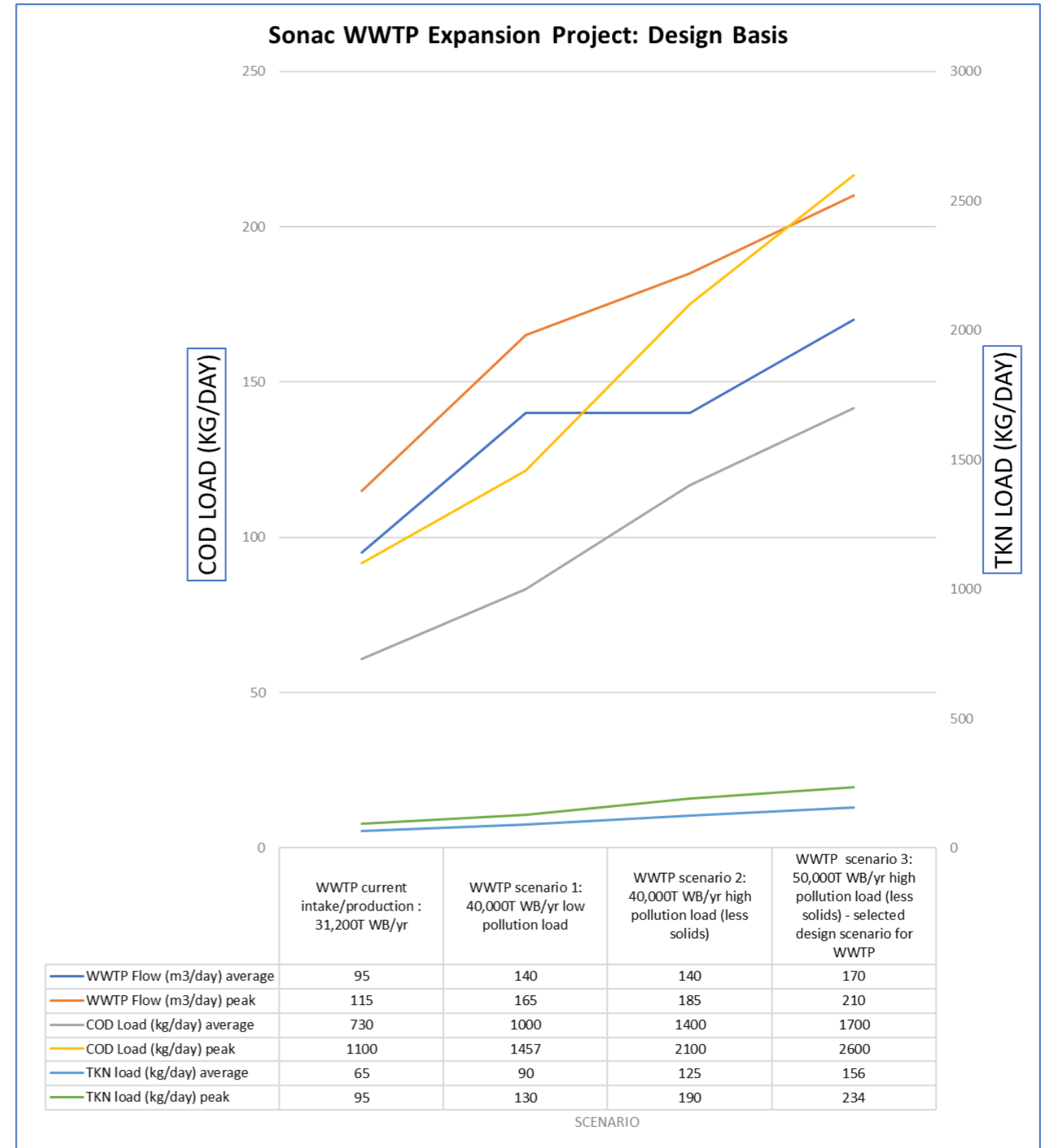


Attachment 1: WWTP Mass Balance & Design Basis

Sonac Australia WWTP Design Scenario	Whole Blood (WB) T/wk	WWTP Flow (m3/day) average	WWTP Flow (m3/day) peak	COD Load (kg/day) average	COD Load (kg/day) peak	TKN load (kg/day) average	TKN load (kg/day) peak
WWTP current intake/production: 31,200T Whole blood(WB) /yr	600	95	115	730	1100	65	95
WWTP scenario 1: 40,000T WB/yr low pollution load	800	140	165	1000	1457	90	130
WWTP scenario 2: 40,000T WB/yr high pollution load (less solids)	800	140	185	1400	2100	125	190
WWTP scenario 3: 50,000T WB/yr high pollution load (less solids) - selected design scenario for WWTP	1000	170	210	1700	2600	156	234

Mass balance (including flowrate and equipment size/volume) - source Sonac/Waterform

Mass Balance	Current	Selected Design Scenario for WWTP	
Tonne per day Whole Blood	100	167	T/day
WWTP flow m3/day	95	170	m3/day
WWTP peak flow m3/day	115	210	m3/day
WWTP flow m3/hr	4.0	7.1	m3/hr
WWTP flow m3/hr peak	4.8	8.8	m3/hr



Attachment 2: EPA Licence Monitoring Program:

‘Provide the results of the monitoring programme undertaken in last 5 years including groundwater, soil, and wastewater/recycle water reuse programme’

Groundwater Sample No.	Bore #	Date sampled	Water Level (m)	pH	EC us/cm	Chloride mg/kg	Sodium mg/kg	Sulphate mg/kg	Total Nitrogen mg/kg
7378432	1	8/3/2022	8	6.4	4000	1300	710	56	2
7389732	1	17/3/2022	8	6.1	4900	1700	850	44	2
7424075	1	19/4/2022	8	6	5000	1700	1000	21	46
195153	1	24/5/2022	8	6.2	4900	1600	1000	21	1.4
7454218	1	23/6/2022	8	5.9	4900	1600	960	24	0.5
7623332	1	16/8/2022	8	5.8	5000	1600	780	24	11
	2	8/03/2022	dry						
	2	17/03/2022	dry						
	2	19/04/2022	dry						
	2	24/5/2022	dry						
	2	23/6/2022	dry						
	2	16/8/2022	dry						
	3	8/03/2022	dry						
	3	17/03/2022	dry						
	3	19/04/2022	dry						
	3	24/5/2022	dry						
	3	23/6/2022	dry						
	3	16/8/2022	dry						
7378433	4	8/03/2022	6	6	28000	12000	4800	2000	
7389733	4	17/03/2022	6	5.5	31000	13000	6300	2000	
7424076	4	19/04/2022	6	5.4	31000	12000	7100	2000	2.6
195154	4	24/5/2022	6	5.2	30000	12000	7400	2000	0.6
7454219	4	23/6/2000	6	4.8	32000	13000	7600	1800	0.9
7623333	4	16/8/2022	6	4.6	34000	13000	7000	1900	1.6

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SOIL SAMPLE RESULTS

Sample ID	Grower Name	Paddock Name	Sampling Date	Sample Depth From	Sample Depth To	pH (1:5 Water)	pH (1:5 CaCl2)	Electrical Conductivity (1:5 water) dS/m	Elec. Cond. (Sat. Ext.) dS/m	Chloride mg/kg	Nitrate Nitrogen mg/kg	Phosphorus (Colwell) mg/kg	Phosphorus Buffer Index (PBI-Col)	Available Potassium mg/kg	Calcium (Amm-acet.) cmol(+)/kg	Potassium (Amm-acet.) cmol(+)/kg	Magnesium (Amm-acet.) cmol(+)/kg	Sodium (Amm-acet.) cmol(+)/kg	Calcium/Magnesium Ratio	Aluminium (KCl) cmol(+)/kg	Cation Exch. Cap. cmol(+)/kg	Sodium % of Cations (ESP) %	Aluminium Saturation%	Sulphur (KCl40) mg/kg	Organic Carbon (W&B) %	Soil Colour	Soil Texture	Aluminium (KCl)	Calcium (Amm-acet.)	Magnesium (Amm-acet.)	Potassium (Amm-acet.)	Organic Matter (W&B * 1.72)
022218510	Brad Morris	1	02/03/2021	0	10	5.6	4.8	0.16	1.3	83	1.7	<5	60	130	3.3	0.34	1.7	0.57	1.9	0.2	6.1	9.30	2.4	33	3.1	Orange/ Yellow	Clay Loam	13.0	55.0	28.0	5.60	5.4
022218509	Brad Morris	2	02/03/2021	0	10	5.8	5.2	0.67	4.2	480	2.7	7	24	140	2.7	0.35	2.4	2.7	1.1	<0.1	8.1	34.00	<1.0	190	0.9	Orange/ Yellow	Clay	<9.0	33.0	29.0	4.30	1.5
022218508	Brad Morris	3	02/03/2021	0	10	5.7	4.5	0.14	0.9	100	1.9	8	160	130	1.2	0.34	1.6	0.89	0.8	0.6	4.6	19.00	13.0	25	1.4	Orange/ Yellow	Clay	53.0	25.0	35.0	7.30	2.3
022218507	Brad Morris	4	02/03/2021	0	10	6.1	5.2	0.33	2	230	1.3	<5	38	230	3.6	0.58	4	1.8	0.9	<0.1	10.0	18.00	<1.0	62	1.9	Brown	Clay	<9.0	36.0	40.0	5.80	3.2
022218506	Brad Morris	5	02/03/2021	0	10	5.9	5.1	0.35	2.2	140	1.8	6	75	330	5.5	0.84	3.2	2	1.7	<0.1	11.6	17.00	<1.0	110	2.9	Brown	Clay	<9.0	47.0	28.0	7.20	5.0
022123586	Brad Morris	1	13/10/2021	0	10	5.9	4.9	0.08	0.6	11	4.3	<5	64	150	3.3	0.39	2	0.41	1.7	0.1	6.2	6.60	1.9	13	2.9	Brown	Clay Loam	11.0	53.0	32.0	6.20	5.0
022123585	Brad Morris	2	13/10/2021	0	10	7.4	6.2	0.26	1.6	56	4.9	8	120	300	8.7	0.78	6.5	3.1	1.3	<0.1	19.0	16.00	<1.0	66	6.5	Brown	Clay	<9.0	46.0	34.0	4.10	11.0
022123584	Brad Morris	3	13/10/2021	0	10	6.2	4.7	0.12	0.7	39	3.9	9	180	170	2.5	0.43	2.4	1.4	1	0.3	7.0	20.00	4.4	21	3.1	Brown	Clay	27.0	36.0	34.0	6.10	5.3
022123583	Brad Morris	4	13/10/2021	0	10	7.2	6.1	0.14	0.9	32	5.7	<5	32	270	4.1	0.69	3.9	1	1.1	<0.1	9.7	10.00	<1.0	12	1.9	Brown	Clay	<9.0	43.0	40.0	7.10	3.3
022123582	Brad Morris	5	13/10/2021	0	10	7	6.1	0.21	1.3	110	7.0	<5	59	180	5.9	0.46	5.4	1.3	1.1	<0.1	13.0	9.90	<1.0	41	2.3	Brown	Clay	<9.0	45.0	41.0	3.50	3.9
130114538	Brad Morris	1	28/06/2022	0	10	5.5	4.5	0.11	0.9	35	<0.5	<5	500	230	1.2	0.59	1.5	0.48	0.8	0.5	4.2	12.00	11.0	28	1.4	Brown	Clay Loam	43.0	29.0	35.0	14.00	2.3
130114537	Brad Morris	2	28/06/2022	0	10	5.9	5.3	0.89	7.1	510	1.0	<5	630	200	4.3	0.51	3.7	4.3	1.2	<0.1	12.8	34.00	<1.0	370	2.3	Grey	Clay Loam	<9.0	33.0	29.0	4.00	3.9
130114536	Brad Morris	3	28/06/2022	0	10	6.9	5.2	0.06	0.5	14	<0.5	<5	110	210	2.9	0.55	1.8	1	1.6	<0.1	6.3	16.00	<1.0	8	1.9	Brown	Clay Loam	<9.0	46.0	29.0	8.80	3.2
130114535	Brad Morris	4	28/06/2022	0	10	6.5	5.8	0.46	3.7	480	2.0	7	30	230	5.5	0.6	6.1	2.8	0.9	<0.1	15.0	19.00	<1.0	72	2.6	Brown	Clay Loam	<9.0	37.0	41.0	4.00	4.5
130114534	Brad Morris	5	28/06/2022	0	10	5.8	5	0.37	3.8	170	2.7	13	130	260	6.2	0.67	3	2	2.1	<0.1	11.8	17.00	<1.0	140	3.7	Brown	Sandy Loam	<9.0	52.0	25.0	5.70	6.3

Attachment 2: EPA Licence Monitoring Program:

Provide the results of the monitoring programme undertaken in last 5 years including groundwater, soil, and wastewater/recycle water reuse programme

WASTEWATER / RECYCLE WATER REUSE PROGRAM – IRRIGATION

	pH	E. coli	BOD	EC	TDS	SS	TPC	Ca	Mg	Na	SAR
Units	-	org/100mL	mg/L	uS/cm	mg/L	mg/L	org/mL	mg/L	mg/L	mg/L	Ratio
Limits	6.0 - 9.0	<100	<20								
24/01/2018	7.6	0	<2	280	170						
25/02/2019	7.6	0	<2	380	150						
25/03/2019	7.2	0	<2	370	140						
17/04/2019	7.3	0	3	350	180						
16/05/2019	7.3	0	3	470	160	<2					
12/06/2019	7.7	<2	3	540	220	2					
18/07/2019	7.2	0	<2	260	120	<2					
15/08/2019	7.1	0	<2	320	160	<2					
12/09/2019	6.5	0	<2	190	92	<2					
17/10/2019	6.4	0	<2	200	90	<2					
14/11/2019	6.8	0	<2	230	100	4					
12/12/2019	6.6	0	<2	160	72	<2					
16/01/2020	6.7	0	<2	200	95	<2					
27/02/2020	6.6	0	<2	260	140	<2					
14/04/2020	6.8	0	<2	180	91	<2					
26/11/2020	7.4	0	<2	220	100	<2	0				
16/02/2021	7.2	-	<2	-	480	<2	-				
25/02/2021	6.8	-	<2	-	230	<2	-				
15/04/2021					120			<0.1	<0.1	34	42
22/04/2021					190			<0.1	<0.1	27	39

Note: Irrigation discontinued in 2021. Irrigation equipment decommissioned due to soil waterlogging caused by unprecedented wet weather. (Climate change event)

PRIMESAFE PERMEATE RESULTS MONITORING PROGRAM

Quarterly Sample Date	Clostridium (spores p/100mL)	E. coli (orgs /100mL)	Salmonella (2L VIDAS)	Total plate count (orgs/mL)
28/01/2021	0	0	Not detected	0
14/09/2021	Not tested	0	not tested	not tested
16/11/2021	Not tested	0	not tested	not tested
17.2.2022	Not tested	0	not tested	not tested
3/05/2022	Not tested	0	not tested	not tested
16/08/2022	Not tested	0	not tested	not tested

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STORMWATER MONITORING PROGRAM

SURFACE WATER MONITORING PROGRAM

Date	Storm Drain EC (µS/cm)	Storm Drain COD (mg/L)	Storm Drain TN (mg/L)	Previous rainfall	Date	Sample location	Surface water EC (µS/cm)	Comments
16/02/2021	240		23	unknown	4/02/2021	Group samples, East-West	300-500	See pdf dated 4.2.2021
11/05/2021	510	880	28	rain fell on 10/5/2021	1/03/2021	Group samples, N-NW side	700-1200	See pdf dated 1/3/2021
3/08/2021	640	110	7.9	rain fell on 2/8/2021	1/04/2021	west side	1000	See pdf dated 1/4/2021
16/11/2021	130	16	1.8	rain fell 13/11	11/11/2021	Group samples South	300-500	Internally tested.
17/02/2022	390	8	0.7	no rain prev week	29/06/2022	North	4400	Higher EC probably result of long-term evaporation (semi-permanent pool sampled)
3/05/2022	220	6	0.2	rain fell previous week	29/06/2022	South	820	
16/08/2022	1300	36	22	rain within 48 hours	29/06/2022	East	560	
					29/06/2022	West	1600	

BRINE TO LAGOON MONITORING PROGRAM

Date	BOD5	NO3	COD
2/02/2021	8	0	<250
9/02/2021	12	0.14	960
16/02/2021	5	0.06	280
25/02/2021	8	<0.01	<250
2/03/2021	7	<0.01	340
11/03/2021	18	<0.02	690
18/03/2021	14	<0.01	1100
23/03/2021	6	0.06	980
13/04/2021	11	1.4	1000
27/04/2021	5	0.46	160
11/05/2021	8	0.4	510
18/05/2021	11	0.67	200
25/05/2021	3	0.55	550
1/06/2021	6	0.68	340
8/06/2021	7	0.34	180
15/06/2021	4	0.32	300
22/06/2021	7	0.08	220
29/06/2021	<3	0.41	300
6/07/2021	7	0.3	280
13/07/2021	8	0.53	160
27/07/2021	9	0.14	2200
3/08/2021	26	0.54	1100
10/08/2021	30	0.39	740
17/08/2021	68	0.44	680

24/08/2021	65	1.1	240
31/08/2021	26	0.01	200
7/09/2021	92	<0.01	210
14/09/2021	49	0.02	230
21/09/2021	37	<0.01	230
30/09/2021	<7	0.25	190
5/10/2021	<7	0.25	210
12/10/2021	<3	0.05	69
19/10/2021	6	0.06	200
26/10/2021	5	0.14	240
4/11/2021	5	0.17	320
11/11/2021	6	0.14	700
16/11/2021	7	0.06	220
23/11/2021	6	0.16	330
30/11/2021	4	0.07	520
7/12/2021	5	0.05	180
16/12/2021	11	0.57	240
21/12/2021	4	0.03	940
4/01/2022	<5	<0.01	220
5/01/2022	4	0.03	150
18/01/2022	5	<0.01	430
1/02/2022	6	<0.01	250
8/02/2022	6	<0.01	180
17/02/2022	11	0.31	290
22/02/2022	4	0.79	210
1/03/2022	6	1	250
7/03/2022	6	1.1	710
17/03/2022	3	0.77	230
22/03/2022	3	0.65	130
29/03/2022	<3	1.3	200
7/04/2022	11	0.49	180
12/04/2022	<2	0.96	210
19/04/2022	5	1.3	190
3/05/2022	<3	0.9	160
10/05/2022	2	0.83	310
17/05/2022	4	0.6	130
24/05/2022	2	0.38	380
31/05/2022	4	0.26	150
7/06/2022	7	0.61	770
24/06/2022	14	0.39	190
28/06/2022	17	0.34	400
5/07/2022	14	0.76	180
12/07/2022	21	0.58	210
28/07/2022	24	0.84	810
2/08/2022	8	0.84	690
9/08/2022	10	0.52	630

16/08/2022	5	0.6	710
25/08/2022	6	0.92	570
30/08/2022	9	0.54	570
8/09/2022	7	0.25	220
15/09/2022	18	0.43	710
20/09/2022	5	0.44	760
27/09/2022	12	0.97	870

Attachment 3: Sonac Noise Risk Assessment

Sonac Australia Pty Ltd



HAZARD AND RISK REGISTER - Human health and the environment

Revision V1 **Noise Assessment**
 Risk assessment team: Brad Morris, Sonac Environmental Manager
 Tim Juzefowicz, Q2 Quality and Technical Consultant

EPA Licence 244735

No.	Hazard	Element	Potential Harm	Risk assessment			Existing controls	Frequency	Resp.	What further controls are required	Actions		
				Consequence	Likelihood	Risk rating					Action by	Due By	Date completed
1	Noise	Increased trucking movements from operational expansion	Excessive noise arising from increased trucking movements arising from operational expansion	Low	Possible	Low	Maintain noise attenuation measures through 'truck quiet passage' policy (includes application of speed limits, unloading procedure, engine rev, idling, and site on/off access route)	Daily	Environmental Manager	Monitor traffic controls. Investigate incidents and rectify. Maintain register of complaints.	Environmental Manager	Ongoing	Ongoing
2		Increased trucking movements during construction of new plant	Excessive noise arising from increased trucking movements arising from operational expansion	Low	Possible	Low	Maintain noise attenuation measures through 'truck quiet passage' policy (includes application of speed limits, unloading procedure, engine rev, idling, and site on/off access route)	Daily	Environmental Manager	Monitor traffic controls. Investigate incidents and rectify. Maintain register of complaints.	Environmental Manager	Ongoing	Ongoing
3		Installation of new wastewater treatment plant	Excessive noise from construction of Wastewater treatment plant	Minor	Possible	Medium	Maintain noise attenuation measures to ensure such as equipment housing	During construction	Project Manager	Conduct daily work operation schedule and determine noise attenuation measures for project.	Project Manager	During construction	End construction
4		Operation of new wastewater treatment plant	Excessive noise from operation of Wastewater treatment plant	Low	Unlikely	Low	Noise attenuation measures incorporated through housing and operating equipment design	Daily	Environmental Manager	Monitor plant operation	Environmental Manager	Ongoing	Ongoing
5		Installation of new Box Dryer and construction of building for the dryer. Installation, commissioning, and start-up	Excessive noise from construction of Box dryer	Minor	Possible	Medium	Maintain noise attenuation measures such as equipment housing	Daily	Project Manager	Conduct daily work operation schedule and determine noise attenuation measures for project.	Project Manager	During construction	End construction
6		Operation of new box dryer	Excessive noise from operation of new Box dryer	Low	Unlikely	Low	Noise attenuation measures incorporated through housing and operating equipment design	Daily	Environmental Manager	Monitor plant operation	Environmental Manager	Ongoing	Ongoing
7		Generation of Noise	Construction vehicles and equipment involved in earth works and construction may cause excessive noise levels	Minor	Likely	Medium	Construction works to be conducted during permitted times	Construction	Project Manager	Determine permitted times for construction works	Project Manager	During construction	End construction

REFERENCES

EPA Vic. Publication 1695.1 2018 Assessing and controlling risk: A guide for business
 EPA Vic. Publication 1862.4 Noise Limit and Assessment Protocol May 2021

Noise Measurements on Sonac Perimeter Fence	Measured noise dB(A) Low	Measured noise dB(A) High (Peak)	Land Zoning Around Sonac	Table B.1: Zone levels (dB(A)) Receiving zone	Receiving zone Noise limits at the nearest sensitive receptors (dB(A))
North	56	58	Rural farming	Farming Zone FZ	Day 53 Evening 48 Night 43
East	58	64 (car passing)	Public Use	Public Use Zone 1,3,4,6&7	Day 55 Evening 50 Night 45
South	60	63 (car passing)	Industrial	Industrial 1 Zone IN1Z	Day 58 Evening 53 Night 48
West	58	60	Rural farming	Farming Zone FZ	Day 53 Evening 48 Night 43

Attachment 4: Sonac Environmental Complaints Register – Summary Odour Complaints

Date of complaint raised	Date complaint received by Sonac	Source of complaint and name	Type/Method of complaint	Complainant Name	Source of Complaint (Internal / External)	Complaint type (odour, noise, light, vibration, flora, fauna, ground, water, report)	Justified / Unjustified / Report	Summary finding (on site / off site)	Complainant Address	1. Complainant Contact No.	2. Complainant Contact No.	Complainant Email contact	Complaint Details (record full details of the complaint as received) Register date, time, weather conditions, plant operations and any other pertinent details	Investigated by	Date/s of Investigation	Outcome of Investigation (Justified/unjustified, insufficient information)	Complaint response & report	Reviewed by (name/date)
2/01/2022	2/01/2022	Brad Morris during visit to site on Sunday, 2 Jan 22, found strong odour beyond plant boundary	Initially contacted Simon Cox, then composed email	Brad Morris	Internal	Odour	Justified	On site	Environmental manager Sonac	0407 458 428		bradmorris@sonac.biz	See correspondence on 2 January tab for details of odour problem.	Brad Morris, Environmental Manager	44563	See correspondence on 2 Jan tab	Procedural document created and adopted, so that this circumstance will not recur. Copy pasted in 2 Jan tab. Pdf copy also saved in this system. Document reviewed and adopted by KD, SC and GN	Simon Cox
19/01/2022	19/01/2022	Simon Cox noticed strong odour blowing in from east.	Initially contacted by Simon Cox via email	Simon Cox	Internal	Odour	Unjustified	Off site	Plant manager Sonac		498 150 302	simoncox@sonac.biz	See correspondence on 2 January tab for details of odour problem.	Brad Morris, Environmental Manager	44580	See correspondence on 19 Jan tab. Origin of odour from unknown location off site.	Walked to east edge of property a few minutes after Simon's complaint. Noticed the odour and concluded it was same odour as was noticed in the morning. Took note of wind direction confirm again gentle breeze blowing towards west north west	Simon Cox
20/01/2022	20/01/2022	Brad Morris noticed same strong odour while driving to work, beginning before Fenton's	Self report	Brad Morris	Internal	Odour	Unjustified	Off site	Environmental manager Sonac	0407 458 428		bradmorris@sonac.biz	Definitely a strong "poo" odour along Maryborough-Dunolly road at 07:50 am.	Brad Morris, Environmental Manager	44581	Origin of odour is off site and unknown	Wind direction checked at Sonac driveway and found to be breeze from the east. Odour detectable at driveway. Not an odour I associate with Sonac's operation. Odour also detected by Sonac employee Jayne Parkinson (contact 0438 827 575) at Sonac's gatehouse at 09:30 same morning.	Simon Cox
20/01/2022	20/01/2022	resident on Slaughter Yard Track	email sent to Simon Cox	Kate Gablek	External	Odour	Unjustified	Off site	Slaughter Yard Track (see location map on Slaughter Yard Track tab)	0437 165 601		kablek@gmail.com	See email correspondence on 20 January tab	Brad Morris, Environmental Manager	44216	Odour is blowing in from east, Origin is unknown	Wind direction checked by lead hand on nightshift duty. See correspondence on 20 January tab	Simon Cox
25/01/2022	25/01/2022	Brad Morris, Simon Cox and Leo Hocking noticed strong odour while driving in to work	Verbal to Environmental Manager	Brad Morris, Simon Cox, Leo Hocking	Internal	Odour	Unjustified	Off site	Sonac Australia 281 Maryborough-Dunolly Road 3465	498 150 302 (SC) 0407 458 428(BM) 0447 738 418 (LH)		bradmorris@sonac.biz simoncox@sonac.biz leohocking@sonac.biz	Leo Hocking reported that at 06:45 while driving to work from Bendigo, he noticed a strong "poop smell" beginning near the Eddington/Bendigo turnoff on Maryborough-Dunolly road. The odour persisted most of the way to work. Brad Morris reports basically the same experience as reported on 20/1/2022 and Simon Cox reports similar experience at 07:35 driving the same route (opposite direction from Leo Hocking) from Maryborough that Brad Morris drives.	Brad Morris, Environmental Manager	25/01/2022, 09:00	Origin of odour is from off site and unknown.	Wind direction is very still at 09:00. Sewage "poop" type odour has blanketed the area. Suspect lack of air movement has caused odour from unknown source to build up in the area.	Simon Cox
26/01/2022	26/01/2022	Brad Morris noticed strong odour while driving in to work on Australia Day	Self Report	Brad Morris	Internal	Odour	Unjustified	Off site	Sonac Australia 281 Maryborough-Dunolly Road 3466	0407 458 428(BM)		bradmorris@sonac.biz	Brad Morris reports basically the same experience as reported on 20/1/2022	Brad Morris, Environmental Manager	26/01/2022, 11:30	Origin of odour is from off site and unknown.	Wind direction is mixed/still at 11:30. Foul odour noticed while driving to work at area of Four Mile Lane to about Fenton's.	Simon Cox
27/01/2022	27/01/2022	Brad Morris noticed strong odour while driving in to work	Self Report	Brad Morris	Internal	Odour	Unjustified	Off site	Sonac Australia 281 Maryborough-Dunolly Road 3467	0407 458 428(BM)		bradmorris@sonac.biz	Brad Morris reports basically the same experience as reported on 20/1/2022 with time being 07:50	Brad Morris, Environmental Manager	27/01/2022, 09:02	Some localised odour of a different smell in area of waste pits. Origin of odour down the road is from off site and unknown.	Wind direction is gentle from east 08:00. Foul odour noticed while driving to work at area of Four Mile Lane	Simon Cox
27/01/2022	27/01/2022	Simon Cox concerns for misblame of area odours recently logged.	Email	Simon Cox	Internal	Odour	Report	Off site	Sonac Australia 281 Maryborough-Dunolly Road 3468	498 150 302		simoncox@sonac.biz	Correspondence to council voicing concerns about potential misblame for area odours.	n/a	n/a	n/a	See Council Correspondence tab	Simon Cox
31/01/2022, 09:34	n/a	n/a	n/a	n/a	Internal	Odour	Report	Off site	n/a	n/a	n/a	n/a	n/a	n/a	n/a	N/a	Brad Morris phone conversation w/ Stephen Carter CHW about arranging an odour action plan with their manager, Stephen Glenny, of the sewage treatment plant over the road. Stephen relayed to me that their treatment plant has had a problem with odour recently and that they are bringing in a big aerator for their head pond, and also recirculating the head water. We discussed having a phone meeting with their treatment plant manager and agreed to make it happen.	Simon Cox
17/02/2022	n/a	n/a	n/a	n/a	Internal	Odour	Report	Off site	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Meeting with CHW, see 19 January tab		Simon Cox
18/02/2022	18/02/2022	resident on Slaughter Yard Track	email sent to Simon Cox from resident.	Kate Gablek	External	Odour	Unjustified	Off site	Slaughter Yard Track (see location map on Slaughter Yard Track tab)	0437 165 601		kablek@gmail.com	See email correspondence on Slaughter Yard Track tab, section 18/2/2022.	Brad Morris, Environmental Manager	44245	Unjustified, see email correspondence Slaughter Yard Track tab, section 18/2/2022.	Odour also checked by production manager, who detected no outstanding odour issues. Brad Morris findings: Slight breeze is blowing from east, no odour detectable at Sonac plant. Suspect complainants odour could be originating from CHW sewage plant, but no proof. Notified relevant CHW personnel by email that we had received a complaint from the	Simon Cox
22/02/2022	22/02/2022	Brad Morris encountered very strong offensive odour while driving home after to work	Self Report	Brad Morris	Internal	Odour	Unjustified	Off site	Sonac Australia 281 Maryborough-Dunolly Road 3467	0407 458 428(BM)		bradmorris@sonac.biz	Brad Morris reports that strong odour was encountered while driving south on Maryborough-Dunolly Road at approx 16:30. Odour occurred at about Fenton's corner. Weather was hot, no wind.	Brad Morris, Environmental Manager	22/02/2022, 09:02	Origin unknown, suspected to originate from CHW sewage plant	Email sent to CHW personnel advising them of odour. See CHW correspondence tab section 22/2/2022	Simon Cox

Attachment 5: AIRCARE EXTRACTION SYSTEMS: ADVANCED AIR HORIZONTAL PACKED BED WET SCRUBBER



Horizontal Packed Bed Wet Scrubber

The Advanced Air® Horizontal Packed Bed Wet Scrubber is proven to be efficient and reliable. This type of Packed Bed Wet Scrubber removes soluble chemicals, fumes, and odours, as the contaminated gases pass through the packing media that is wetted with a single pass or recirculating water spray system.

The scrubbing liquid absorbs the gas pollutant by physical or chemical means. The spray system (single pass or recirculating) removes the contaminants before passing through the mist eliminator blades prior to discharging to the atmosphere.

Our Advanced Air® scrubbers are suitable for the removal of 95%-98% of water soluble acids and bases. Other contaminants may require chemical dosing systems.



Advanced Air® fume scrubber 900L/s.

Wet Air Scrubber

- ▶ Materials of construction include:
 - ▶ uPVC
 - ▶ Polypropylene & Polyethylene
- ▶ Wide range of packing media available
- ▶ Chemical treatment, including oxidation and neutralization, is available to increase absorption of gaseous pollutants. pH control available when applicable.
- ▶ Corrosion resistant Brinkmann® uPVC/PP extraction fans.
- ▶ Corrosion resistant recirculating pumps for scrubber liquid recirculation.
- ▶ Non-plugging spray nozzles for wetting packing in corrosion resistant polypropylene.

Horizontal Packed Bed Fume Scrubber

- ▶ This is a cross-flow design with scrubbing liquid flowing vertically downwards while the gas passes horizontally through the packing section. The Advanced Air® horizontal Packed Bed Scrubber can be used in all situations including limited facility headroom and is ideal for roof and ground installations. The cross-flow design is less susceptible to fouling for airstreams with the air flow capacity range from 150 l/s – 2000 l/s with larger units available on request.



Roof mounted Advanced Air® fume scrubber 1200L/s.



Scrubbers ready for export – Hong Kong.

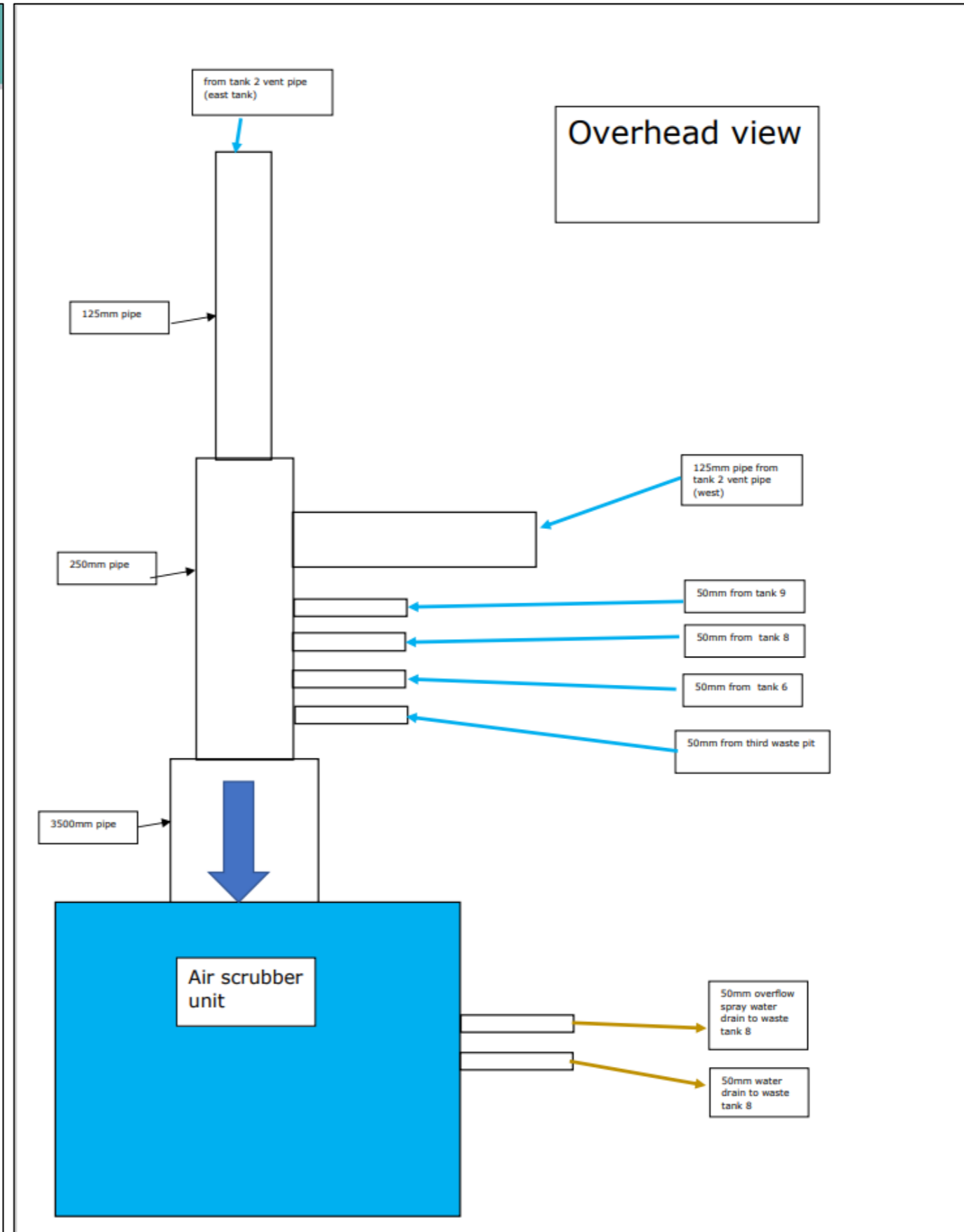
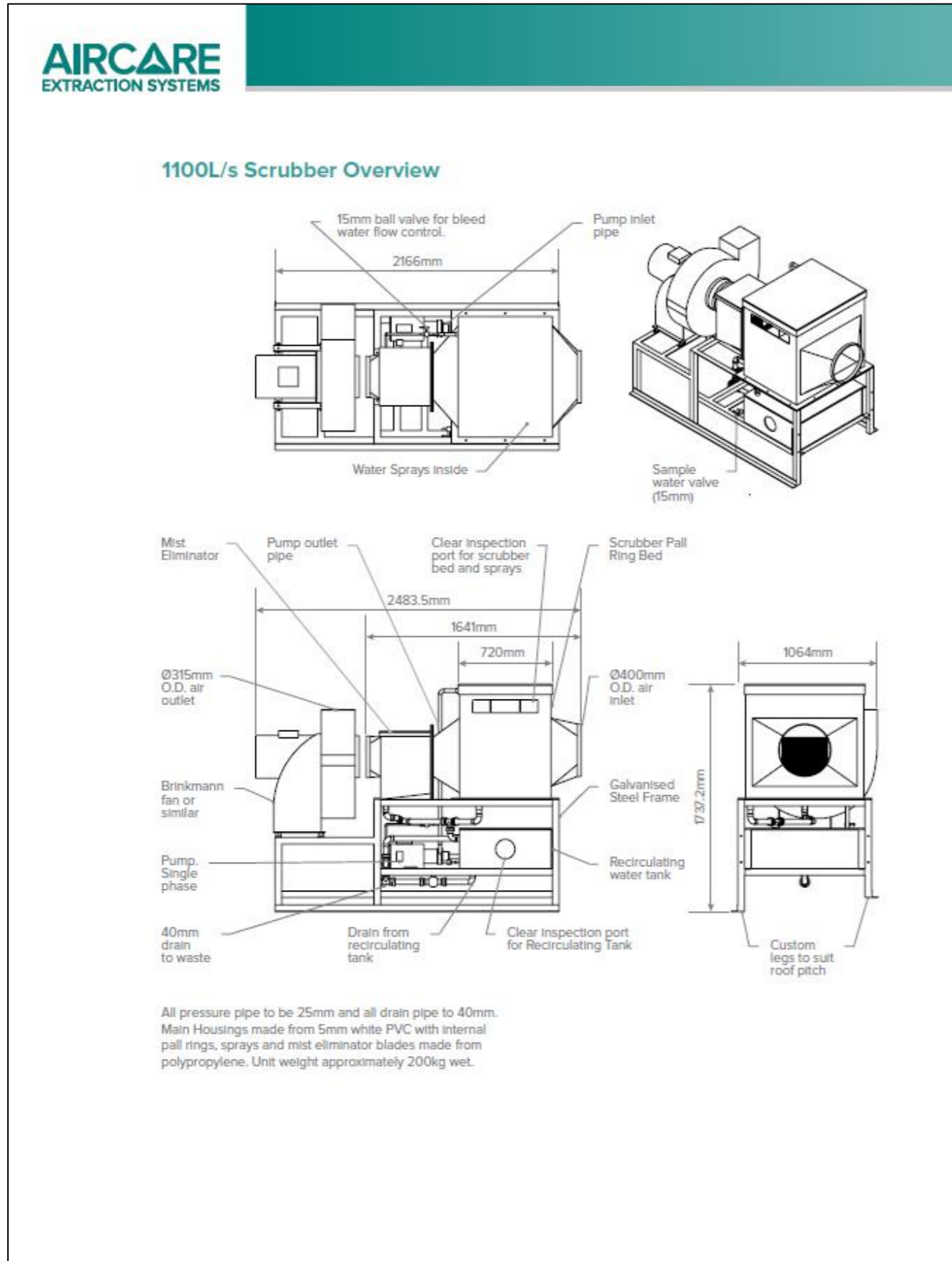
Specifications

Size/ Volume?	250 -350 Litres/sec.	450 – 550 Litres/sec.	650-750 Litres/sec.	950-1100 Litres/sec.	1500 Litres/sec.	2000 Litres/sec.
Materials Types	uPVC or Polypropylene					
Dimensions (excludes extraction fan)	1525mm L x 570mm W x 1130mm H (allows for Recirculating Tank)	1525mm L x 570mm W x 1380mm H (allows for Recirculating Tank)	1550mm L x 720mm W x 1380mm H (allows for Recirculating Tank)	1650mm L x 890mm W x 1500mm H (allows for Recirculating Tank)	1650mm L x 1050mm W x 1600mm H (allows for Recirculating Tank)	1650mm L x 1200mm W x 1800mm H (allows for Recirculating Tank)
Location	Roof or Ground Mounted					
Inlet/Outlet	250mm/ 250mm	315mm/ 315mm	315mm/ 315mm	400mm/ 400mm	400mm/ 400mm	400mm/ 400mm
Nominal Weight	120kg	150kg	180kg	200kg	220kg	280kg
Nominal Static Pa Loss	350pa					
Water Spray System	6 x Nozzle Sprays Total 18 Litres/ min.	6 x Nozzle Sprays Total 30 Litres/ min.	9 x Nozzle Sprays Total 40 Litres/ min.	12 x Nozzle Sprays Total 60 Litres/ min.	12 x Nozzle Sprays Total 90 Litres/ min.	15 x Nozzle Sprays Total 120 Litres/ min.
Packed Bed Type	Polypropylene Pall Rings					
Mist Eliminator	Polypropylene Blade Hooked					
Efficiency*	95%-98%					
Scrubber Control	Fume Cupboard Controller or Separate Switching					
Low Water Flow Alarm	Yes (where applicable)					
Optional	Recirculating Tank, Dosing System					

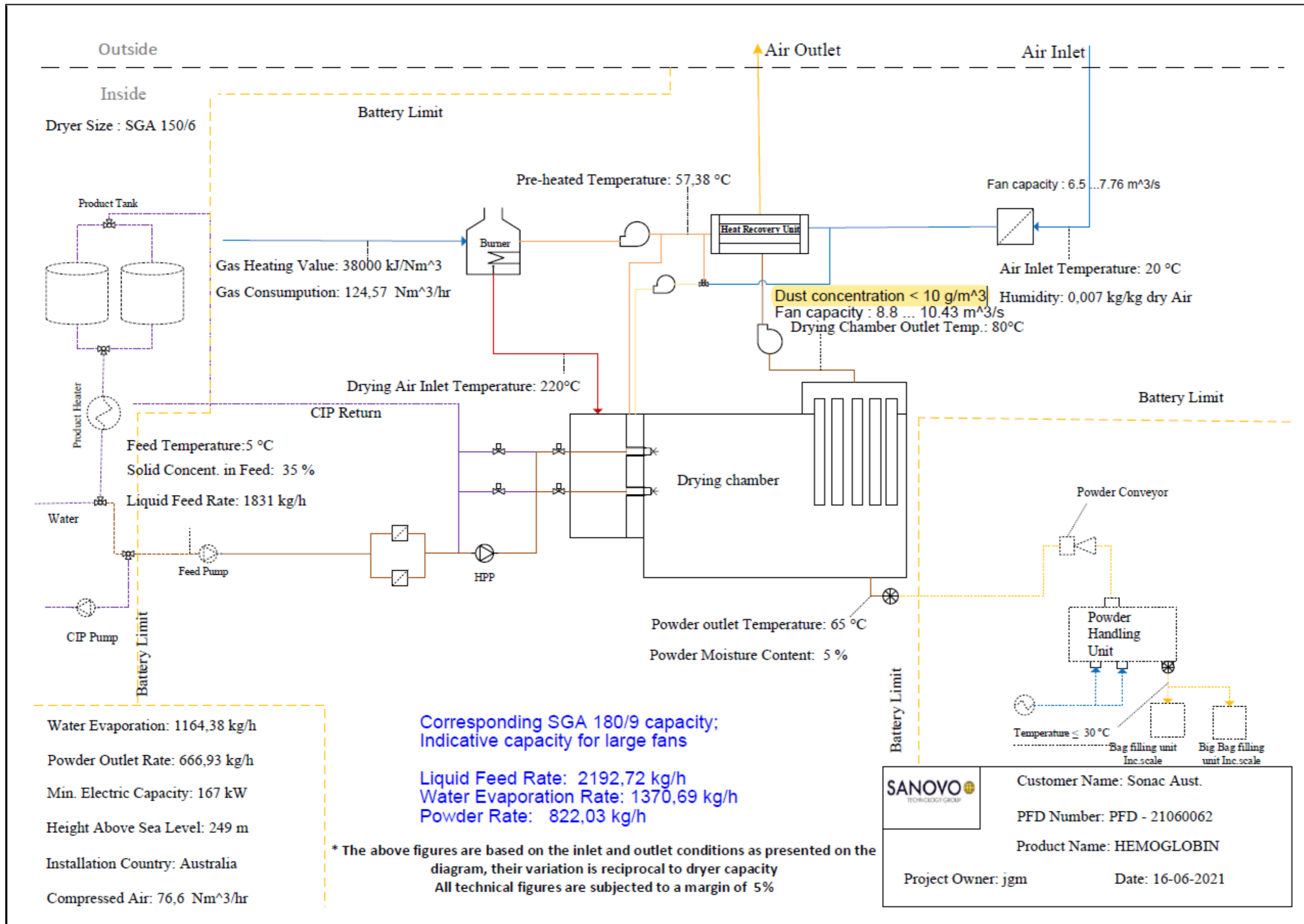
* Advanced Air® cross flow wet scrubber capable of removing water soluble acids and bases @ of 95%-98%.

ATTACHMENT 5: ADVANCED AIR HORIZONTAL PACKED BED WET SCRUBBER

SONAC AIR SCRUBBER UNIT SKETCH



Attachment 6: Sonac Spray Dryer PFD 21060062



Attachment 7: Sonac Australia Natural Gas Consumed and Electricity Use 2019 – 2021

