

Regain SPL Reprocessing Facility - Tomago Aluminium Smelter

Environmental Pollution Monitoring - Obtained Data

Environment Protection Licence Point 1 - Rotary Kiln Stack

Required Frequency - Bi-Annually

Draft Regulatory Limit and Test Period	Material Processed	Carbon Monoxide (mg/cu m)	Cyanide (mg/cu m)	Dioxins and Furans - Lower Bound (ng/cu m)	Dioxins and Furans - Middle Bound (ng/cu m)	Dry Gas Density (n.a.)	Fine Particulate (mg/cu m)	Flow (cu m/sec)	Moisture (%)	Nitrogen Oxides (mg/cu m)	Oxygen (O2) (%)	Polycyclic Aromatic Hydrocarbons (mg/cu m)	Sulphur Dioxide (mg/cu m)	Temperature (deg celcius)	Total Fluoride (mg/cu m)	Total Particulate (mg/cu m)	Type 1 & Type 2 Substances in Aggregate (mg/cu m)	Cadmium (mg/cu m)	Velocity (m/sec)	Volatile Organic Compounds (mg/m <sup>3</sup> )	Date Sampled	Date Obtained	Date Published	
Current Draft Regulatory Limit		tba	1.0	<-----0.1 in total----->		n.a.	10	n.a.	n.a.	25	n.a.	0.2	25	n.a.	5	20	0.5	0.025	n.a.	10				
Dec 2012 to Feb 2013	First Cut SPL	136	See Note 2	0.0045	0.0053	1.29	2.8	11.3	2.5	3	20.23	0.096	0	81.5	0.7	1.9	0.019 <		17.3	n.a.	26/27 Feb 13	31-Oct-13	8-Nov-13	
	Second Cut SPL	116	See Note 2	0.00021	0.00099	1.29	0.27	10.7	3.1	1	21.3	0.056	0	81.3	1.4	1.1	0.02	0.0049	16.7	n.a.				
Mar 2012 to May 2013	First Cut SPL	116	See Note 2	0.00066	0.00098	1.21	0.26	6.2	2.1	7	20.32	0.085	4	76.9	0.098	2.7	0.1	0.0077	9.7	n.a.	23&27 May 13	31-Oct-13	8-Nov-13	
	Second Cut SPL	59	See Note 2	0.0011	0.0017	1.29	1.2	8.2	1.7	10	20.49	0.011	5	78	0.089	0.56	0.1	0.0047	13	n.a.				
Note 1 - Plant under commissioning during August and September. Sampling deferred until October.																								
Note 2 - Cyanide sampling method not specified and under development during December, 2012 and March, 2013.																								
Note 3 - Test results from February and May 2013 sampling made available after verification of testing methods																								
Note 4 - Monitoring test for Poly Aromatic Hydrocabons for second cut SPL material not performed in October due to abnormal conditions (test to be performed in November)																								
Jun, Jul, Oct 2013	First Cut SPL	57	0.19	0.00067	0.003	1.29	1.4	11	2.2	10	20.45	0.16	8	76.3	0.077	0.92	0.016	0.0082	17	n.a.	3 & 8 Oct 13	31 Oct and 18 Nov 2013	8 Nov and 29 Nov 2013	
	Second Cut SPL	58	0.044	0.003	0.0033	1.29	4.8	10.8	3.3	9	20.32	See Note 4	2	74.8	0.26	<0.34	0.064	0.0061	16.8	n.a.				
Nov 2013 (Supplementary testing)	First Cut SPL	n.a.	<0.11	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.21	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	14 & 20 November	16-Dec-13	20-Dec-13
	Second Cut SPL	n.a.	<0.084	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.			
	First Cut SPL	n.a.	0.86	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.			
	Second Cut SPL	n.a.	0.095	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.			
Note 5 - Two monitoring tests for cyanide were performed in November after development of cyanide sampling method in October 2013																								
Note 6 - Single monitoring test for Aromatic Hydrocabons for second cut SPL material not performed in October due to abnormal conditions was done in November																								
Feb-14	First Cut SPL	8	0.0037	0.0011	0.0017	1.29	0.54	6.4	3.3	7	20.4	0.4	13	77.8	0.42	<0.28	0.013	0.0018	13.3	n.a.	17 & 21 Feb 14	28-Mar-14	29-Mar-14	
	Second Cut SPL	56	0.021	0.0033	0.00072	1.29	3.1	8.6	3	8	20.3	0.039	9	78.9	0.6	1.9	0.028	0.015	18	n.a.				
Sep-14	First Cut SPL	112	<0.0031	0.0086	0.013	1.29	5.6	8.03	2.27	11	20.01	0.41	<3	80.3	0.85	8.7	0.03	<0.00016	17	5.8	24-25 Sept 14	5-Nov-14	28-Nov-14	
	Second Cut SPL	112	<0.0028	0.016	0.02	1.29	2.1	8.3	3.03	1	20.29	0.19	<3	71.7	0.57	8.2	0.0054	<0.0002	17	0.3				
Note 7 - The addition of a 100 percentile concentration limit for volatile organic compounds at Point 1 (condition L2.3)																								
Mar - May 2015	First Cut SPL	56	0.1	0.0007	0.0011	1.29	7	8.8	3	4	20.24	0.0061	<0.1	77.5	1.8	8.9	0.12	0.0016	18.3	2.6	Mar - May 2015	17-Jun-15	19-Jun-15	
	Second Cut SPL	31	0.7	0.00036	0.00084	1.29	6.6	8.7	3.5	6	20.49	0.0058	<0.1	76.5	2.7	3.8	0.066	0.0036	18.5	3.3				
Oct - Nov 2015	First Cut SPL	121	0.0075	0.0036	0.0041	28.9	1.4	7.9	2.8	5	20.12	0.23	<1	85.4	0.28	4.7	0.072	0.0087	17	<0.38	Oct - Nov 2015	4-Dec-15	4-Dec-15	
	Second Cut SPL	67	0.23	0.0052	0.0055	28.9	1.2	8.5	3.5	2	20.19	0.071	<1	82.2	0.74	4.5	0.0085	0.0064	18	<0.37				
Apr - May 2016	First Cut SPL	122	0.29	0.0005	0.0022	1.29	2.1	8.9	3.15	8	20.32	0.0068	<1	83.1	0.074	2.6	0.00025	0.00017	18.75	<0.36	Apr-May 2016	30-Jun-16	1-Jul-16	
	Second Cut SPL	66	0.57	0.0004	0.0022	1.29	2.1	9.4	1.98	3	20.27	0.0067	<1	83.5	0.38	1	0.017	0.0026	20	<0.36				
Sept - Nov 2016	First Cut SPL	95	0.41	0.000041	0.0009	1.29	1.5	8.9	2.6	4	20.2	0.02	<0.1	84	0.79	8.1	0.004	<0.00017	19	<0.36	Sept - Nov 2016	25-Nov-16	25-Nov-16	
	Second Cut SPL	91	0.28	0.0000026	0.00095	1.29	1.8	9	2.3	6	20.3	0.029	<0.1	86	0.61	8	0.043	0.000085	19	<0.36				
Apr - May 2017	First Cut SPL	51.00	0.16	0.00045	0.00120	1.29	3.60	8.70	3.00	2.00	20.40	0.00084	<1	78.50	0.16	12.00	0.028	0.00710	18.00	0.40	Mar - May 2017	20-Jul-17	20-Jul-17	
	Second Cut SPL	57	<0.072	0.0013	0.0014	1.29	9.9	8.3	3.8	<1	20.3	0.0029	<1	88.1	0.047	13	0.031	0.00089	18	0.3				
Aug - Nov 2017	First Cut SPL	73.00	<0.062	0.04000	0.04000	1.29	3.50	9.00	2.30	3.00	20.20	0.03900	2	82.00	0.25	15.00	0.017	0.00850	18.00	<0.27	Aug - Nov 2017	5-Dec-17	5-Dec-17	
	Second Cut SPL	50	<0.066	0.013	0.013	1.29	6.6	8.7	2.5	8	20.1	0.22	8	81.5	0.34	7.5	0.0039	0.00017	18	<0.36				
Mar - May 2018	First Cut SPL	68.00	<0.063	0.00280	0.00300	1.29	2.40	8.60	1.80	5.00	20.50	0.01300	5	74.00	0.61	9.30	0.017	0.00060	18.00	<0.36	Mar - May 2018	12-Jul-18	17-Jul-18	
	Second Cut SPL	36	<0.051	0.0035	0.0041	1.29	2.9	9.3	1.8	5	20.4	0.01	5	84	0.83	9.9	0.032	0.017	19	<0.36				
Aug - Oct 2018	First Cut SPL	84	0.034	0.0019	0.0022	1.29	3.4	8.8	2.3	7	20	0.0069	<1	80.5	0.073	5.2	0.192	0.00024	18.3	<0.33	Aug - Oct 2018	8-Nov-18	8-Nov-18	
	Second Cut SPL	41	<0.077	0.00075	0.00094	1.29	3.9	8.9	1.8	2	20.2	0.0089	1	76.5	0.36	6.8	0.0137	0.00042	18.3	1.8				
Feb - Mar 2019	First Cut SPL	204	0.81	0.00013	0.0005	1.29	3.2	8.5	2.2	9	20.1	0.011	<1	80	0.76	7	0.011	0.0014	17.8	<0.18	Feb - Mar 2019	12-Apr-19	16-Apr-19	
	Second Cut SPL	34	0.098	0.0027	0.0034	1.29	1.6	8.4	1.8	5	20.4	0.011	3	84	0.79	11	0.007	0.00053	17.5	<0.18				
Aug - Oct 2019	First Cut SPL	70	0.26	0.0003	0.00059	1.29	10	6.6	2.1	9	20.1	0.013	2	86	0.69	16	0.011	0.0027	14	<0.18	Aug - Oct 2019	12-Nov-19	12-Nov-19	
	Second Cut SPL	68	0.25	0.00027	0.00076	1.29	2.8	6.4	1.9	3	20.2	0.028	2	79	0.39	3.5	0.038	0.023	13	1.8				
Feb-20	First Cut SPL	67	0.76	0.024	0.03	1.29	3.2	8.7	2.6	9	20.3	0.086	6	85	0.8	4.1	0.0069	0.0013	19	<0.19	Feb-20	20-Apr-20	20-Apr-20	
	Second Cut SPL	85	1	0.011	0.015	1.29	0.67	9	2.2	6	20.6	0.11	6	85	0.75	10	0.02	0.00071	19	<0.19				
Sept - Nov 2020	First Cut SPL	66	0.28	0.0015	0.004	1.29	1.4	9	1.7	3	20.2	0.00092	2	86	0.098	2.5	0.019	0.00065	19	0.28	Sept - Nov 2020	17-Dec-20	22-Dec-20	
	Second Cut SPL	82	0.49	0.0012	0.0038	1.29	2.0	8.8	2.1	5	20.4	0.0025	<1	88	1.2	3.4	0.0089	0.000035	18	0.42				
June - Aug 2021	SPL	79	0.51	0.00014	0.00043	1.29	<0.11	8.2	1.8	5	20.2	0.0000045	<1	87.1	0.071	0.56	0.13	<0.0001	17	<0.36	June - Aug 2021	7-Oct-21	15-Oct-21	
Sept - Nov 2021	SPL	32	0.61	0.00035	0.00076	1.29	1.8	7.7	1.6	3	20.2	0.024	<1	93.2	0.41	3.7	0.29	<0.0001	16	<0.36	Sept - Nov 2021	27-Sep-21	4-Nov-21	
March - May 2022	SPL	132	0.42	0.0014	0.0018	1.29	0.14	7.8	2.5	20	20.3	0.017	<3	96	0.19	0.78	0.016	0.00015	17	<0.38	March - May 2022	24-Jun-22	29-Jun-22	
June-Sept 2022	SPL	100	<0.014	0.000015	0.00093	1.29	3.8	7.8	1.5	5	20.2	0.065	<3	82.3	0.095	2.4	0.1	<0.0019	16	0.2	June - Sept 2022	27-Oct-22	3-Nov-22	
Nov 2022 - Feb 2023	SPL	77	0.022	0.00025	0.0011	1.29	2.3	6.4	2.2	7	20.1	0.025	<3	87.5	0.16	18	0.096	<0.002	13	<0.74	Nov 2022 - Feb 2023	28-Feb-23	2-Mar-23	
April-May 2023	SPL	60	0.034	0.00071	0.0013	1.29	<0.23	6.8	2	16	20.3	0.0026	<3	79.8	0.11	<0.28	0.046	<0.0019	14	0.25	April - May 2023	15-Jun-23	20-Jun-23	
Nov 2023 - Feb 2024	SPL	138	<0.012	0.0053	0.0064	1.29	0.6	7.5	1.6	3	20.5	0.0045	<1	80.2	0.71	2.5	0.036	<0.000086	16	0.59	Nov 2023 - Feb 2024	21-Feb-24	22-Feb-24	
May-24	SPL	42	<0.014	0.00078	0.0021	1.29	0.092	8.7	1.7	4	20.4	0.0033	<1	82	0.027	0.47	0.0094	<0.00029	18	<0.36	May-23	27-Jun-24	2-Jul-24	
Nov-24	SPL	425	<0.013	0.0012	0.0047	1.29	0.1	7.1	1.5	12	20.2	0.0038	<3	83.3	0.19	0.56	0.012	<0.00019	15	0.19	Nov-24	24-Dec-24	7-Jan-25	
Jun-25	SPL																							