Nov-25	22-Nov-25	12-Dec-25	5.3	97.0	66.5	
23-Nov-25	6-Dec-25	12-Dec-25	40.0	96.2	66.8	
7-Dec-25	20-Dec-25	16-Jan-26	36.7	98.1	69.1	
21-Dec-25	3-Jan-26	16-Jan-26	39.3	97.0	64.2	
4-Jan-26	17-Jan-26	16-Feb-26	41.4	98.0	68.3	
18-Jan-26	31-Jan-26	16-Feb-26	37.3	92.9	67.5	
1-Feb-26	14-Feb-26	16-Feb-26	45.0	97.1	68.0	
15-Feb-26	28-Feb-26	20-Mar-26	48.7	98.1	67.2	
1-Mar-26	14-Mar-26	20-Mar-26	38.3	98.5	67.9	
15-Mar-26	28-Mar-26	17-Apr-26	42.8	97.0	65.2	
29-Mar-26	11-Apr-26	17-Apr-26	46.4	98.1	70.1	
12-Apr-26	25-Apr-26	15-May-26	50.6	98.7	73.2	
26-Apr-26	9-May-26	15-May-26	45.6	97.4	71.6	
10-May-26	23-May-26	12-Jun-26	0.0	0.0	0.0	
24-May-26	6-Jun-26	12-Jun-26	30.3	98.6	67.5	
7-Jun-26	20-Jun-26	17-Jul-26	25.0	96.2	68.7	
21-Jun-26	4-Jul-26	17-Jul-26	45.3	97.1	76.0	
5-Jul-26	18-Jul-26	14-Aug-26	50.4	93.4	78.2	
19-Jul-26	1-Aug-26	14-Aug-26	50.2	94.8	73.9	
2-Aug-26	15-Aug-26	18-Sep-26	55.8	91.9	75.0	
16-Aug-26	29-Aug-26	18-Sep-26	30.4	97.4	67.8	
30-Aug-26	12-Sep-26	18-Sep-26	35.5	97.9	69.1	
27-Sep-26	10-Oct-26	16-Oct-26	-5.0	99.6	50.9	
11-Oct-26	24-Oct-26	19-Nov-26	10.3	98.3	47.8	
25-Oct-26	7-Nov-26	19-Nov-26	10.4	99.6	44.8	

Sampling Point:	**Monitoring Point 3 - Drain No 8 Heat Exchanger Discharging to River**
Licencee	Manildra Harwood Sugars
Location	**Harwood Island, Harwood**
EPL No	171
Parameter Measured	**TEMPERATURE (ºC)**
Frequency & Method	Monthly Representative Insitu
Limits	90th percentile limit 35°C 40°C Maximum
Comments	Pecentile limits: A 90 percentile limit means 90% of results must be below this prescribed limit. Maximum limit is the maximum permissable discharge value

Date Sampled	Date Results Obtained	Date Published	Results	Notes
9-Jul-22	9-Jul-22	18-Jul-22	22.3	
23-Jul-22	23-Jul-22	12-Aug-22	22.4	
6-Aug-22	6-Aug-22	12-Aug-22	22.1	
20-Aug-22	20-Aug-22	9-Sep-22	22.9	
3-Sep-22	3-Sep-22	9-Sep-22	24.1	
17-Sep-22	17-Sep-22	19-Oct-22	26.3	
1-Oct-22	1-Oct-22	19-Oct-22	26.9	
15-Oct-22	15-Oct-22	19-Oct-22	27.1	
29-Oct-22	29-Oct-22	11-Nov-22	28.0	
12-Nov-22	12-Nov-22	16-Dec-22	30.3	
26-Nov-22	26-Nov-22	16-Dec-22	33.1	
10-Dec-22	10-Dec-22	16-Dec-22	31.1	
24-Dec-22	24-Dec-22	16-Jan-23	31.3	
7-Jan-23	7-Jan-23	16-Jan-23	31.9	
21-Jan-23	21-Jan-23	17-Feb-23	33.9	
7-Jan-23	7-Jan-23	17-Feb-23	31.9	
21-Jan-23	21-Jan-23	17-Mar-23	33.9	
4-Feb-23	4-Feb-23	17-Mar-23	35.4	
18-Feb-23	18-Feb-23	17-Mar-23	35.5	
4-Mar-23	4-Mar-23	17-Mar-23	32.9	
18-Mar-23	18-Mar-23	18-Apr-23	33.7	
1-Apr-23	1-Apr-23	18-Apr-23	34.2	
15-Apr-23	15-Apr-23	18-Apr-23	30.8	
29-Apr-23	29-Apr-23	15-Jun-23	29.3	
13-May-23	13-May-23	15-Jun-23	22.8	
27-May-23	27-May-23	15-Jun-23	23.0	
10-Jun-23	10-Jun-23	15-Jun-23	25.9	
24-Jun-23	24-Jun-23	13-Jul-23	23.7	
8-Jul-23	8-Jul-23	13-Jul-23	21.2	
22-Jul-23	22-Jul-23	10-Aug-23	22.1	
5-Aug-23	5-Aug-23	13-Oct-23	26.8	
19-Aug-23	19-Aug-23	13-Oct-23	25.6	
2-Sep-23	2-Sep-23	13-Oct-23	27.0	
16-Sep-23	16-Sep-23	13-Oct-23	26.8	
30-Sep-23	30-Sep-23	13-Oct-23	28.6	
14-Oct-23	14-Oct-23	15-Dec-23	30.1	
28-Oct-23	28-Oct-23	15-Dec-23	31.4	
11-Nov-23	11-Nov-23	15-Dec-23	32.1	
25-Nov-23	25-Nov-23	15-Dec-23	34.3	
9-Dec-23	9-Dec-23	15-Dec-23	36.0	
23-Dec-23	23-Dec-23	18-Mar-24	37.1	Personnel change caused backlog of IT
6-Jan-24	6-Jan-24	18-Mar-24	0.0	Issues so there were delays extracting
20-Jan-24	20-Jan-24	18-Mar-24	35.7	the data from the DCS into this report
3-Feb-24	3-Feb-24	18-Mar-24	36.2	
17-Feb-24	17-Feb-24	18-Mar-24	35.6	
2-Mar-24	2-Mar-24	18-Mar-24	35.9	
16-Mar-24	16-Mar-24	18-Mar-24	35.1	Elevated temperatures investigated and rectified
30-Mar-24	30-Mar-24	19-Apr-24	33.6	
13-Apr-24	13-Apr-24	19-Apr-24	33.1	
27-Apr-24	27-Apr-24	17-May-24	31.0	
11-May-24	11-May-24	14-Jun-24	29.4	
25-May-24	25-May-24	14-Jun-24	24.7	
8-Jun-24	8-Jun-24	14-Jun-24	24.5	
22-Jun-24	22-Jun-24	26-Jul-24	22.2	
6-Jul-24	6-Jul-24	26-Jul-24	23.3	
20-Jul-24	20-Jul-24	26-Jul-24	24.1	
3-Aug-24	3-Aug-24	16-Aug-24	22.6	
17-Aug-24	17-Aug-24	18-Sep-24	23.9	
31-Aug-24	31-Aug-24	18-Sep-24	27.3	
14-Sep-24	14-Sep-24	18-Sep-24	28.2	
28-Sep-24	28-Sep-24	18-Oct-24	26.0	
12-Oct-24	12-Oct-24	18-Oct-24	28.6	
26-Oct-24	26-Oct-24	18-Nov-24	30.4	
9-Nov-24	9-Nov-24	18-Nov-24	33.3	
23-Nov-24	23-Nov-24	20-Dec-24	33.4	
7-Dec-24	7-Dec-24	20-Dec-24	34.6	
21-Dec-24	21-Dec-24	14-Jan-25	35.3	
4-Jan-25	4-Jan-25	14-Jan-25	34.7	
18-Jan-25	18-Jan-25	14-Feb-25	35.7	
1-Feb-25	1-Feb-25	14-Feb-25	35.3	
15-Feb-25	15-Feb-25	14-Mar-25	35.6	
1-Mar-25	1-Mar-25	14-Mar-25	36.2	
15-Mar-25	15-Mar-25	11-Apr-25	34.2	
29-Mar-25	29-Mar-25	11-Apr-25	36.5	
12-Apr-25	12-Apr-25	9-May-25	35.6	
26-Apr-25	26-Apr-25	9-May-25	29.8	
10-May-25	10-May-25	12-Jun-25	0.0	
24-May-25	24-May-25	12-Jun-25	27.9	
7-Jun-25	7-Jun-25	12-Jun-25	27.1	
21-Jun-25	21-Jun-25	10-Jul-25	24.1	
5-Jul-25	5-Jul-25	10-Jul-25	23.0	
19-Jul-25	19-Jul-25	15-Aug-25	25.4	

Sampling Point:	**Monitoring Point 3 - Drain No 8 Heat Exchanger Discharging to River**
Licencee	Manildra Harwood Sugars
Location	**Harwood Island, Harwood**
EPL No	171
Parameter Measured	**TEMPERATURE (ºC)**
Frequency & Method	Monthly Representative Insitu
Limits	90^{th} percentile limit 35°C 40°C Maximum
Comments	Pecentile limits: A 90 percentile limit means 90% of results must be below this prescribed limit. Maximum limit is the maximum permissable discharge value

Date Sampled	Date Results Obtained	Date Published	Results	Notes
2-Aug-25	2-Aug-25	15-Aug-25	22.8	
30-Aug-25	30-Aug-25	15-Sep-25	23.9	
13-Sep-25	13-Sep-25	15-Sep-25	26.0	
27-Sep-25	27-Sep-25	9-Oct-25	27.8	
11-Oct-25	11-Oct-25	14-Nov-25	31.3	
25-Oct-25	25-Oct-25	14-Nov-25	32.2	
8-Nov-25	8-Nov-25	14-Nov-25	31.8	
22-Nov-25	22-Nov-25	12-Dec-25	31.1	
6-Dec-25	6-Dec-25	12-Dec-25	35.4	
20-Dec-25	20-Dec-25	16-Jan-26	36.8	
3-Jan-26	3-Jan-26	16-Jan-26	35.2	
17-Jan-26	17-Jan-26	16-Feb-26	37.7	
31-Jan-26	31-Jan-26	16-Feb-26	37.8	
14-Feb-26	14-Feb-26	16-Feb-26	35.8	
28-Feb-26	28-Feb-26	20-Mar-26	37.2	
14-Mar-26	14-Mar-26	20-Mar-26	39.4	Faulty Transmitter replaced 11/3/26
28-Mar-26	28-Mar-26	17-Apr-26	34.4	
11-Apr-26	11-Apr-26	17-Apr-26	32.3	
25-Apr-26	25-Apr-26	15-May-26	31.1	
9-May-26	9-May-26	15-May-26	28.7	
23-May-26	23-May-26	12-Jun-26	20.2	
6-Jun-26	6-Jun-26	12-Jun-26	26.6	
20-Jun-26	20-Jun-26	17-Jul-26	25.4	
4-Jul-26	4-Jul-26	17-Jul-26	24.8	
18-Jul-26	18-Jul-26	14-Aug-26	23.7	
1-Aug-26	1-Aug-26	14-Aug-26	23.7	
15-Aug-26	15-Aug-26	18-Sep-26	23.1	
29-Aug-26	29-Aug-26	18-Sep-26	19.3	
12-Sep-26	12-Sep-26	18-Sep-26	22.0	
10-Oct-26	10-Oct-26	16-Oct-26	20.8	
24-Oct-26	24-Oct-26	19-Nov-26	21.4	
7-Nov-26	7-Nov-26	19-Nov-26	24.1	

Sampling Point:	**Monitoring Point 3 - Drain No 8 Heat Exchanger Discharging to River**
Licencee	Manildra Harwood Sugars
Location	**Harwood Island, Harwood**
EPL No	171
Paramater Measured	**VOLUME (kL/day)**
Frequency & Method	Continuous inline
Limit (max)	2000 kL/day
Comments	The results in the table provide a summary of the minimum, maximum and mean daily volume discharged in kilolitres per day (kL/day) for the period and identifies the number of exceedences recorded if applicable

MONITORING PERIOD			Volume (kL)				
Date Start	Date Finish	Date Published	Minimum Daily Discharge	Maximum Daily Discharge	Mean Daily Discharge	Number of Exceedences	Notes
26-Jun-22	9-Jul-22	18-Jul-22	38	348	174	0	
10-Jul-22	23-Jul-22	12-Aug-22	10	166	99	0	
24-Jul-22	6-Aug-22	12-Aug-22	0	306	104	0	
7-Aug-22	20-Aug-22	9-Sep-22	10	330	159	0	
21-Aug-22	3-Sep-22	9-Sep-22	2	297	156	0	
4-Sep-22	17-Sep-22	19-Oct-22	5	212	116	0	
18-Sep-22	1-Oct-22	19-Oct-22	6	328	170	0	
2-Oct-22	15-Oct-22	19-Oct-22	81	285	168	0	
16-Oct-22	29-Oct-22	11-Nov-22	59	326	209	0	
30-Oct-22	12-Nov-22	16-Dec-22	152	379	262	0	
13-Nov-22	26-Nov-22	16-Dec-22	87	378	222	0	
27-Nov-22	10-Dec-22	16-Dec-22	147	557	256	0	
11-Dec-22	24-Dec-22	16-Jan-23	46	334	197	0	
25-Dec-22	7-Jan-23	16-Jan-23	9	286	131	0	
8-Jan-23	21-Jan-23	17-Feb-23	169	328	256	0	
25-Dec-22	7-Jan-23	17-Feb-23	9	286	131	0	
8-Jan-23	21-Jan-23	17-Mar-23	169	328	256	0	
22-Jan-23	4-Feb-23	17-Mar-23	23	377	242	0	
5-Feb-23	18-Feb-23	17-Mar-23	131	298	236	0	
19-Feb-23	4-Mar-23	17-Mar-23	26	386	220	0	
5-Mar-23	18-Mar-23	18-Apr-23	160	338	244	0	
19-Mar-23	1-Apr-23	18-Apr-23	78	360	269	0	
2-Apr-23	15-Apr-23	18-Apr-23	149	342	241	0	
16-Apr-23	29-Apr-23	15-Jun-23	95	209	142	0	
30-Apr-23	13-May-23	15-Jun-23	1	1	1	0	Shutdown 4/5 - 16/5/23
14-May-23	27-May-23	15-Jun-23	0	303	121	0	
28-May-23	10-Jun-23	15-Jun-23	85	264	159	0	
11-Jun-23	24-Jun-23	13-Jul-23	2	142	57	0	
25-Jun-23	8-Jul-23	13-Jul-23	0	148	58	0	
9-Jul-23	22-Jul-23	10-Aug-23	0	180	68	0	
23-Jul-23	5-Aug-23	13-Oct-23	20	671	195	0	
6-Aug-23	19-Aug-23	13-Oct-23	64	251	136	0	
20-Aug-23	2-Sep-23	13-Oct-23	38	190	112	0	
3-Sep-23	16-Sep-23	13-Oct-23	0	200	68	0	
17-Sep-23	30-Sep-23	13-Oct-23	79	320	183	0	
1-Oct-23	14-Oct-23	15-Dec-23	55	298	195	0	
15-Oct-23	28-Oct-23	15-Dec-23	12	304	160	0	
29-Oct-23	11-Nov-23	15-Dec-23	128	329	231	0	
12-Nov-23	25-Nov-23	15-Dec-23	18	313	215	0	
26-Nov-23	9-Dec-23	15-Dec-23	169	355	281	0	
10-Dec-23	23-Dec-23	18-Mar-24	125	350	244	0	
24-Dec-23	6-Jan-24	18-Mar-24	0	0	0	0	Shutdown
7-Jan-24	20-Jan-24	18-Mar-24	46	309	214	0	
21-Jan-24	3-Feb-24	18-Mar-24	84	312	210	0	
4-Feb-24	17-Feb-24	18-Mar-24	120	268	194	0	
18-Feb-24	2-Mar-24	18-Mar-24	44	257	157	0	
3-Mar-24	16-Mar-24	18-Mar-24	159	334	251	0	
17-Mar-24	30-Mar-24	19-Apr-24	186	314	249	0	
31-Mar-24	13-Apr-24	19-Apr-24	66	283	222	0	
14-Apr-24	27-Apr-24	17-May-24	71	275	206	0	
28-Apr-24	11-May-24	14-Jun-24	13	310	72	0	
12-May-24	25-May-24	14-Jun-24	0	5	2	0	
26-May-24	8-Jun-24	14-Jun-24	6	33	18	0	
9-Jun-24	22-Jun-24	26-Jul-24	0	16	7	0	
23-Jun-24	6-Jul-24	26-Jul-24	0	31	13	0	
7-Jul-24	20-Jul-24	26-Jul-24	0	42	18	0	
21-Jul-24	3-Aug-24	16-Aug-24	0	36	12	0	
4-Aug-24	17-Aug-24	18-Sep-24	10	233	110	0	
18-Aug-24	31-Aug-24	18-Sep-24	24	303	182	0	
1-Sep-24	14-Sep-24	18-Sep-24	4	347	206	0	
15-Sep-24	28-Sep-24	18-Oct-24	0	484	254	0	
29-Sep-24	12-Oct-24	18-Oct-24	21	343	222	0	
13-Oct-24	26-Oct-24	18-Nov-24	240	416	321	0	
27-Oct-24	9-Nov-24	18-Nov-24	174	484	268	0	
10-Nov-24	23-Nov-24	20-Dec-24	47	421	234	0	
24-Nov-24	7-Dec-24	20-Dec-24	31	387	255	0	
8-Dec-24	21-Dec-24	14-Jan-25	156	430	294	0	
22-Dec-24	4-Jan-25	14-Jan-25	12	389	224	0	
5-Jan-25	18-Jan-25	14-Feb-25	75	313	247	0	
19-Jan-25	1-Feb-25	14-Feb-25	77	247	174	0	
2-Feb-25	15-Feb-25	14-Mar-25	117	305	219	0	
16-Feb-25	1-Mar-25	14-Mar-25	240	362	282	0	
2-Mar-25	15-Mar-25	11-Apr-25	90	275	182	0	
16-Mar-25	29-Mar-25	11-Apr-25	193	294	258	0	
30-Mar-25	12-Apr-25	9-May-25	113	255	210	0	
13-Apr-25	26-Apr-25	9-May-25				0	Boiler and Refinery Shutdown for 1 month
27-Apr-25	10-May-25	12-Jun-25				0	
11-May-25	24-May-25	12-Jun-25	0	265	160	0	
25-May-25	7-Jun-25	12-Jun-25	71	240	164	0	
8-Jun-25	21-Jun-25	10-Jul-25	24	177	100	0	
22-Jun-25	5-Jul-25	10-Jul-25	3	177	85	0	
6-Jul-25	19-Jul-25	15-Aug-25	83	193	131	0	

Sampling Point:	**Monitoring Point 3 - Drain No 8 Heat Exchanger Discharging to River**
Licencee	Manildra Harwood Sugars
Location	**Harwood Island, Harwood**
EPL No	171
Paramater Measured	**VOLUME (kL/day)**
Frequency & Method	Continuous inline
Limit (max)	2000 kL/day
Comments	The results in the table provide a summary of the minimum, maximum and mean daily volume discharged in kilolitres per day (kL/day) for the period and identifies the number of exceedences recorded if applicable

MONITORING PERIOD			Volume (kL)				
Date Start	**Date Finish**	**Date Published**	**Minimum Daily Discharge**	**Maximum Daily Discharge**	**Mean Daily Discharge**	**Number of Exceedences**	**Notes**
20-Jul-25	2-Aug-25	15-Aug-25	4	170	69	0	
17-Aug-25	30-Aug-25	15-Sep-25	10	167	68	0	
31-Aug-25	13-Sep-25	15-Sep-25	38	223	120	0	
14-Sep-25	27-Sep-25	9-Oct-25	7	291	109	0	
28-Sep-25	11-Oct-25	14-Nov-25	77	206	163	0	
12-Oct-25	25-Oct-25	14-Nov-25	100	339	232	0	
26-Oct-25	8-Nov-25	14-Nov-25	87	397	244	0	
9-Nov-25	22-Nov-25	12-Dec-25	25	203	124	0	
23-Nov-25	6-Dec-25	12-Dec-25	3	265	161	0	
7-Dec-25	20-Dec-25	16-Jan-26	123	307	219	0	
21-Dec-25	3-Jan-26	16-Jan-26	66	238	169	0	
4-Jan-26	17-Jan-26	16-Feb-26	72	188	147	0	
18-Jan-26	31-Jan-26	16-Feb-26	69	251	170	0	
1-Feb-26	14-Feb-26	16-Feb-26	94	335	220	0	
15-Feb-26	28-Feb-26	20-Mar-26	248	324	283	0	
1-Mar-26	14-Mar-26	20-Mar-26	138	351	264	0	
15-Mar-26	28-Mar-26	17-Apr-26	43	447	307	0	
29-Mar-26	11-Apr-26	17-Apr-26	207	325	272	0	
12-Apr-26	25-Apr-26	15-May-26	113	320	238	0	
26-Apr-26	9-May-26	15-May-26	177	335	295	0	
10-May-26	23-May-26	12-Jun-26	0	303	73	0	
24-May-26	6-Jun-26	12-Jun-26	24	303	163	0	
7-Jun-26	20-Jun-26	17-Jul-26	19	377	185	0	
21-Jun-26	4-Jul-26	17-Jul-26	82	359	226	0	
5-Jul-26	18-Jul-26	14-Aug-26	48	258	133	0	
19-Jul-26	1-Aug-26	14-Aug-26	57	238	158	0	
2-Aug-26	15-Aug-26	18-Sep-26	150	519	287	0	
16-Aug-26	29-Aug-26	18-Sep-26	20	288	139	0	
30-Aug-26	12-Sep-26	18-Sep-26	43	423	136	0	
27-Sep-26	10-Oct-26	16-Oct-26	0	211	96	0	
11-Oct-26	24-Oct-26	19-Nov-26	0	314	168	0	
25-Oct-26	7-Nov-26	19-Nov-26	146	440	222	0	

Sampling Point: **Monitoring Point 4 - Drain 4 Torri Discharge**
Licencee Manildra Harwood Sugars
Location **Harwood Island, Harwood**
EPL No 171

Parameter/s Monitored Biochemical Oxygen Demand and Total Suspended Solids (milligrams per litre)

Frequency & Method Fortnightly Composite

Limits See table

Comments
Pecentile limits: A 90 percentile limit means 90% of results must be below this prescribed limit. Maximum limit is the maximum permissable discharge value

>bgd Means the concentration of the relevant parameter above the background water quality sampled and reported at monitoring point 5. The values in the table are provided as the level above background.

			Licence Limits	BOD_5 (mg/L)	TSS (mg/L)	
Date Sampled	Date Results Obtained	Date Published	90 Percentile Limit Maximum	45 >bgd 50 >bgd	20 >bgd 25 >bgd	Notes
5-Jul-22	11-Jul-22	18-Jul-22		2.4	0.0	
12-Jul-22	20-Jul-22	12-Aug-22		16.8	2.0	
19-Jul-22	26-Jul-22	12-Aug-22		15.3	-6.0	
26-Jul-22	1-Aug-22	12-Aug-22		69.2	0.0	Exceedance Reported 1/8 under investigation
9-Aug-22	15-Aug-22	9-Sep-22		25.8	2.0	mill stopped between 1/08/2022 and 07/08/2022
16-Aug-22	24-Aug-22	9-Sep-22		16.9	-2.0	
23-Aug-22	29-Aug-22	9-Sep-22		19.9	0.0	
30-Aug-22	6-Sep-22	9-Sep-22		16.1	3.0	
6-Sep-22	13-Sep-22	19-Oct-22		2.7	-4.0	
13-Sep-22	21-Sep-22	19-Oct-22		13.7	2.0	
20-Sep-22	27-Sep-22	19-Oct-22		28.9	0.0	
26-Sep-22	2-Oct-22	19-Oct-22				Shutdown
4-Oct-22	10-Oct-22	19-Oct-22		4.7	2.0	
11-Oct-22	19-Oct-22	11-Nov-22		12.8	2.0	
18-Oct-22	25-Oct-22	11-Nov-22		18.1	5.0	
25-Oct-22	31-Oct-22	11-Nov-22		4.8	5.0	
1-Nov-22	8-Nov-22	11-Nov-22		15.2	1.0	
9-Nov-22	14-Nov-22	16-Dec-22		22.8	6.0	
15-Nov-22	22-Nov-22	16-Dec-22		14.1	6.9	
22-Nov-22	28-Nov-22	16-Dec-22		11.1	12.7	
29-Nov-22	7-Dec-22	16-Dec-22		9.9	-2.0	
7-Dec-22	14-Dec-22	16-Dec-22		17.4	-4.0	
13-Dec-22	20-Dec-22	16-Jan-23		49.1	2.0	
20-Dec-22	3-Jan-23	16-Jan-23		10.9	5.0	
3-Jan-23	9-Jan-23	16-Jan-23		1.8	0.0	
10-Jan-23	17-Jan-23	17-Feb-23				No samples taken. Mill in final shut down and not running at steady state
17-Jan-23	24-Jan-23	17-Feb-23		3.2	-1.0	
24-Jan-23	1-Feb-23	17-Feb-23		13.1	7.0	
31-Jan-23	9-Feb-23	17-Feb-23		4.6	2.0	
7-Feb-23	13-Feb-23	17-Feb-23		6.5	-2.0	
14-Feb-23	20-Feb-23	17-Mar-03		2.5	2.0	
21-Feb-23	28-Feb-23	17-Mar-03				no samples - shutdown
28-Feb-23	9-Mar-23	17-Mar-03		2.2	15.5	
7-Mar-23	15-Mar-23	17-Mar-03		1.4	19.9	
14-Mar-23	22-Mar-23	18-Apr-23		2.7	-7.0	
21-Mar-23	26-Mar-23	18-Apr-23		6.7	10.0	
28-Mar-23	3-Apr-23	18-Apr-23		6.5	0.0	
4-Apr-23	14-Apr-23	18-Apr-23		2.6	13.0	
18-Apr-23	28-Apr-23	15-Jun-23		4.4	21.0	No Samples - easter
23-May-23	28-May-23	15-Jun-23		5.1	-2.0	Shutdown
30-May-23	5-Jun-23	15-Jun-23		5.0	-2.0	
6-Jun-23	16-Jun-23	13-Jul-23		5.8	3.0	
20-Jun-23	5-Jul-23	13-Jul-23		5.0	6.0	No Samples
27-Jun-23	4-Jul-23	13-Jul-23		2.7	1.0	
4-Jul-23	11-Jul-23	13-Jul-23		6.3	1.5	
11-Jul-23	17-Jul-23	10-Aug-23		13.8	-2.0	
18-Jul-23	25-Jul-23	10-Aug-23		11.8	1.0	
1-Aug-23	7-Aug-23	10-Aug-23		12.4	6.0	No Samples - Maint. Day
8-Aug-23	14-Aug-23	15-Sep-23		9.1	0.0	
15-Aug-23	22-Aug-23	15-Sep-23		14.4	-1.0	
22-Aug-23	29-Aug-23	15-Sep-23		15.2	0.0	
29-Aug-23	5-Sep-23	15-Sep-23		13.9	-4.0	
5-Sep-23	11-Sep-23	15-Sep-23		11.1	0.0	
12-Sep-23	19-Sep-23	13-Oct-23		10.6	2.0	
20-Sep-23	25-Sep-23	13-Oct-23		9.5	-3.0	
26-Sep-23	5-Oct-23	13-Oct-23		75.1	8.0	Notifications issued - under investigation
3-Oct-23	11-Oct-23	13-Oct-23		15.4	1.0	
10-Oct-23	19-Oct-23	15-Dec-23		9.9	6.0	
17-Oct-23	23-Oct-23	15-Dec-23		12.3	-2.0	
24-Oct-23	1-Nov-23	15-Dec-23		3.5	-1.0	
31-Oct-23	8-Nov-23	15-Dec-23		4.0	-1.0	
7-Nov-23	13-Nov-23	15-Dec-23		7.4	17.0	
14-Nov-23	19-Nov-23	15-Dec-23				
21-Nov-23	26-Nov-23	15-Dec-23		11.0	16.2	
28-Nov-23	4-Dec-23	15-Dec-23		3.4	18.8	
5-Dec-23	13-Dec-23	15-Dec-23		4.8	11.0	
12-Dec-23	18-Dec-23	15-Jan-24		23.6	-2.0	
19-Dec-23	24-Dec-23	15-Jan-24		5.5	5.0	
9-Jan-24	16-Jan-24	12-Feb-24		20.9	21.0	
16-Jan-24	24-Jan-24	12-Feb-24		5.5	8.0	
23-Jan-24	29-Jan-24	12-Feb-24		5.9	0.0	
30-Jan-24	5-Feb-24	12-Feb-24		2.7	-5.0	
6-Feb-24	12-Feb-24	18-Mar-24		3.4	4.0	
13-Feb-24	23-Feb-24	18-Mar-24		2.2	11.0	
19-Feb-24	26-Feb-24	18-Mar-24		22.2	3.0	
27-Feb-24	4-Mar-24	18-Mar-24		3.9	9.0	
5-Mar-24	11-Mar-24	18-Mar-24		4.0	2.0	
12-Mar-24	18-Mar-24	15-Apr-24		9.0	-1.0	
19-Mar-24	25-Mar-24	19-Apr-24		10.5	3.0	
26-Mar-24	2-Apr-24	19-Apr-24		6.8	7.0	
2-Apr-24	8-Apr-24	19-Apr-24		9.9	3.3	
9-Apr-24	15-Apr-24	19-Apr-24		8.4	17.0	
						Shutdown

Sampling Point:	**Monitoring Point 4 - Drain 4 Torri Discharge**
Licencee	Manildra Harwood Sugars
Location	**Harwood Island, Harwood**
EPL No	171
Parameter/s Monitored	Biochemical Oxygen Demand and Total Suspended Solids (milligrams per litre)
Frequency & Method	Fortnightly Composite
Limits	See table
Comments	Pecentile limits: A 90 percentile limit means 90% of results must be below this prescribed limit. Maximum limit is the maximum permissable discharge value
	>bgd Means the concentration of the relevant parameter above the background water quality sampled and reported at monitoring point 5. The values in the table are provided as the level above background.

			Licence Limits	BOD_5 (mg/L)	TSS (mg/L)	
Date Sampled	**Date Results Obtained**	**Date Published**	**90 Percentile Limit** / **Maximum**	**45 >bgd** / **50 >bgd**	**20 >bgd** / **25 >bgd**	**Notes**
23-Apr-24	29-Apr-24	17-May-24		3.7	1.0	
30-Apr-24	7-May-24	17-May-24		6.3	7.0	
7-May-24	13-May-24	17-May-24		5.2	41.0	very heavy rain over last 24hours/shut down 9th
13-May-24	19-May-24	14-Jun-24				Shut down
21-May-24	27-May-24	14-Jun-24		6.0	2.0	
28-May-24	2-Jun-24	14-Jun-24		6.0	3.0	
4-Jun-24	11-Jun-24	14-Jun-24		5.1	8.0	
11-Jun-24	17-Jun-24	26-Jul-24		4.5	-1.0	
18-Jun-24	26-Jun-24	26-Jul-24		0.0	0.0	
25-Jun-24	2-Jul-24	26-Jul-24		3.3	5.0	First Week Of Crush
2-Jul-24	8-Jul-24	26-Jul-24		9.0	-3.0	
9-Jul-24	15-Jul-24	26-Jul-24		2.3	1.0	
16-Jul-24	29-Jul-24	16-Aug-24		7.7	1.0	
30-Jul-24	6-Aug-24	16-Aug-24		11.1	0.0	
6-Aug-24	12-Aug-24	16-Aug-24		9.7	6.0	
13-Aug-24	21-Aug-24	18-Sep-24		3.9	4.0	
20-Aug-24	26-Aug-24	18-Sep-24		69.1	4.0	
27-Aug-24	2-Sep-24	18-Sep-24		14.7	0.0	
10-Sep-24	19-Sep-24	18-Oct-24		10.7	0.0	Shutdown
17-Sep-24	23-Sep-24	18-Oct-24		10.0	1.0	
24-Sep-24	1-Oct-24	18-Oct-24		14.3	2.0	
1-Oct-24	8-Oct-24	18-Oct-24		1.0	6.0	
8-Oct-24	16-Oct-24	18-Oct-24		25.6	7.0	
15-Oct-24	22-Oct-24	18-Oct-24		11.3	19.0	
22-Oct-24	5-Nov-24	18-Nov-24		5.8	4.0	
5-Nov-24	14-Nov-24	18-Nov-24		11.9	-3.0	
26-Nov-24	10-Dec-24	18-Nov-24		15.7	0.0	Mill not running 29/10/24
10-Dec-24	2-Jan-25	20-Dec-24		22.7	13.0	Mill shutdown 12/11/2024 & 19/11 /24 - Superheater Tubes
17-Dec-24	2-Jan-25	14-Jan-25		9.7	3.0	
7-Jan-25	14-Jan-25	14-Jan-25		4.8	-2.0	
14-Jan-25	28-Jan-25	14-Feb-25		1.6	-3.0	Site shutdown Christmas 24/12 - 17/12
28-Jan-25	6-Feb-25	14-Feb-25		2.2	16.0	Last day of 2024 crush 7/1
4-Feb-25	13-Feb-25	14-Mar-25		1.0	-7.0	
11-Feb-25	19-Feb-25	14-Mar-25		0.0	-6.0	
18-Feb-25	24-Feb-25	14-Mar-25		12.6	0.0	
4-Mar-25	19-Mar-25	14-Mar-25		5.2	1.0	
18-Mar-25	3-Apr-25	11-Apr-25		0.0	1.0	
25-Mar-25	3-Apr-25	11-Apr-25		0.0	-1.0	
1-Apr-25	11-Apr-25	11-Apr-25		2.7	3.0	
8-Apr-25	22-Apr-25	9-May-25		-4.8	1.0	
20-May-25	28-May-25	9-May-25		0.6	-1.0	
27-May-25	3-Jun-25	12-Jun-25		1.5	0.0	
3-Jun-25	12-Jun-25	12-Jun-25		0.0	0.0	
24-Jun-25	30-Jun-25	10-Jul-25		12.9	1.0	
8-Jul-25	15-Jul-25	10-Jul-25		9.5	-1.0	
15-Jul-25	28-Jul-25	15-Aug-25		0.0	1.0	
22-Jul-25	28-Jul-25	15-Aug-25		12.1	1.0	
12-Aug-25	20-Aug-25	15-Sep-25		0.0	-2.0	
19-Aug-25	27-Aug-25	15-Sep-25		8.0	7.0	
26-Aug-25	3-Sep-25	15-Sep-25		17.0	1.0	
2-Sep-25	10-Sep-25	15-Sep-25		14.9	0.0	
9-Sep-25	22-Sep-25	9-Oct-25		37.7	-2.0	
16-Sep-25	23-Sep-25	9-Oct-25		22.0	2.0	
30-Sep-25	10-Oct-25	14-Nov-25		14.6	0.0	No samples sent 23/9/2025 Mill not running
7-Oct-25	16-Oct-25	14-Nov-25		18.7	0.1	
14-Oct-25	23-Oct-25	14-Nov-25		30.6	-1.0	
21-Oct-25	31-Oct-25	14-Nov-25		16.0	1.0	
28-Oct-25	5-Nov-25	14-Nov-25		25.1	19.0	
4-Nov-25	10-Nov-25	14-Nov-25		19.0	-3.0	
18-Nov-25	25-Nov-25	12-Dec-25		42.7	-1.0	No samples sent 11/11/2025 due to Boiler shutdown
2-Dec-25	9-Dec-25	12-Dec-25		14.0	2.0	
6-Dec-25	8-Jan-26	16-Jan-26		24.5	-2.0	Boiler Shutdown on 9/12/2025 - no samples collected
13-Jan-26	20-Jan-26	16-Feb-26		6.0	1.0	LAST WEEK OF 2025 CRUSH
27-Jan-26	2-Feb-26	16-Feb-26		2.4	-3.0	
3-Feb-26	10-Feb-26	16-Feb-26		6.4	-12.0	
10-Feb-26	16-Feb-26	16-Feb-26		11.1	10.0	
17-Feb-26	23-Feb-26	20-Mar-26		12.4	-2.0	
24-Feb-26	2-Mar-26	20-Mar-26		7.9	3.0	
3-Mar-26	9-Mar-26	20-Mar-26		16.8	0.0	
10-Mar-26	16-Mar-26	20-Mar-26		6.4	10.0	
17-Mar-26	23-Mar-26	20-Mar-26		12.9	22.0	
24-Mar-26	1-Apr-26	17-Apr-26		4.3	-3.0	
31-Mar-26	7-Apr-26	17-Apr-26		4.7	4.0	
14-Apr-26	20-Apr-26	17-Apr-26		4.8	4.0	
21-Apr-26	29-Apr-26	15-May-26		11.2	3.0	
2-Jun-26	10-Jun-26	15-May-26		31.0	4.0	
9-Jun-26	22-Jun-26	12-Jun-26		7.8	2.0	
16-Jun-26	22-Jun-26	17-Jul-26		-0.5	15.0	
23-Jun-26	29-Jun-26	17-Jul-26		3.9	-2.0	
7-Jul-26	13-Jul-26	17-Jul-26		17.3	4.0	
14-Jul-26	20-Jul-26	14-Aug-26		16.3	6.0	
28-Jul-26	3-Aug-26	14-Aug-26		17.2	1.0	
4-Aug-26	13-Aug-26	14-Aug-26		15.5	-10.0	
11-Aug-26	17-Aug-26	18-Sep-26		14.3	8.0	
25-Aug-26	31-Aug-26	18-Sep-26		18.7	3.0	
1-Sep-26	7-Sep-26	18-Sep-26		48.4	1.0	
8-Sep-26	14-Sep-26	18-Sep-26		29.8	4.0	
15-Sep-26	21-Sep-26	16-Oct-26		35.0	-17.0	
22-Sep-26	29-Sep-26	16-Oct-26		23.4	2.0	
6-Oct-26	14-Oct-26	16-Oct-26		4.0	-0.3	Mill was in maintenance shutdown on the 29/9/2026 so no EPA samples were collected
13-Oct-26	19-Oct-26	19-Nov-26		22.8	8.0	
3-Nov-26	11-Nov-26	19-Nov-26		-2.4	-11.0	No EPA collection 20-27/10/2026 as Mill shutdown
10-Nov-26	16-Nov-26	19-Nov-26		11.5	1.0	

Sampling Point:	**Monitoring Point 4 - Drain 4 Torri Discharge**
Licencee	Manildra Harwood Sugars
Location	**Harwood Island, Harwood**
EPL No	171
Parameters Monitored	pH and Temperature (ºC)
Frequency & Method	Fortnightly Representative Sample Insitu
Limits	See Table
Comments	Pecentile limits: A 90 percentile limit means 90% of results must be below this prescribed limit. Maximum limit is the maximum permissable discharge value
	Temperature * A temperature limit of 50°C applies when only the refinery is operating and is indicated with Y. Conversely a temperature limit of 45ºC applies when the mill and refinery is operating indicated with N.

		Licence Limits	pH	Temperature (°C)	50	
Date Sampled	**Date Published**	**90 Percentile Limit**		**45***	**Refinery Only Op**	**Notes**
		Maximum	**6.5 - 8.5**	**55**		
5-Jul-22	18-Jul-22		7.8	34.0	N	
12-Jul-22	12-Aug-22		7.5	30.1	N	
19-Jul-22	12-Aug-22		7.7	29.4	N	
26-Jul-22	12-Aug-22		7.8	29.0	N	Exceedance Reported 1/8 under investigation
9-Aug-22	9-Sep-22		7.6	33.1	N	mill stopped between 1/08/2022 and 07/08/2022
16-Aug-22	9-Sep-22		7.9	32.7	N	
23-Aug-22	9-Sep-22		7.7	36.1	N	
30-Aug-22	9-Sep-22		7.7	34.5	N	
6-Sep-22	19-Oct-22		7.7	31.2	N	
13-Sep-22	19-Oct-22		7.6	34.5	N	
20-Sep-22	19-Oct-22		7.6	35.4	N	
26-Sep-22	19-Oct-22					Shutdown
4-Oct-22	19-Oct-22		7.3	35.0	N	
11-Oct-22	11-Nov-22		7.2	35.7	N	
18-Oct-22	11-Nov-22		7.3	37.7	N	
25-Oct-22	11-Nov-22		7.4	29.3		Shutdown
1-Nov-22	11-Nov-22		7.3	39.0	N	
9-Nov-22	16-Dec-22		7.2	38.7	N	
15-Nov-22	16-Dec-22		7.3	41.0	N	
22-Nov-22	16-Dec-22		7.6	40.1	N	
29-Nov-22	16-Dec-22		7.6	38.0	N	
7-Dec-22	16-Dec-22		7.6	40.0	N	
13-Dec-22	16-Jan-23		7.6	41.7	N	
20-Dec-22	16-Jan-23		7.8	35.4	N	
3-Jan-23	16-Jan-23		7.9	35.3	Y	Shutdown in process
10-Jan-23	17-Feb-23				Y	No samples taken. Mill in final shut down and not running at steady state
17-Jan-23	17-Feb-23		7.8	38.3	Y	
24-Jan-23	17-Feb-23		7.7	37.8	Y	
31-Jan-23	17-Feb-23		7.9	41.6	Y	
7-Feb-23	17-Feb-23		7.9	40.1	Y	
14-Feb-23	17-Mar-03		8.0	37.5	Y	
21-Feb-23	17-Mar-03					no samples - shutdown
28-Feb-23	17-Mar-03		8.0	36.5	Y	
7-Mar-23	17-Mar-03		8.0	34.2	Y	
14-Mar-23	18-Apr-23		7.9	35.7	Y	
21-Mar-23	18-Apr-23		7.7	38.5	Y	
28-Mar-23	18-Apr-23		7.8	41.4	Y	
4-Apr-23	18-Apr-23		7.9	37.0	Y	
						No Samples - easter
18-Apr-23	15-Jun-23		7.9	35.9	Y	
						Shutdown
23-May-23	15-Jun-23		7.7	33.0	Y	
30-May-23	15-Jun-23		7.8	33.1	Y	
6-Jun-23	13-Jul-23		7.8	33.1	Y	
						No Samples
20-Jun-23	13-Jul-23		8.0	29.4	Y	
27-Jun-23	13-Jul-23		7.7	30.4	Y	
4-Jul-23	13-Jul-23		7.6	25.5	N	
11-Jul-23	10-Aug-23		7.7	31.3	N	
18-Jul-23	10-Aug-23		7.6	34.9	N	
						No Samples - Maint. Day
1-Aug-23	10-Aug-23		7.7	35.8	N	
8-Aug-23	15-Sep-23		7.7	34.8	N	
15-Aug-23	15-Sep-23		7.7	36.7	N	
22-Aug-23	15-Sep-23		7.6	36.0	N	
29-Aug-23	15-Sep-23		7.5	35.4	N	
5-Sep-23	15-Sep-23		7.6	29.6		Refinery Shut Down
12-Sep-23	13-Oct-23		7.8	35.8	N	
20-Sep-23	13-Oct-23		7.8	36.2	N	
26-Sep-23	13-Oct-23		7.7	38.5	N	
3-Oct-23	13-Oct-23		7.6	40.7	N	
10-Oct-23	15-Dec-23		7.8	40.1	N	
17-Oct-23	15-Dec-23		7.8	40.7	N	
24-Oct-23	15-Dec-23		7.8	33.3	Y	
31-Oct-23	15-Dec-23		7.8	34.7	Y	
7-Nov-23	15-Dec-23		7.7	33.4	Y	
14-Nov-23	15-Dec-23					Shut Down
21-Nov-23	15-Dec-23		7.7	49.4	Y	
28-Nov-23	15-Dec-23		7.7	46.4	Y	
5-Dec-23	15-Dec-23		7.6	45.3	Y	
12-Dec-23	15-Jan-24		7.6	45.0	Y	
19-Dec-23	15-Jan-24		7.6	40.7	Y	
9-Jan-24	12-Feb-24		7.9	42.8	Y	
16-Jan-24	12-Feb-24		7.8	45.5	Y	
23-Jan-24	12-Feb-24		7.5	44.3	Y	
30-Jan-24	12-Feb-24		7.3	45.3	Y	
6-Feb-24	18-Mar-24		7.7	45.7	Y	
13-Feb-24	18-Mar-24		7.8	46.7	Y	
19-Feb-24	18-Mar-24		7.2	40.0	Y	
27-Feb-24	18-Mar-24		7.8	40.5	Y	
5-Mar-24	18-Mar-24		7.8	40.5	Y	
12-Mar-24	15-Apr-24		7.7	44.8	Y	
19-Mar-24	19-Apr-24		7.9	45.4	Y	temp data manually extracted
26-Mar-24	19-Apr-24		7.6	36.0	Y	temp data manually extracted
2-Apr-24	19-Apr-24		7.7	38.4	Y	temp data manually extracted
9-Apr-24	19-Apr-24		7.8	35.6	Y	temp data manually extracted
						Shutdown

Sampling Point:	**Monitoring Point 4 - Drain 4 Torri Discharge**					
Licencee	Manildra Harwood Sugars					
Location	**Harwood Island, Harwood**					
EPL No	171					
Parameters Monitored	pH and Temperature (ºC)					
Frequency & Method	Fortnightly Representative Sample Insitu					
Limits	See Table					
Comments	Pecentile limits:	A 90 percentile limit means 90% of results must be below this prescribed limit. Maximum limit is the maximum permissable discharge value				
	Temperature	* A temperature limit of 50°C applies when only the refinery is operating and is indicated with Y. Conversely a temperature limit of 45ºC applies when the mill and refinery is operating indicated with N.				

		Licence Limits	pH	Temperature (°C)	50	
Date Sampled	**Date Published**	**90 Percentile Limit**		**45***	**Refinery Only Op**	**Notes**
		Maximum	**6.5 - 8.5**	**55**		
23-Apr-24	17-May-24		7.6	40.1	Y	temp data manually extracted
30-Apr-24	17-May-24		7.5	43.6	Y	temp data manually extracted
7-May-24	17-May-24		7.6	38.5	Y	very heavy rain over last 24hours/shut down 9th
13-May-24	14-Jun-24					Shut down
21-May-24	14-Jun-24		7.6	38.5	Y	
28-May-24	14-Jun-24		7.5	36.4	Y	
4-Jun-24	14-Jun-24		7.8	33.0	Y	
11-Jun-24	26-Jul-24		7.6	33.4	Y	
18-Jun-24	26-Jul-24		8.9	28.9	Y	
25-Jun-24	26-Jul-24		7.8	35.4	N	First Week Of Crush
2-Jul-24	26-Jul-24		7.8	30.8	N	
9-Jul-24	26-Jul-24		7.7	27.4	N	
16-Jul-24	16-Aug-24		7.8	30.7	N	
30-Jul-24	16-Aug-24		7.8	33.7	N	
6-Aug-24	16-Aug-24		7.6	33.5	N	
13-Aug-24	18-Sep-24		7.6	32.3	N	
20-Aug-24	18-Sep-24		7.1	33.2	N	
27-Aug-24	18-Sep-24		7.1	36.6	N	
10-Sep-24	18-Oct-24		7.5	39.2	N	Shutdown
17-Sep-24	18-Oct-24		7.6	35.9	N	
24-Sep-24	18-Oct-24		7.6	37.5	N	
1-Oct-24	18-Oct-24		7.7	37.0	N	
8-Oct-24	18-Oct-24		7.5	38.1	N	
15-Oct-24	18-Oct-24		7.5	39.1	N	
22-Oct-24	18-Nov-24		7.5	40.3	N	
5-Nov-24	18-Nov-24		7.5	42.3	N	
26-Nov-24	18-Nov-24		7.3	39.1	N	Mill not running 29/10/24
10-Dec-24	20-Dec-24		7.3	43.5	N	Mill shutdown 12/11/2024 & 19/11 /24 - Superheater Tubes
17-Dec-24	14-Jan-25		7.3	42.6	N	
7-Jan-25	14-Jan-25		7.6	40.1	N	
14-Jan-25	14-Feb-25		7.7	40.2	Y	Site shutdown Christmas 24/12 - 17/12
28-Jan-25	14-Feb-25		7.6	45.4	Y	Last day of 2024 crush 7/1
4-Feb-25	14-Mar-25		7.6	43.3	Y	
11-Feb-25	14-Mar-25		7.4	43.5	Y	
18-Feb-25	14-Mar-25		7.5	43.5	Y	
4-Mar-25	14-Mar-25		7.8	35.3	Y	
18-Mar-25	11-Apr-25		7.1	39.3	Y	
25-Mar-25	11-Apr-25		7.4	37.8	Y	
1-Apr-25	11-Apr-25		7.3	36.4	Y	
8-Apr-25	9-May-25		7.5	37.1	Y	
20-May-25	9-May-25		7.5	34.0	Y	
27-May-25	12-Jun-25		7.3	34.0	Y	
3-Jun-25	12-Jun-25		7.2	34.9	Y	
24-Jun-25	10-Jul-25		7.3	32.0	N	
8-Jul-25	10-Jul-25		7.5	32.8	N	
15-Jul-25	15-Aug-25		7.6	33.0	N	
22-Jul-25	15-Aug-25		7.7	27.8	N	
12-Aug-25	15-Sep-25		7.7	30.4	N	
19-Aug-25	15-Sep-25		7.5	33.8	N	
26-Aug-25	15-Sep-25		7.7	34.8	N	
2-Sep-25	15-Sep-25		7.4	35.2	N	
9-Sep-25	9-Oct-25		7.3	38.6	N	
16-Sep-25	9-Oct-25		7.3	38.6	N	
30-Sep-25	14-Nov-25		7.7	40.0	N	No samples sent 23/9/2025 Mill not running
7-Oct-25	14-Nov-25		7.7	45.7	N	
14-Oct-25	14-Nov-25		7.6	40.9	N	
21-Oct-25	14-Nov-25		7.6	39.6	N	
28-Oct-25	14-Nov-25		7.6	40.5	N	
4-Nov-25	14-Nov-25		7.6	37.4	N	
18-Nov-25	12-Dec-25		7.7	43.6	N	No samples sent 11/11/2025 due to Boiler shutdown
2-Dec-25	12-Dec-25		7.9	42.0	N	
6-Dec-25	16-Jan-26		7.6	43.6	N	Boiler Shutdown on 9/12/2025 - no samples collected
13-Jan-26	16-Feb-26		7.9	44.4	N	LAST WEEK OF 2025 CRUSH
27-Jan-26	16-Feb-26		7.9	43.0	Y	
3-Feb-26	16-Feb-26		7.9	42.9	Y	
10-Feb-26	16-Feb-26		7.9	43.4	Y	
17-Feb-26	20-Mar-26		7.7	44.6	Y	
24-Feb-26	20-Mar-26		7.9	44.8	Y	
3-Mar-26	20-Mar-26		7.9	44.7	Y	
10-Mar-26	20-Mar-26		7.9	47.6	Y	
17-Mar-26	20-Mar-26		7.8	50.1	Y	
24-Mar-26	17-Apr-26		7.8	48.8	Y	
31-Mar-26	17-Apr-26		7.7	49.6	Y	
14-Apr-26	17-Apr-26		7.9	47.5	Y	
21-Apr-26	15-May-26		7.7	47.1	Y	
2-Jun-26	15-May-26		7.7	40.8	Y	
9-Jun-26	12-Jun-26		7.7	43.2	Y	
16-Jun-26	17-Jul-26		7.7	44.3	Y	
23-Jun-26	17-Jul-26		7.6	45.0	Y	
7-Jul-26	17-Jul-26		7.7	47.0	N	
14-Jul-26	14-Aug-26		7.6	33.5	N	
28-Jul-26	14-Aug-26		7.6	42.9	N	
4-Aug-26	14-Aug-26		7.4	32.8	N	
11-Aug-26	18-Sep-26		7.8	36.5	N	
25-Aug-26	18-Sep-26		7.7	37.0	N	no EPA water collected 18/8/2062 as Mill in shutdown
1-Sep-26	18-Sep-26		7.8	36.7	N	
8-Sep-26	18-Sep-26		7.7	38.6	N	
15-Sep-26	16-Oct-26		7.6	37.9	N	
22-Sep-26	16-Oct-26		7.7	40.7	N	
6-Oct-26	16-Oct-26		7.9	38.7	N	
13-Oct-26	19-Nov-26		7.8	39.2	N	
3-Nov-26	19-Nov-26		7.5	40.2	N	No EPA collection 20-27/10/2026 as Mill shutdown
10-Nov-26	19-Nov-26		7.4	41.5	N	

Sampling Point:	**Monitoring Point 4 - Drain 4 Torri Discharge**
Licencee	Manildra Harwood Sugars
Location	**Harwood Island, Harwood**
EPL No	171
Parameter/s Monitored	**Volume (kilolitres/day)**
Frequency and Method	Continuous Online
Limit/s	90000 kL/day
Note: 1	The results in the table provide a summary of the minimum, maximum and mean daily volume discharged in kilolitres per day for the period and inludes the number of exceedences for period

MONITORING PERIOD				Volume (kL)			
Date Start	Date Finish	Date Received	Date Published	Minimum Daily Discharge	Maximum Daily Discharge	Mean Daily Discharge	Notes
1-Nov-22	13-Nov-22	17-Nov-22	16-Dec-22	43368	47018	45193	
14-Nov-22	27-Nov-22	8-Dec-22	16-Dec-22	43138	47159	45149	
28-Nov-22	11-Dec-22	20-Dec-22	16-Jan-23	42972	44230	43601	
12-Dec-22	25-Dec-22	3-Jan-23	16-Jan-23	32874	50492	41683	
3-Jan-23	15-Jan-23	17-Jan-23	17-Feb-23	12225	17522	14874	Non - Crush
15-Jan-23	29-Jan-23	2-Feb-23	17-Feb-23	12333	16105	14219	
29-Jan-23	12-Feb-23	20-Feb-23	17-Mar-23	15410	17180	16295	
13-Feb-23	27-Feb-23	9-Mar-23	17-Mar-23	0	16659	16659	Shutdown 1 week
28-Feb-23	12-Mar-23	15-Mar-23	17-Mar-23	13900	14755	14328	
13-Mar-23	26-Mar-23	28-Mar-23	18-Apr-23	11195	11558	11377	
27-Mar-23	9-Apr-23	12-Apr-23	18-Apr-23	14936	17421	16179	
10-Apr-23	23-Apr-23	3-May-23	11-May-23	0	16439	16439	No samples Easter Week
13-May-23	28-May-23	5-Jun-23	15-Jun-23	6118	10581	8350	
29-May-23	11-Jun-23	16-Jun-23	13-Jul-23	10547	10601	10574	
13-Jun-23	25-Jun-23	4-Jul-23	13-Jul-23	7953	8044	7999	
26-Jun-23	9-Jul-23	1-Aug-23	10-Aug-23	10239	16381	13310	
10-Jul-23	23-Jul-23	1-Aug-23	10-Aug-23	23106	34579	28842	
24-Jul-23	6-Aug-23	15-Aug-23	15-Sep-23	10778	35672	23225	mill shut down for Maint.
7-Aug-23	20-Aug-23	29-Aug-23	15-Sep-23	33554	36374	34964	
21-Aug-23	3-Sep-23	11-Sep-23	15-Sep-23	28073	37276	32675	
4-Sep-23	17-Sep-23	5-Oct-23	13-Oct-23	15986	33145	24566	
18-Sep-23	1-Oct-23	19-Oct-23	15-Dec-23	31532	32251	31891	
2-Oct-23	15-Oct-23	19-Oct-23	15-Dec-23	35537	38809	37173	
16-Oct-23	29-Oct-23	2-Nov-23	15-Dec-23	10626	40432	25529	crush finished.
31-Oct-23	12-Nov-23	29-Nov-23	15-Dec-23	12125	12890	12508	
13-Nov-23	26-Nov-23	29-Nov-23	15-Dec-23	0	13034	6517	Shut down
27-Nov-23	10-Dec-23	14-Dec-23	15-Dec-23	15314	16437	15876	
11-Dec-23	24-Dec-23	15-Jan-23	12-Feb-24	11481	14955	13218	
9-Jan-24	21-Jan-24	25-Jan-24	12-Feb-24	11404	17435	14420	
22-Jan-24	4-Feb-24	5-Feb-24	12-Feb-24	13980	17841	15911	
5-Feb-24	18-Feb-24	23-Feb-24	18-Mar-24	12930	13735	13333	
19-Feb-24	4-Mar-24	10-Mar-24	18-Mar-24	7964	15790	11877	3 days shut down
5-Mar-24	18-Mar-24	27-May-24	14-Jun-24	12348	12588	12468	
19-Mar-24	31-Mar-24	27-May-24	14-Jun-24	11440	13453	12447	
1-Apr-24	14-Apr-24	27-May-24	14-Jun-24	13780	19116	16448	
15-Apr-24	28-Apr-24	27-May-24	14-Jun-24	0	14962	14962	shutdown included
29-Apr-24	12-May-24	27-May-24	14-Jun-24	13749	14841	14295	
13-May-24	26-May-24	28-May-24	14-Jun-24	0	15024	15024	shutdown included
27-May-24	9-Jun-24	13-Jun-24	14-Jun-24	11094	12397	11746	
10-Jun-24	23-Jun-24	26-Jun-24	26-Jul-24	11100	13971	12536	
24-Jun-24	7-Jul-24	15-Jul-24	26-Jul-24	13506	17156	15331	
8-Jul-24	21-Jul-24	29-Jul-24	16-Aug-24	12630	27814	20222	
22-Jul-24	4-Aug-24	12-Aug-24	16-Aug-24	23485	36343	29914	
5-Aug-24	18-Aug-24	26-Aug-24	18-Sep-24	18900	38578	28739	
19-Aug-24	1-Sep-24	10-Sep-24	18-Sep-24	31716	50325	41020	
2-Sep-24	15-Sep-24	24-Sep-24	18-Oct-24	39990	47969	43979	
16-Sep-24	29-Sep-24	14-Oct-24	18-Oct-24	41678	43591	42634	
30-Oct-24	13-Oct-24	22-Oct-24	18-Nov-24	23461	39693	31577	
14-Oct-24	27-Oct-24	6-Nov-24	18-Nov-24	48361	49819	49090	

Sampling Point:	**Monitoring Point 4 - Drain 4 Torri Discharge**
Licencee	Manildra Harwood Sugars
Location	**Harwood Island, Harwood**
EPL No	171
Parameter/s Monitored	**Volume (kilolitres/day)**
Frequency and Method	Continuous Online
Limit/s	90000 kL/day
Note: 1	The results in the table provide a summary of the minimum, maximum and mean daily volume discharged in kilolitres per day for the period and inludes the number of exceedences for period

MONITORING PERIOD				Volume (kL)			
Date Start	**Date Finish**	**Date Received**	**Date Published**	**Minimum Daily Discharge**	**Maximum Daily Discharge**	**Mean Daily Discharge**	**Notes**
28-Oct-24	10-Nov-24	18-Nov-24	20-Dec-24	44758	55130	49944	
11-Nov-24	24-Nov-24	11-Dec-24	20-Dec-24	528	32666	16597	Shut down included - superheater tubes
25-Nov-24	8-Dec-24	31-Dec-24	14-Jan-25	29808	44701	37255	
9-Dec-24	22-Dec-24	31-Dec-24	14-Jan-25	49602	58785	54193	
23-Dec-24	5-Jan-25	29-Jan-25	14-Feb-25	20185	55404	37795	
6-Jan-25	19-Jan-25	29-Jan-25	14-Feb-25	25219	28635	26927	
20-Jan-25	2-Feb-25	2-Feb-25	14-Mar-25	17754	18509	18132	
3-Feb-25	16-Feb-25	20-Feb-25	14-Mar-25	18859	20222	19541	
17-Feb-25	2-Mar-25	19-Mar-25	11-Apr-25	19138	20547	19843	
3-Mar-25	16-Mar-25	19-Mar-25	11-Apr-25	11562	11562	11562	Shut down 1 week
17-Mar-25	30-Mar-25	4-Apr-25	11-Apr-25	20866	21193	21030	
31-Mar-25	13-Apr-25	16-Apr-25	9-May-25	16698	22431	19565	
20-May-25	1-Jun-25	13-Jun-25	10-Jul-25	12473	13035	12754	
2-Jun-25	15-Jun-25	25-Jun-25	10-Jul-25	15119	10102	12611	
16-Jun-25	29-Jun-25	9-Jul-25	10-Jul-25	13888	30549	22219	
30-Jun-25	13-Jul-25	16-Jul-25	15-Aug-25	24009	36287	30148	
14-Jul-25	27-Jul-25	5-Aug-25	15-Aug-25	20114	39232	29673	
28-Jul-25	10-Aug-25	21-Aug-25	15-Sep-25	29324	33548	31436	
11-Aug-25	24-Aug-25	27-Aug-25	15-Sep-25	22827	26059	24443	
25-Aug-25	14-Sep-25	22-Sep-25	9-Oct-25	26282	39198	32740	
15-Sep-25	21-Sep-25	30-Sep-25	9-Oct-25	27947	36994	32470	
22-Sep-25	5-Oct-25	16-Oct-25	14-Nov-25	41572	49749	45661	
6-Oct-25	19-Oct-25	31-Oct-25	14-Nov-25	50661	50695	50678	
20-Oct-25	2-Nov-25	25-Nov-25	12-Dec-25	40124	40443	40284	
3-Nov-25	16-Nov-25	25-Nov-25	12-Dec-25	10794	32724	21759	
17-Nov-25	30-Nov-25	9-Dec-25	12-Dec-25	8334	25597	16965	
1-Dec-25	14-Dec-25	9-Jan-26	16-Jan-26	45339	58140	51740	
15-Dec-25	28-Dec-25	9-Jan-26	16-Jan-26	8902	61078	34990	
29-Dec-25	11-Jan-26	21-Jan-26	16-Feb-26	47168	47958	47563	
12-Jan-26	20-Jan-26	18-Feb-26	20-Mar-26	12870	20005	16437	CRUSH completed 14/01/2026.
26-Jan-26	8-Feb-26	18-Feb-26	20-Mar-26	11774	17511	14643	
9-Feb-26	22-Feb-26	25-Feb-26	20-Mar-26	19192	20186	19689	
23-Feb-26	8-Mar-26	10-Mar-26	20-Mar-26	20273	21015	20644	
9-Mar-26	22-Mar-26	23-Mar-26	17-Apr-26	14933	17345	16139	
23-Mar-26	5-Apr-26	7-Apr-26	17-Apr-26	14856	16292	15574	
6-Apr-26	19-Apr-26	20-May-26	15-May-26	13574	13574	13574	
20-Apr-26	3-May-26	4-May-26	15-May-26	13741	13906	13824	
4-May-26	17-May-26	30-Jun-26	17-Jul-26	0	0	0	REFINERY/MILL SHUTDOWN
11-May-26	31-May-26	30-Jun-26	17-Jul-26	0	0	0	REFINERY/MILL SHUTDOWN
1-Jun-26	14-Jun-26	30-Jun-26	17-Jul-26	12917	13215	13066	
15-Jun-26	28-Jun-26	30-Jun-26	17-Jul-26	11160	34169	22665	Mill start up - 23/6/2026
29-Jun-26	12-Jul-26	16-Jul-26	17-Jul-26	21009	35444	28226	
13-Jul-26	26-Jul-26	4-Aug-26	14-Aug-26	18779	31287	25033	
27-Jul-26	9-Aug-26	17-Aug-26	18-Sep-26	33677	38973	36325	
10-Aug-26	23-Aug-26	27-Aug-26	18-Sep-26	20258	38167	29212	
24-Aug-26	6-Sep-26	15-Sep-26	18-Sep-26	33393	35309	34351	
7-Sep-26	20-Sep-26	14-Oct-26	16-Oct-26	36485	37451	36968	
21-Sep-26	4-Oct-26	14-Oct-26	16-Oct-26	32709	39833	36271	
5-Oct-26	18-Oct-26	28-Oct-26	19-Nov-26	35869	36367	36118	
19-Oct-26	1-Nov-26	12-Nov-26	19-Nov-26	9717	17928	13822	

Sampling Point:	**Monitoring Point 5 - Injection Water Inlet, Background River Water Quality**
Licencee	Manildra Harwood Sugars
Location	Harwood Island, Harwood
EPL No	171
Parameter/s Monitored	Biochemical Oxygen Demand and Total Suspended Solids (milligrams per litre)
Frequency & Method	Fortnightly Composite
Limits	Not Applicable - Data is used to determine compliance for BOD & TSS at monitoring point 4 by subtracting these background results from the results at point 4

Date Sampled	Date Results Obtained	Date Published	BOD_5 (mg/L)	TSS (mg/L)	Notes
1-Nov-22	8-Nov-22	11-Nov-22	1.4	11.0	
9-Nov-22	14-Nov-22	16-Dec-22	0.0	16.0	
15-Nov-22	22-Nov-22	16-Dec-22	2.2	7.7	
22-Nov-22	28-Nov-22	16-Dec-22	1.0	8.0	
29-Nov-22	7-Dec-22	16-Dec-22	2.6	8.7	
7-Dec-22	14-Dec-22	16-Dec-22	1.4	10.0	
13-Dec-22	20-Dec-22	16-Jan-23	2.9	3.0	
20-Dec-22	3-Jan-23	16-Jan-23	2.1	3.0	
3-Jan-23	9-Jan-23	16-Jan-23	0.0	12.0	
10-Jan-23	17-Jan-23	17-Feb-23	0.0	10.0	
17-Jan-23	24-Jan-23	17-Feb-23	2.0	10.0	
24-Jan-23	1-Feb-23	17-Feb-23	1.8	11.6	
31-Jan-23	9-Feb-23	17-Feb-23	0.0	134.0	
7-Feb-23	13-Feb-23	17-Feb-23	2.4	7.0	
14-Feb-23	20-Feb-23	17-Mar-03	0.0	3.0	
21-Jan-00	28-Feb-23				Shutdown - no samples
28-Feb-23	9-Mar-23	17-Mar-03	0.0	6.0	
7-Mar-23	15-Mar-23	17-Mar-03	0.0	13.8	
14-Mar-23	22-Mar-23	18-Apr-23	1.2	22.0	
21-Mar-23	26-Mar-23	18-Apr-23	0.0	27.0	
28-Mar-23	3-Apr-23	18-Apr-23	0.0	9.0	
4-Apr-23	14-Apr-23	18-Apr-23	1.0	9.0	
					no samples Easter Week
18-Apr-23	28-Apr-23	15-Jun-23	2.2	23.0	
					Shutdown - no samples
23-May-23	28-May-23	15-Jun-23	1.8	8.0	
30-May-23	5-Jun-23	15-Jun-23	1.4	8.0	
6-Jun-23	16-Jun-23	13-Jul-23	0.0	7.0	
					NO Samples
20-Jun-23	5-Jul-23	13-Jul-23	0.0	3.0	
27-Jun-23	4-Jul-23	13-Jul-23	0.0	3.0	
4-Jul-23	11-Jul-23	13-Jul-23	2.1	10.6	
11-Jul-23	17-Jul-23	10-Aug-23	0.0	10.8	
18-Jul-23	25-Jul-23	10-Aug-23	1.2	3.0	
					No Samples . Maint. Day
1-Aug-23	7-Aug-23	10-Aug-23	0.0	5.0	
8-Aug-23	14-Aug-23	15-Sep-23	1.9	0.0	
15-Aug-23	22-Aug-23	15-Sep-23	2.1	4.0	
22-Aug-23	29-Aug-23	15-Sep-23	1.8	5.0	
29-Aug-23	5-Sep-23	15-Sep-23	1.5	7.0	
5-Sep-23	11-Sep-23	15-Sep-23	0.0	7.0	
12-Sep-23	19-Sep-23	13-Oct-23	3.9	9.0	
20-Sep-23	25-Sep-23	13-Oct-23	3.5	10.0	
26-Sep-23	5-Oct-23	13-Oct-23	2.9	13.0	
3-Oct-23	11-Oct-23	13-Oct-23	1.1	3.0	
10-Oct-23	19-Oct-23	15-Dec-23	0.0	4.0	
17-Oct-23	23-Oct-23	15-Dec-23	1.6	9.0	
24-Oct-23	1-Nov-23	15-Dec-23	0.0	5.0	
31-Oct-23	8-Nov-23	15-Dec-23	0.0	7.0	

Sampling Point:	**Monitoring Point 5 - Injection Water Inlet, Background River Water Quality**
Licencee	Manildra Harwood Sugars
Location	Harwood Island, Harwood
EPL No	171
Parameter/s Monitored	Biochemical Oxygen Demand and Total Suspended Solids (milligrams per litre)
Frequency & Method	Fortnightly Composite
Limits	Not Applicable - Data is used to determine compliance for BOD & TSS at monitoring point 4 by subtracting these background results from the results at point 4

Date Sampled	Date Results Obtained	Date Published	BOD_5 (mg/L)	TSS (mg/L)	Notes
7-Nov-23	13-Nov-23	15-Dec-23	0.0	14.0	
14-Nov-23	19-Nov-23				Shutdown - no samples
21-Nov-23	26-Nov-23	15-Dec-23	0.0	15.9	
28-Nov-23	4-Dec-23	15-Dec-23	0.0	15.3	
5-Dec-23	13-Dec-23	15-Dec-23	2.6	15.4	
12-Dec-23	18-Dec-23	15-Jan-24	1.4	27.0	
19-Dec-23	24-Dec-23	15-Jan-24	0.0	17.0	
9-Jan-23	16-Jan-24	12-Feb-24	0.0	17.0	
16-Jan-24	25-Jan-24	12-Feb-24	1.3	8.0	
23-Jan-24	29-Jan-24	12-Feb-24	1.7	17.0	
30-Jan-24	5-Feb-24	12-Feb-24	0.0	25.0	
6-Feb-24	12-Feb-24	18-Mar-24	0.0	13.0	
13-Feb-24	23-Feb-24	18-Mar-24	0.0	36.0	
19-Feb-24	26-Feb-24	18-Mar-24	2.1	14.0	
27-Feb-24	4-Mar-24	18-Mar-24	0.0	20.0	
5-Mar-24	11-Mar-24	18-Mar-24	1.6	9.0	
12-Mar-24	18-Mar-24	15-Apr-24	0.0	16.0	
19-Mar-24	25-Mar-24	19-Apr-24	1.5	11.0	
26-Mar-24	2-Apr-24	19-Apr-24	1.1	7.0	
2-Apr-24	8-Apr-24	19-Apr-24	0.0	16.0	
9-Apr-24	15-Apr-24	19-Apr-24	0.0	34.0	
					Shutdown - no samples
23-Apr-24	29-Apr-24	17-May-24	1.9	11.0	
30-Apr-24	7-May-24	17-May-24	0.0	16.0	
7-May-24	13-May-24	17-May-24	1.8	12.0	
13-May-24	19-May-24				Shutdown - no samples
21-May-24	27-May-24	14-Jun-24	1.2	4.0	
28-May-24	2-Apr-24	14-Jun-24	0.0	11.0	
4-Jun-24	11-Jun-24	14-Jun-24	1.1	9.0	
11-Jun-24	17-Jun-24	26-Jul-24	0.0	11.0	
18-Jun-24	26-Jun-24	26-Jul-24	4.6	5.0	
25-Jun-24	2-Jul-24	26-Jul-24	0.0	5.0	
2-Jul-24	8-Jul-24	26-Jul-24	1.0	4.0	
9-Jul-24	15-Jul-24	26-Jul-24	0.0	7.0	
16-Jul-24	29-Jul-24	16-Aug-24	1.7	3.0	
30-Jul-24	6-Aug-24	16-Aug-24	2.1	3.0	
6-Aug-24	12-Aug-24	16-Aug-24	1.1	7.0	
13-Aug-24	21-Aug-24	18-Sep-24	0.0	10.0	
20-Aug-24	26-Aug-24	18-Sep-24	3.7	17.0	
27-Aug-24	2-Sep-24	18-Sep-24	1.3	15.0	
					Shut down
10-Sep-24	19-Sep-24	18-Oct-24	1.9	8.0	
17-Sep-24	23-Sep-24	18-Oct-24	0.0	9.0	
24-Sep-24	1-Oct-24	18-Oct-24	2.4	3.0	
1-Oct-24	8-Oct-24	18-Oct-24	0.0	8.0	
8-Oct-24	16-Oct-24	18-Oct-24	2.4	8.0	
15-Oct-24	22-Oct-24	18-Oct-24	1.0	10.0	
22-Oct-24	5-Nov-24	18-Nov-24	0.0	10.0	

Sampling Point:	**Monitoring Point 5 - Injection Water Inlet, Background River Water Quality**
Licencee	Manildra Harwood Sugars
Location	Harwood Island, Harwood
EPL No	171
Parameter/s Monitored	Biochemical Oxygen Demand and Total Suspended Solids (milligrams per litre)
Frequency & Method	Fortnightly Composite
Limits	Not Applicable - Data is used to determine compliance for BOD & TSS at monitoring point 4 by subtracting these background results from the results at point 4

Date Sampled	Date Results Obtained	Date Published	BOD_5 (mg/L)	TSS (mg/L)	Notes
5-Nov-24	14-Nov-24	18-Nov-24	3.0	5.0	Mill not running 29/10/24
26-Nov-24	10-Dec-24	18-Nov-24	1.5	15.0	Mill shutdown 12/11/2024 & 19/11 /24 - Superheater Tubes
10-Dec-24	2-Jan-25	20-Dec-24	0.0	0.0	
17-Dec-24	2-Jan-25	14-Jan-25	1.2	20.0	
7-Jan-25	14-Jan-25	14-Jan-25	5.0	15.1	Mill Christmas shutdown 24/12 - 27/12
14-Jan-25	28-Jan-25	14-Feb-25	1.4	8.0	Last day of 2024 crush 7/1
28-May-25	6-Feb-25	14-Feb-25	1.3	15.0	
4-Feb-25	13-Feb-25	14-Mar-25	13.9	17.0	
11-Feb-25	19-Feb-25	14-Mar-25	4.9	23.0	
18-Feb-25	24-Feb-25	14-Mar-25	1.7	7.1	
4-Mar-25	19-Mar-25	14-Mar-25	0.0	12.0	No Samples
18-Mar-25	3-Apr-25	11-Apr-25	10.3	18.0	
25-Mar-25	3-Apr-25	11-Apr-25	7.6	12.0	
1-Apr-25	11-Apr-25	11-Apr-25	8.0	18.0	
8-Apr-25	22-Apr-25	9-May-25	10.6	14.0	
20-May-25	28-May-25	9-May-25	5.7	14.0	
27-May-25	3-Jun-25	12-Jun-25	4.1	46.0	
3-Jun-25	13-Jun-25	12-Jun-25	35.6	13.0	
24-Jun-25	30-Jun-25	10-Jul-25	2.8	9.0	
8-Jul-25	15-Jul-25	10-Jul-25	3.2	5.8	
15-Jul-25	28-Jul-25	15-Aug-25	22.9	5.0	
22-Jul-25	28-Jul-25	15-Aug-25	3.2	4.0	
12-Aug-25	20-Aug-25	15-Sep-25	84.0	13.0	
19-Aug-25	27-Aug-25	15-Sep-25	2.0	5.0	
26-Aug-25	3-Sep-25	15-Sep-25	2.9	12.0	
2-Sep-25	10-Sep-25	15-Sep-25	2.5	16.0	
9-Sep-25	19-Sep-25	9-Oct-25	2.6	13.0	
16-Sep-25	23-Sep-25	9-Oct-25	2.6	7.0	
30-Sep-25	10-Oct-25	14-Nov-25	2.4	2.0	No samples sent 23/9/2025 Mill not running
7-Oct-25	16-Oct-25	14-Nov-25	2.7	12.0	
14-Oct-25	23-Oct-25	14-Nov-25	2.5	4.0	
21-Oct-25	31-Oct-25	14-Nov-25	2.2	11.0	
28-Oct-25	5-Nov-25	14-Nov-25	2.4	8.0	
4-Nov-25	10-Nov-25	14-Nov-25	0.0	44.0	
18-Nov-25	25-Nov-25	12-Dec-25	5.1	9.0	No samples sent 11/11/2025 due to Boiler Shutdown
2-Dec-25	9-Dec-25	12-Dec-25	1.8	12.0	
16-Dec-25	9-Jan-26	16-Jan-26	1.0	9.0	No samples collected 9/12/2025 due to Boiler Shutdown
13-Jan-26	27-Jan-26	16-Feb-26	2.6	5.0	LAST WEEK OF 2025 CRUSH
27-Jan-26	10-Feb-26	16-Feb-26	0.0	18.0	
3-Feb-26	16-Feb-26	16-Feb-26	1.1	13.0	
10-Feb-26	23-Feb-26	16-Feb-26	1.1	7.0	
17-Feb-26	2-Mar-26	20-Mar-26	2.1	6.0	
24-Feb-26	9-Mar-26	20-Mar-26	1.7	5.0	
3-Mar-26	16-Mar-26	20-Mar-26	1.9	14.0	
10-Mar-26	23-Mar-26	20-Mar-26	2.0	24.0	
17-Mar-26	1-Apr-26	20-Mar-26	1.3	14.0	
24-Mar-26	7-Apr-26	17-Apr-26	2.2	18.0	
31-Mar-26	20-Apr-26	17-Apr-26	1.3	2.0	
14-Apr-26	29-Apr-26	17-Apr-26	1.0	27.0	
21-Apr-26	10-Jun-26	15-May-26	2.1	4.0	
2-Jun-26	10-Jun-26	15-May-26	2.1	4.0	
9-Jun-26	22-Jun-26	12-Jun-26	1.9	7.0	
16-Jun-26	22-Jun-26	17-Jul-26	2.6	6.0	
23-Jun-26	29-Jun-26	17-Jul-26	0.0	6.0	
7-Jul-26	13-Jul-26	17-Jul-26	2.0	6.0	
14-Jul-26	20-Jul-26	14-Aug-26	0.0	8.0	
28-Jul-26	3-Aug-26	14-Aug-26	1.4	7.0	
4-Aug-26	13-Aug-26	14-Aug-26	1.5	16.0	
11-Aug-26	17-Aug-26	18-Sep-26	1.3	14.0	
25-Aug-26	31-Aug-26	18-Sep-26	1.2	10.0	
1-Sep-26	7-Sep-26	18-Sep-26	1.6	3.0	
8-Sep-26	14-Sep-26	18-Sep-26	1.7	7.0	
15-Sep-26	21-Sep-26	16-Oct-26	2.1	23.0	
22-Sep-26	29-Sep-26	16-Oct-26	1.9	9.0	
6-Oct-26	14-Oct-26	16-Oct-26	0.0	10.0	BOD for Injection water = <1
13-Oct-26	19-Oct-26	19-Nov-26	2.2	4.0	
3-Nov-26	11-Nov-26	19-Nov-26	9.6	16.0	No EPA collection 20-27/10/2026 as Mill shutdown
10-Nov-26	16-Nov-26	19-Nov-26	1.7	14.0	

Sampling Point:	**Monitoring Point 5 - Injection Water Inlet, Background River Water Quality**
Licencee	Manildra Harwood Sugars
Location	Harwood Island, Harwood
EPL No	171
Parameters Monitored	pH and Temperature (ºC)
Frequency & Method	Fortnightly Representative Insitu
Limits	Not Applicable - Data is used to determine compliance for BOD & TSS at monitoring point 4 by subtracting these background results from the results at point 4

Date Sampled	Date Results Obtained	Date Published	pH	Temp (ºC)	Notes
1-Nov-22	8-Nov-22	11-Nov-22	7.2	22.5	
9-Nov-22	14-Nov-22	16-Dec-22	7.2	22.8	
15-Nov-22	22-Nov-22	16-Dec-22	7.3	24.5	
22-Nov-22	28-Nov-22	16-Dec-22	7.7	25.2	
29-Nov-22	7-Dec-22	16-Dec-22	7.6	24.8	
7-Dec-22	14-Dec-22	16-Dec-22	7.8	25.0	
13-Dec-22	20-Dec-22	16-Jan-23	7.6	25.7	
20-Dec-22	3-Jan-23	16-Jan-23	8.0	24.2	
3-Jan-23	9-Jan-23	16-Jan-23	7.9	26.6	
10-Jan-23	17-Jan-23	17-Feb-23	7.9	27.0	
17-Jan-23	24-Jan-23	17-Feb-23	7.9	27.5	
24-Jan-23	1-Feb-23	17-Feb-23	7.9	27.4	
31-Jan-23	9-Feb-23	17-Feb-23	8.0	28.3	
7-Feb-23	13-Feb-23	17-Feb-23	7.9	28.3	
14-Feb-23	20-Feb-23	17-Mar-03	8.0	27.4	
21-Jan-00	28-Feb-23				Shutdown - no samples
28-Feb-23	9-Mar-23	17-Mar-03	8.0	26.6	
7-Mar-23	15-Mar-23	17-Mar-03	8.1	26.6	
14-Mar-23	22-Mar-23	18-Apr-23	7.9	26.6	
21-Mar-23	26-Mar-23	18-Apr-23	7.7	27.4	
28-Mar-23	3-Apr-23	18-Apr-23	7.9	26.7	
4-Apr-23	14-Apr-23	18-Apr-23	7.9	24.9	
					no samples Easter Week
18-Apr-23	28-Apr-23	15-Jun-23	7.9	22.8	
					Shutdown - no samples
23-May-23	28-May-23	15-Jun-23	7.7	18.3	
30-May-23	5-Jun-23	15-Jun-23	8.0	18.0	
6-Jun-23	16-Jun-23	13-Jul-23	7.7	18.5	
20-Jun-23	5-Jul-23	13-Jul-23	7.9	16.9	
27-Jun-23	4-Jul-23	13-Jul-23	7.9	16.4	
4-Jul-23	11-Jul-23	13-Jul-23	7.8	16.1	
11-Jul-23	17-Jul-23	10-Aug-23	7.9	16.4	
18-Jul-23	25-Jul-23	10-Aug-23	7.8	17.1	
25-Jul-23					No Samples . Maint. Day
1-Aug-23	7-Aug-23	10-Aug-23	7.8	18.3	
8-Aug-23	14-Aug-23	15-Sep-23	7.8	18.4	
15-Aug-23	22-Aug-23	15-Sep-23	7.8	19.2	
22-Sep-23	29-Aug-23	15-Sep-23	7.7	19.0	
29-Aug-23	5-Sep-23	15-Sep-23	7.8	19.9	
5-Sep-23	11-Sep-23	15-Sep-23	7.7	21.0	
12-Sep-23	19-Sep-23	13-Oct-23	7.8	20.6	
20-Sep-23	25-Sep-23	13-Oct-23	7.9	21.6	
26-Sep-23	5-Oct-23	13-Oct-23	7.8	21.8	
3-Oct-23	11-Oct-23	13-Oct-23	7.7	23.1	
10-Oct-23	19-Oct-23	15-Dec-23	7.9	22.6	
17-Oct-23	23-Oct-23	15-Dec-23	7.8	22.9	
24-Oct-23	1-Nov-23	15-Dec-23	7.8	24.1	
31-Oct-23	8-Nov-23	15-Dec-23	7.7	23.2	

Sampling Point:	**Monitoring Point 5 - Injection Water Inlet, Background River Water Quality**
Licencee	Manildra Harwood Sugars
Location	Harwood Island, Harwood
EPL No	171
Parameters Monitored	pH and Temperature (ºC)
Frequency & Method	Fortnightly Representative Insitu
Limits	Not Applicable - Data is used to determine compliance for BOD & TSS at monitoring point 4 by subtracting these background results from the results at point 4

Date Sampled	Date Results Obtained	Date Published	pH	Temp (ºC)	Notes
7-Nov-23	13-Nov-23	15-Dec-23	7.6	23.3	
14-Nov-23	19-Nov-23				Shutdown - no samples
21-Nov-23	26-Nov-23	15-Dec-23	7.6	24.8	
28-Nov-23	4-Dec-23	15-Dec-23	7.6	26.0	
5-Dec-23	13-Dec-23	15-Dec-23	7.6	27.7	
12-Dec-23	18-Dec-23	15-Jan-24	7.6	28.2	
19-Dec-23	24-Dec-23	15-Jan-24	7.6	27.9	
9-Jan-24	16-Jan-24	12-Feb-24	7.8	27.9	
16-Jan-24	25-Jan-24	12-Feb-24	7.7	27.6	
23-Jan-24	29-Jan-24	12-Feb-24	7.2	27.5	
30-Jan-24	5-Feb-24	12-Feb-24	7.1	28.8	
6-Feb-24	12-Feb-24	18-Mar-24	7.7	27.9	
13-Feb-24	23-Feb-24	18-Mar-24	7.4	28.1	
19-Feb-24	26-Feb-24	18-Mar-24	7.5	28.8	
27-Feb-24	4-Mar-24	18-Mar-24	7.5	24.6	
5-Mar-24	11-Mar-24	18-Mar-24	7.8	24.6	
12-Mar-24	18-Mar-24	15-Apr-24	7.6	24.3	temp data manually extracted
19-Mar-24	25-Mar-24	19-Apr-24	8.0	25.7	temp data manually extracted
26-Mar-24	2-Apr-24	19-Apr-24	7.6	23.5	temp data manually extracted
2-Apr-24	8-Apr-24	19-Apr-24	7.8	24.7	temp data manually extracted
9-Apr-24	15-Apr-24	19-Apr-24	7.3	23.3	temp data manually extracted
					Shutdown - no samples
23-Apr-24	29-Apr-24	17-May-24	7.6	19.1	temp data manually extracted
30-Apr-24	7-May-24	17-May-24	7.4	22.3	temp data manually extracted
7-May-24	13-May-24	17-May-24	7.5	20.7	temp data manually extracted
13-May-24	19-May-24				Shutdown - no samples
21-May-24	27-May-24	14-Jun-24	7.4	19.1	
28-May-24	2-Apr-24	14-Jun-24	7.6	19.5	
4-Jun-24	11-Jun-24	14-Jun-24	7.9	18.7	
11-Jun-24	17-Jun-24	26-Jul-24	7.7	17.8	
18-Jun-24	26-Jun-24	26-Jul-24	9.3	17.9	
25-Jun-24	2-Jul-24	26-Jul-24	7.7	17.0	First Week Of Crush
2-Jul-24	8-Jul-24	26-Jul-24	7.8	17.3	
9-Jul-24	15-Jul-24	26-Jul-24	7.6	17.6	
16-Jul-24	29-Jul-24	16-Aug-24	7.9	16.8	
30-Jul-24	6-Aug-24	16-Aug-24	8.0	16.6	
6-Aug-24	12-Aug-24	16-Aug-24	7.8	17.4	
13-Aug-24	21-Aug-24	18-Sep-24	7.5	17.5	
20-Aug-24	26-Aug-24	18-Sep-24	7.1	18.5	
27-Aug-24	2-Sep-24	18-Sep-24	7.0	20.5	
					Shut down
10-Sep-24	19-Sep-24	18-Oct-24	7.4	21.8	
17-Sep-24	23-Sep-24	18-Oct-24	7.7	20.6	
24-Sep-24	1-Oct-24	18-Oct-24	7.7	21.2	
1-Oct-24	8-Oct-24	18-Oct-24	7.6	21.0	
8-Oct-24	16-Oct-24	18-Oct-24	7.5	22.6	
15-Oct-24	22-Oct-24	18-Oct-24	7.5	22.5	
22-Oct-24	5-Nov-24	18-Nov-24	7.5	24.2	

Sampling Point:	**Monitoring Point 5 - Injection Water Inlet, Background River Water Quality**
Licencee	Manildra Harwood Sugars
Location	Harwood Island, Harwood
EPL No	171
Parameters Monitored	pH and Temperature (ºC)
Frequency & Method	Fortnightly Representative Insitu
Limits	Not Applicable - Data is used to determine compliance for BOD & TSS at monitoring point 4 by subtracting these background results from the results at point 4

Date Sampled	Date Results Obtained	Date Published	pH	Temp (ºC)	Notes
5-Nov-24	14-Nov-24	18-Nov-24	7.6	26.3	Mill not running 29/10/24
26-Nov-24	10-Dec-24	18-Nov-24	7.2	26.3	Mill shutdown 12/11/2024 & 19/11 /24 - Superheater Tubes
10-Dec-24	2-Jan-25	20-Dec-24	7.2	27.9	
17-Dec-24	2-Jan-25	14-Jan-25	7.2	27.9	
7-Jan-25	14-Jan-25	14-Jan-25	7.7	27.9	Mill Christmas shutdown 24/12 - 27/12
14-Jan-25	28-Jan-25	14-Feb-25	7.7	27.6	Last day of 2024 crush 7/1
28-May-25	6-Feb-25	14-Feb-25	7.6	28.4	
4-Feb-25	13-Feb-25	14-Mar-25	7.8	27.2	
11-Feb-25	19-Feb-25	14-Mar-25	7.6	28.6	
18-Feb-25	24-Feb-25	14-Mar-25	7.5	28.0	
4-Mar-25	19-Mar-25	14-Mar-25	7.7	27.1	No Samples
18-Mar-25	3-Apr-25	11-Apr-25	6.9	24.9	
25-Mar-25	3-Apr-25	11-Apr-25	7.3	24.8	
1-Apr-25	11-Apr-25	11-Apr-25	7.2	22.1	
8-Apr-25	22-Apr-25	9-May-25	7.2	22.3	
20-May-25	28-May-25	9-May-25	7.5	19.5	
27-May-25	3-Jun-25	12-Jun-25	7.1	18.7	
3-Jun-25	13-Jun-25	12-Jun-25	7.1	17.9	
24-Jun-25	30-Jun-25	10-Jul-25	7.3	17.0	
8-Jul-25	15-Jul-25	10-Jul-25	7.5	16.8	
15-Jul-25	28-Jul-25	15-Aug-25	7.8	16.4	
22-Jul-25	28-Jul-25	15-Aug-25	7.8	16.3	
12-Aug-25	20-Aug-25	15-Sep-25	7.5	16.4	
19-Aug-25	27-Aug-25	15-Sep-25	7.4	16.9	
26-Aug-25	3-Sep-25	15-Sep-25	7.4	17.9	
2-Sep-25	10-Sep-25	15-Sep-25	7.3	18.8	
9-Sep-25	19-Sep-25	9-Oct-25	7.2	20.7	
16-Sep-25	23-Sep-25	9-Oct-25	7.4	20.7	
30-Sep-25	10-Oct-25	14-Nov-25	7.8	23.1	No samples sent 23/9/2025 Mill not running
7-Oct-25	16-Oct-25	14-Nov-25	7.7	24.4	
14-Oct-25	23-Oct-25	14-Nov-25	7.6	25.2	
21-Oct-25	31-Oct-25	14-Nov-25	7.7	25.4	
28-Oct-25	5-Nov-25	14-Nov-25	7.7	24.6	
4-Nov-25	10-Nov-25	14-Nov-25	7.7	26.1	
18-Nov-25	25-Nov-25	12-Dec-25	7.8	24.8	No samples sent 11/11/2025 due to Boiler Shutdown
2-Dec-25	9-Dec-25	12-Dec-25	8.0	26.7	
16-Dec-25	9-Jan-26	16-Jan-26	7.8	27.5	No samples collected 9/12/2025 due to Boiler Shutdown
13-Jan-26	27-Jan-26	16-Feb-26	8.0	28.1	LAST WEEK OF 2025 CRUSH
27-Jan-26	10-Feb-26	16-Feb-26	8.0	27.9	
3-Feb-26	16-Feb-26	16-Feb-26	7.9	27.0	
10-Feb-26	23-Feb-26	16-Feb-26	8.0	27.7	
17-Feb-26	2-Mar-26	20-Mar-26	7.9	26.9	
24-Feb-26	9-Mar-26	20-Mar-26	8.0	28.0	
3-Mar-26	16-Mar-26	20-Mar-26	8.0	27.4	
10-Mar-26	23-Mar-26	20-Mar-26	8.0	26.9	
17-Mar-26	1-Apr-26	20-Mar-26	8.0	26.2	
24-Mar-26	7-Apr-26	17-Apr-26	7.9	26.1	
31-Mar-26	20-Apr-26	17-Apr-26	7.9	25.0	
14-Apr-26	29-Apr-26	17-Apr-26	8.1	24.7	
21-Apr-26	10-Jun-26	15-May-26	8.0	22.6	
2-Jun-26	10-Jun-26	15-May-26	7.8	19.1	
9-Jun-26	22-Jun-26	12-Jun-26	7.8	18.4	
16-Jun-26	22-Jun-26	17-Jul-26	7.5	19.3	
23-Jun-26	29-Jun-26	17-Jul-26	7.6	18.7	
7-Jul-26	13-Jul-26	17-Jul-26	7.8	17.6	
14-Jul-26	20-Jul-26	14-Aug-26	7.7	17.3	
28-Jul-26	3-Aug-26	14-Aug-26	7.6	17.6	
4-Aug-26	13-Aug-26	14-Aug-26	7.6	17.8	
11-Aug-26	17-Aug-26	18-Sep-26	7.8	18.0	
25-Aug-26	31-Aug-26	18-Sep-26	7.8	19.6	No EPA collection done last week as Mill was in shutdown
1-Sep-26	7-Sep-26	18-Sep-26	7.8	20.7	
8-Sep-26	14-Sep-26	18-Sep-26	7.9	21.4	
15-Sep-26	21-Sep-26	16-Oct-26	7.7	21.1	
22-Sep-26	29-Sep-26	16-Oct-26	7.9	22.0	
6-Oct-26	14-Oct-26	16-Oct-26	8.0	22.6	
13-Oct-26	19-Oct-26	19-Nov-26	7.8	23.1	
3-Nov-26	11-Nov-26	19-Nov-26	7.7	24.4	No EPA collection 20-27/10/2026 as Mill shutdown
10-Nov-26	16-Nov-26	19-Nov-26	7.3	25.2	

Licencee **Manildra Harwood Sugars**
Location Harwood Island, Harwood
EPL No 171

CORRECTIONS LOG

Date / Period	Monitoring Point	Pollutant/Parameter	Original Data	Corrected Data	Date Corrected	Date Originally Published	Reason
12/03/2024 - 17/03/2024	Point 4	Torri Temp	NIL	45	24/05/24	15/04/24	database crashed - manually pulled from VNP
18/03/2024-24/03/2024	Point 4	Torri Temp	NIL	45	24/05/24	19/04/24	database crashed - manually pulled from VNP
25/03/2024-31/03/2024	Point 4	Torri Temp	NIL	36	24/05/24	19/04/24	database crashed - manually pulled from VNP
01/04/2024-07/04/2024	Point 4	Torri Temp	NIL	38	24/05/24	19/04/24	database crashed - manually pulled from VNP
08/04/2024-14/04/2024	Point 4	Torri Temp	NIL	36	24/05/24	19/04/24	database crashed - manually pulled from VNP
12/03/2024 - 17/03/2024	Background River	Injection water	NIL	24	24/05/24	15/04/24	database crashed - manually pulled from VNP
18/03/2024-24/03/2024	Background River	Injection water	NIL	26	24/05/24	19/04/24	database crashed - manually pulled from VNP
25/03/2024-31/03/2024	Background River	Injection water	NIL	24	24/05/24	19/04/24	database crashed - manually pulled from VNP