

Emission Rates																			
ID	Description	NO _x		PM		CO		Process Conditions							Actual volumetric flow rate (m ³ /h)	Volumetric flow rate at ref conditions (m ³ /s)*	Volumetric flow rate at ref conditions (m ³ /h)*	Operating hours new configuration	%
		g/s	mg/m ³	g/s	mg/m ³	g/s	mg/m ³	Stack Height (m)	Diameter (m)	Surface (m ²)	Stack Temp. (°C)	Velocity (m/s)	Actual volumetric flow rate (m ³ /s)						
A1a	Boiler house brick stack Release Point Boiler No 8 through A1	0.612	167	-	-	0.50	137	38	2.6	5.308	251	1.32	7.02	25277	3.66	13185	0	0.0	
A1b	Boiler house brick stack Release Point Boiler No 7 through A1	0.955	88	-	-	1.84	170	38	2.6	5.308	91	3.04	16.15	58146	10.85	39049	320	3.7	
A1	TOTAL	1.566	107.94	-	-	2.35	161.67	38	2.6	5.308	139	4.37	23.17	83423	14.51	52234	320	3.7	
A2	Centrax GT Emergency Dump Stack	4.386	113	-	-	1.01	26	20	1.42	1.583	451	24.51	38.81	139716			0	0.0	
A27	GT2+Boiler 9 Chimney	0.553	26	-	-	0.83	39	25.5	1.4	1.539	70	16.15	24.86	89499	21.29	76631	8590	98.1	
A37	GT2 emergency stop mode	2.192	50	-	-	4.38	100	10	1.2	1.131	300	38.76	43.83	157788			10	0.1	
A5	Wheat intake	-	-	0.00449	5	-	-	7	0.6	0.360	17	2.66	0.96	3443	0.90	3233	4380	50.0	
A6	Wheat storage	-	-	0.00030	5	-	-	21	0.38	0.113	ambient	0.53	0.06	216			1460	16.7	
A7	Wheat storage	-	-	0.00030	5	-	-	21	0.38	0.113	ambient	0.53	0.06	216			1460	16.7	
A8	Wheat storage	-	-	0.00030	5	-	-	21	0.38	0.113	ambient	0.53	0.06	216			1460	16.7	
A9	Dry mill	-	-	0.01206	5	-	-	24	0.53	0.221	21	11.80	2.60	9373	2.41	8683	5760	65.8	
A10	Dry mill	-	-	0.02631	5	-	-	24	0.88	0.608	25	9.34	5.68	20446	5.26	18941	5760	65.8	
A11	Dry mill	-	-	0.02340	5	-	-	24	0.75	0.442	39	12.14	5.36	19299	4.68	16850	5760	65.8	
A12	Dry mill	-	-	0.04739	5	-	-	24	1.12	0.985	41	11.09	10.93	39341	9.48	34121	5760	65.8	
A13	Gluten storage	-	-	0.00042	5	-	-	22	0.15	0.018	30	4.95	0.09	315	0.08	304	4380	50.0	
A14	Gluten storage	-	-	0.00044	5	-	-	22	0.15	0.018	20	5.22	0.09	332	0.09	314	4380	50.0	
A15	Flour storage	-	-	0.00141	5	-	-	22	0.15	0.018	17	16.67	0.29	1060	0.28	1013	2880	32.9	
A16	Flour storage	-	-	0.00152	5	-	-	22	0.15	0.018	20	18.30	0.32	1164	0.30	1097	2880	32.9	
A17	Conditioning tank	-	-	0.00005	5	-	-	23	0.1	0.008	ambient	1.27	0.01	36			5760	65.8	
A18	Conditioning tank	-	-	0.00005	5	-	-	23	0.1	0.008	ambient	1.27	0.01	36			5760	65.8	
A19	Gluten dryer	-	-	0.21182	10	-	-	28	2.2	3.801	71	7.04	26.76	96330	21.18	76255	8760	100.0	
A20	Gluten mill	-	-	0.00443	5	-	-	28	0.62	0.302	34	3.55	1.07	3854	0.89	3192	8760	100.0	
A21	Scrubber	-	-	-	-	-	-	12	0.3	0.071	24	13.12	0.93	3339			8760	100.0	
A22	Bran storage	-	-	0.00168	5	-	-	21.2	0.17	0.023	ambient	15.73	0.36	1285	0.34	1211	2880	32.9	
A23	Bran loading chute	-	-	0.00140	5	-	-	7	0.18	0.025	ambient	11.01	0.28	1008			1050	12.0	
A24	Diesel electric generator UPS1	0.32	2,839.7	0.0043398	39.4525	0.03	294.1	3	0.1	0.008	130	14.01	0.11	396			10	0.1	
A25	Diesel electric generator UPS2	0.32	2,839.7	0.0043398	39.4525	0.03	294.1	3	0.1	0.008	130	14.01	0.11	396			10	0.1	
A26	Gluten Loading	-	-	0.0014	5	-	-	7	0.18	0.025	ambient	11.01	0.28	1008			100	1.1	
A28	Starch Dryer	-	-	0.04952	5	-	-	28.1	1	0.785	63	16.17	12.70	45717	9.90	35652	6800	77.6	
A29	Modified Starch Reactor	-	-	0.00239	5	-	-	16.2	0.2	0.031	42	17.63	0.55	1994	0.48	1724	700	8.0	
A30	Native Starch Storage	-	-	0.00099	5	-	-	22.2	0.14	0.015	34	14.42	0.22	799	0.20	711	6100	69.6	
A31	Modified Starch Storage	-	-	0.00177	5	-	-	23.2	0.14	0.015	32	25.74	0.40	1426	0.35	1274	700	8.0	
A32	Imported Starch	-	-	0.00165	5	-	-	13.2	0.15	0.018	20	18.68	0.33	1188			30	0.3	
A33	Blends Dosing	-	-	0.00165	5	-	-	13.2	0.15	0.018	20	18.68	0.33	1188			30	0.3	
A34	Starch Loading	-	-	0.0025	5	-	-	5.2	0.15	0.018	20	28.30	0.5	1800			850	9.7	
A35	Diesel electric generator UPS3	0.32	2,839.6	0.0043395	39.45	0.0328	294.1004	3	0.1	0.008	130	14.01	0.11	396			10	0.1	
A36	1-tonne Bagging Station	-	-	0.0015389	5	-	-	7	0.25	0.049	30	6.98	0.34	1233	0.31	1108	1900	21.7	
A38	Bran Storage Silo	-	-	0.0024458	5	-	-	21.2	0.2	0.031	17	16.58	0.52	1875	0.49	1761	2880	32.9	
A39	Starch Dryer 2 nd aspiration	-	-	0.002025	5	-	-	12.1	0.22	0.038	34	12.11	0.46	1657	0.41	1458	6800	77.6	
A40	Gas Turbine 3 emergency stop mode	2.4	50	-	-	4.8	100	10	1.4	1.539	300	28.48	43.83	157788			10	0.1	
A41a	Gas Turbine 3 & Boiler 10	0.553	26	-	-	0.830	39	25.5	1.4	1.539	70	16.15	24.86	89499	21.29	76631	8590	98.1	
A41b	Boiler 10 Fresh air mode	0.986	70	-	-	0.270	19	25.5	1.4	1.539	85	15.12	23.28	83793	14.03	50502	4600	52.5	
A42	Diesel electric generator UPS4	0.32	2,839.7	0.0043395	39.45	0.03	294.1	3	0.1	0.008	130	14.01	0.11	396			10	0.1	
A43	Wetmill Flour Scale suction	-	-	0.00083	5	-	-	16.8	0.12	0.011	ambient	14.68	0.166	597.6			8760	100.0	
A44	Bran loading chute	-	-	0.0014	5	-	-	7	0.18	0.025	ambient	11.01	0.28	1008			1050	12.0	
A45	Bagging plant local exhaust ventilation	-	-	0.00083	5	-	-	7	0.12	0.011	30	14.68	0.166	597.6			3120	35.6	

*273K,101.3kPa,dry gas 15% Oxygen

Measured values
Based on Monitored data *2017
Based on Monitored data *2015
Estimation based on ELVs for Bag filters
Estimation based on technical datasheets/monitored emission rates in g/kWh for CO,NOx and PM