

Water Quality Monitoring	
Monitoring Point	3
Monitoring Point Location	GABION SPILLWAY DISCHARGE
Licensee	SHOALHAVEN STARCHES PTY LTD, 160 Bolong Rd Bomaderry NSW 2541
EPA Licence Number	883
Monitoring Frequency	Continuous

Month	Results Obtained	Pollutant	Units	Min. value	Max. value	Average value	100 percentile limit	Exceedances	Explanatory Note
April 2012	10-May-12	pH	pH unit	6.4	7.7	7.1	6.5 - 8.5	2	River water intake pH < 6.5 due to heavy rainfall & run-off
		Temperature	°C	21.4	33.2	25.8	32	2	low flow on cooling water heat exchanger
May 2012	10-Jun-12	pH	pH unit	7.1	7.6	7.5	6.5 - 8.5	nil	
		Temperature	°C	16.1	26.5	20.8	32	nil	
June 2012	2-Jul-12	pH	pH unit	6.5	7.6	7.2	6.5 - 8.5	nil	
		Temperature	°C	12.8	25.3	15.6	32	nil	
July 2012	1-Aug-12	pH	pH unit	7.43	7.64	7.52	6.5 - 8.5	nil	
		Temperature	°C	12.6	22.7	13.9	32	nil	
August 2012	4-Sep-12	pH	pH unit	7.62	7.78	7.69	6.5 - 8.5	nil	
		Temperature	°C	12.7	16.1	14.2	32	nil	
September 2012	3-Oct-12	pH	pH unit	7.26	7.78	7.59	6.5 - 8.5	nil	
		Temperature	°C	14.3	19.1	17.0	32	nil	
October 2012	2-Nov-12	pH	pH unit	7.13	7.68	7.47	6.5 - 8.5	nil	
		Temperature	°C	18.0	21.3	19.6	32	nil	
November 2012	4-Dec-12	pH	pH unit	7.16	7.71	7.52	6.5 - 8.5	nil	
		Temperature	°C	21.1	40.3	27.0	32	1	low flow on cooling water heat exchanger
December 2012	6-Jan-13	pH	pH unit	6.62	7.69	7.36	6.5 - 8.5	nil	
		Temperature	°C	25.5	31.8	27.5	32	nil	
January 2013	4-Feb-13	pH	pH unit	6.65	7.59	7.27	6.5 - 8.5	nil	
		Temperature	°C	26.7	37.0	30.6	32	5	low flow on cooling water heat exchanger
February 2013	4-Mar-13	pH	pH unit	6.37	7.46	7.24	6.5 - 8.5	2	River water intake pH < 6.5 due to heavy rainfall & run-off
		Temperature	°C	25.8	31.5	28.7	32	nil	
March 2013	5-Apr-13	pH	pH unit	6.31	7.28	6.76	6.5 - 8.5	1	River water intake pH < 6.5 due to heavy rainfall & run-off
		Temperature	°C	23.1	31.3	27.0	32	nil	
April 2013	1-May-13	pH	pH unit	6.87	7.39	7.23	6.5 - 8.5	nil	
		Temperature	°C	22.0	28.0	25.4	32	nil	
May 2013	4-Jun-13	pH	pH unit	7.28	8.36	7.76	6.5 - 8.5	nil	
		Temperature	°C	18.6	27.9	21.9	32	nil	
June 2013	3-Jul-13	pH	pH unit	6.65	7.70	7.39	6.5 - 8.5	nil	
		Temperature	°C	12.7	32.5	23.9	32	2	low flow on cooling water heat exchanger
July 2013	1-Aug-13	pH	pH unit	5.88	7.10	6.68	6.5 - 8.5	8	River water intake pH < 6.5 due to heavy rainfall & run-off
		Temperature	°C	13.2	24.6	16.2	32	nil	
August 2013	4-Sep-13	pH	pH unit	7.07	8.06	7.55	6.5 - 8.5	nil	
		Temperature	°C	13.3	16.3	14.3	32	nil	

Month	Results Obtained	Pollutant	Units	Min. value	Max. value	Average value	100 percentile limit	Exceedances	Explanatory Note
September 2013	4-Oct-13	pH	pH unit	6.77	8.08	7.49	6.5 - 8.5	nil	
		Temperature	°C	16.8	27.8	21.7	32	nil	
October 2013	15-Nov-13	pH	pH unit	6.98	7.69	7.44	6.5 - 8.5	nil	
		Temperature	°C	22.9	30.3	26.0	32	nil	
November 2013	3-Dec-13	pH	pH unit	7.25	7.77	7.48	6.5 - 8.5	nil	
		Temperature	°C	23.8	32.5	28.5	32	4	low flow on cooling water heat exchanger
December 2013	3-Jan-14	pH	pH unit	7.30	7.87	7.63	-	-	pH limits removed as per licence variation 8-Nov-13
		Temperature	°C	29.7	33.2	32.0	32	16	low flow on cooling water heat exchanger
January 2014	3-Feb-14	pH	pH unit	7.24	7.63	7.44	-	-	
		Temperature	°C	28.7	32.6	30.8	32	5	low flow on cooling water heat exchanger
February 2014	13-Mar-14	pH	pH unit	7.33	7.54	7.44	-	-	
		Temperature	°C	26.9	33.0	30.2	32	2	low flow on cooling water heat exchanger
March 2014	9-Apr-14	pH	pH unit	6.75	7.52	7.33	-	-	
		Temperature	°C	26.3	34.1	31.2	32	11	low flow on cooling water heat exchanger
April 2014	2-May-14	pH	pH unit	6.77	7.50	7.17	-	-	
		Temperature	°C	22.4	33.2	29.5	32	1	low flow on cooling water heat exchanger
May 2014	2-Jun-14	pH	pH unit	7.35	7.74	7.58	-	-	
		Temperature	°C	20.5	32.5	24.2	32	1	low flow on cooling water heat exchanger
June 2014	7-Jul-14	pH	pH unit	7.40	8.27	7.68	-	-	
		Temperature	°C	14.6	24.6	19.9	32	nil	
July 2014	6-Aug-14	pH	pH unit	7.47	7.87	7.63	-	-	
		Temperature	°C	15.0	19.9	17.1	32	nil	
August 2014	5-Sep-14	pH	pH unit	6.22	7.87	7.40	-	-	
		Temperature	°C	14.7	18.8	16.6	32	nil	
September 2014	7-Oct-14	pH	pH unit	6.10	7.44	6.93	-	-	
		Temperature	°C	16.1	24.7	20.3	32	nil	
October 2014	5-Nov-14	pH	pH unit	6.95	7.56	7.25	-	-	
		Temperature	°C	21.5	27.6	24.3	32	nil	
November 2014	4-Dec-14	pH	pH unit	7.03	7.68	7.30	-	-	
		Temperature	°C	24.6	29.7	26.8	32	nil	
December 2014	5-Jan-15	pH	pH unit	6.27	7.74	7.05	-	-	
		Temperature	°C	26.3	31.1	28.5	32	nil	
January 2015	3-Feb-15	pH	pH unit	6.27	7.41	6.89	-	-	
		Temperature	°C	27.0	34.4	30.3	32	6	low flow on cooling water heat exchanger
February 2015	12-Mar-15	pH	pH unit	6.50	7.34	7.03	-	-	
		Temperature	°C	22.7	33.0	28.9	32	3	low flow on cooling water heat exchanger
March 2015	7-Apr-15	pH	pH unit	7.04	7.48	7.28	-	-	
		Temperature	°C	23.8	33.9	28.1	32	2	low flow on cooling water heat exchanger
April 2015	6-May-15	pH	pH unit	6.30	7.38	6.96	-	-	
		Temperature	°C	17.8	25.0	22.9	32	nil	
May 2015	11-Jun-15	pH	pH unit	6.33	7.45	7.06	-	-	
		Temperature	°C	18.5	24.4	21.1	32	nil	
June 2015	8-Jul-15	pH	pH unit	6.62	7.76	7.43	-	-	
		Temperature	°C	15.2	22.3	18.1	32	nil	

Month	Results Obtained	Pollutant	Units	Min. value	Max. value	Average value	100 percentile limit	Exceedances	Explanatory Note
July 2015	10-Aug-15	pH	pH unit	7.44	8.07	7.80	-	-	
		Temperature	°C	13.3	30.7	17.9	32	nil	
August 2015	14-Sep-15	pH	pH unit	6.47	8.02	7.48	-	-	
		Temperature	°C	16.9	38.1	24.4	32	3	low flow on cooling water heat exchanger