

Annex E

Air Quality Results Summary

Annex E1 - Summary of Predicted Maximum Ground Level Concentrations at ASRs from 2010 to 2014 (Project Only)

Summary of the Predicted Maximum Ground Level Concentrations at ASRs in 2010 (Project only)

ASR	X	Y	Description	Combined Cycle Mode (Main stacks S1 and S3 in operation)								Simple Cycle Mode (Bypass stacks S2 and S4 in operation)							
				Maximum Ground Level Concentration (µg/m ³)								Maximum Ground Level Concentration (µg/m ³)							
				1-hr NO _x ^(a)	Annual NO _x ^(a)	10-min SO ₂ ^(b)	24-hr SO ₂	24-hr PM ₁₀ ^(c)	Annual PM ₁₀ ^(c)	24-hr PM _{2.5} ^(c)	Annual PM _{2.5} ^(c)	1-hr NO _x ^(a)	Annual NO _x ^(a)	10-min SO ₂ ^(b)	24-hr SO ₂	24-hr PM ₁₀ ^(c)	Annual PM ₁₀ ^(c)	24-hr PM _{2.5} ^(c)	Annual PM _{2.5} ^(c)
ASR1	746279.5	2364781.29	Steel Mill Worker Camp	7.571	0.512	0.739	0.085	0.082	0.017	0.082	0.017	2.324	-	0.227	0.024	0.023	-	0.023	-
ASR2	745333.4	2364353.17	Monastery and Pagoda	5.706	0.278	0.557	0.045	0.044	0.009	0.044	0.009	1.633	-	0.159	0.016	0.015	-	0.015	-
ASR3	747339.2	2365154.24	Hnan Ywa	7.087	0.472	0.692	0.058	0.056	0.016	0.056	0.016	2.621	-	0.256	0.030	0.029	-	0.029	-
ASR4	747040.9	2367600.63	Si Ka Village	7.752	0.774	0.757	0.139	0.135	0.026	0.135	0.026	2.809	-	0.274	0.039	0.038	-	0.038	-
ASR5	743821.6	2368914.27	Cyoker Pin	5.306	0.190	0.518	0.035	0.034	0.006	0.034	0.006	1.979	-	0.193	0.016	0.016	-	0.016	-
ASR6	741171.8	2368065.66	Htu Naung Taing	7.103	0.121	0.693	0.029	0.029	0.004	0.029	0.004	1.594	-	0.156	0.015	0.014	-	0.014	-
ASR7	746154.9	2369881.9	Thein	7.813	0.228	0.762	0.038	0.037	0.008	0.037	0.008	1.889	-	0.184	0.014	0.013	-	0.013	-
ASR8	746347.6	2371618.89	Ywar Si (North)	8.289	0.163	0.809	0.035	0.034	0.005	0.034	0.005	1.537	-	0.150	0.012	0.011	-	0.011	-
ASR9	748578.3	2371578.65	Ywar Si (South)	5.391	0.206	0.526	0.034	0.033	0.007	0.033	0.007	1.403	-	0.137	0.015	0.014	-	0.014	-
ASR10	749757.3	2368956.92	Ku	5.131	0.234	0.501	0.036	0.035	0.008	0.035	0.008	1.917	-	0.187	0.014	0.014	-	0.014	-
ASR11	748625	2361995.32	Kan Sint	5.730	0.232	0.559	0.045	0.044	0.008	0.044	0.008	2.133	-	0.208	0.020	0.020	-	0.020	-
ASR12	747339.1	236828.5	Hpa Yar Hla	5.709	0.232	0.557	0.037	0.036	0.008	0.036	0.008	1.911	-	0.186	0.020	0.020	-	0.020	-
ASR13	746060.7	2363202.22	Hpet Taw	6.933	0.298	0.677	0.050	0.048	0.010	0.048	0.010	1.930	-	0.188	0.017	0.017	-	0.017	-
ASR14	743598.4	2364596.44	Nvaung Kan	6.089	0.162	0.594	0.040	0.039	0.005	0.039	0.005	1.991	-	0.194	0.019	0.018	-	0.018	-
ASR15	744751.5	2361090.44	Unknown Village	4.982	0.165	0.484	0.030	0.029	0.005	0.029	0.005	1.543	-	0.151	0.015	0.014	-	0.014	-
ASR16	742144.4	2363405.88	Ta Pin Kan Ywar Ma	4.930	0.120	0.481	0.030	0.029	0.004	0.029	0.004	1.491	-	0.145	0.018	0.018	-	0.018	-
ASR17	741642.2	2362413.07	Ta Pin Kan (South)	5.111	0.108	0.499	0.024	0.024	0.004	0.024	0.004	1.521	-	0.148	0.016	0.015	-	0.015	-
ASR18	746698	2366662	Steel Mill Worker Housing	21.562	1.525	2.104	0.375	0.364	0.050	0.364	0.050	2.697	-	0.263	0.052	0.050	-	0.050	-
ASR19	746795	2365139	Government Technical High School	9.137	0.718	0.892	0.100	0.097	0.024	0.097	0.024	2.259	-	0.220	0.043	0.042	-	0.042	-
			Assessment Criteria (WHO AQGs)^(d)	200	40	500	125	150	70	75	35	200	40	500	125	150	70	75	35
			Maximum % of Project contribution to criterion	10.78%	3.81%	0.42%	0.30%	0.24%	0.07%	0.49%	0.14%	1.40%	-	0.05%	0.04%	0.03%	-	0.07%	-

Notes:
a) Reference to UK Air Quality Assessment Guidelines - short-term (1-hour) NO_x = 50% of NO_x long-term (annual) NO_x = 100% of NO_x
b) A general factor of 1.43 is used to convert hourly SO₂ model results to 10-min averaged results
c) For conservative approach, emissions of PM₁₀ and PM_{2.5} are assumed to be the same. Therefore, modelling results of PM₁₀ and PM_{2.5} are identical.
d) WHO Interim Target 1 for 24-hr SO₂, 24-hr PM₁₀, 24-hr PM_{2.5}, Annual PM₁₀ and Annual PM_{2.5}. WHO Guideline value for 1-hr NO_x, Annual NO_x and 10-min SO₂.

Summary of the Predicted Maximum Ground Level Concentrations at ASRs in 2011 (Project only)

ASR	X	Y	Description	Combined Cycle Mode (Main stacks S1 and S3 in operation)									Simple Cycle Mode (Bypass stacks S2 and S4 in operation)								
				Maximum Ground Level Concentration (µg/m ³)									Maximum Ground Level Concentration (µg/m ³)								
				1-hr NO _x ^(a)	Annual NO _x ^(a)	10-min SO ₂ ^(b)	24-hr SO ₂	24-hr PM ₁₀ ^(c)	Annual PM ₁₀ ^(c)	24-hr PM _{2.5} ^(c)	Annual PM _{2.5} ^(c)	1-hr NO _x ^(a)	Annual NO _x ^(a)	10-min SO ₂ ^(b)	24-hr SO ₂	24-hr PM ₁₀ ^(c)	Annual PM ₁₀ ^(c)	24-hr PM _{2.5} ^(c)	Annual PM _{2.5} ^(c)		
ASR1	746279.5	2364781.29	Steel Mill Worker Camp	6.800	0.538	0.664	0.068	0.066	0.018	0.066	0.009	0.018	2.245	-	0.219	0.022	0.021	-	0.021	-	
ASR2	745333.4	2364353.17	Monastery and Pagoda	7.745	0.278	0.756	0.055	0.053	0.009	0.053	0.009	0.018	1.798	-	0.175	0.022	0.021	-	0.021	-	
ASR3	747539.2	2365154.24	Hnan Ywa	10.651	0.543	1.039	0.089	0.086	0.018	0.086	0.018	2.604	-	0.254	0.025	0.024	-	0.024	-		
ASR4	747040.9	2367600.63	Sa Ka Village	7.686	0.671	0.750	0.200	0.194	0.022	0.194	0.022	2.884	-	0.281	0.052	0.050	-	0.050	-		
ASR5	743821.6	2368914.27	Cyoker Pin	6.754	0.194	0.659	0.039	0.038	0.006	0.038	0.006	1.541	-	0.150	0.017	0.017	-	0.017	-		
ASR6	741171.8	2368065.66	Hta Naung Taing	6.356	0.119	0.620	0.031	0.030	0.004	0.030	0.004	1.581	-	0.154	0.017	0.016	-	0.016	-		
ASR7	746154.9	2369881.9	Thein	5.900	0.267	0.546	0.058	0.056	0.009	0.056	0.009	2.231	-	0.218	0.021	0.021	-	0.021	-		
ASR8	746347.6	2371618.89	Ywar Si (North)	5.239	0.186	0.511	0.042	0.041	0.006	0.041	0.006	1.626	-	0.159	0.020	0.020	-	0.020	-		
ASR9	748378.3	2371378.65	Ywar Si (South)	7.770	0.193	0.758	0.041	0.039	0.006	0.039	0.006	1.991	-	0.194	0.015	0.014	-	0.014	-		
ASR10	749757.3	2368956.92	Ku	7.146	0.214	0.697	0.037	0.036	0.007	0.036	0.007	1.763	-	0.172	0.015	0.014	-	0.014	-		
ASR11	748625	2361995.32	Kan Sint	5.716	0.273	0.558	0.044	0.042	0.009	0.042	0.009	2.598	-	0.254	0.025	0.024	-	0.024	-		
ASR12	747339.1	2360828.5	Hpa Yar Hla	6.231	0.252	0.608	0.045	0.044	0.008	0.044	0.008	2.185	-	0.213	0.025	0.025	-	0.025	-		
ASR13	746060.7	2363202.22	Hpet Taw	6.169	0.312	0.602	0.045	0.044	0.010	0.044	0.010	2.825	-	0.276	0.020	0.019	-	0.019	-		
ASR14	743598.4	2364596.44	Nvaung Kan	5.250	0.161	0.512	0.027	0.026	0.005	0.026	0.005	1.914	-	0.187	0.014	0.014	-	0.014	-		
ASR15	744751.5	2361090.44	Unknown Village	4.579	0.164	0.447	0.032	0.031	0.005	0.031	0.005	1.985	-	0.194	0.018	0.018	-	0.018	-		
ASR16	742144.4	2363405.88	Ta Pin Kan Ywar Ma	4.401	0.119	0.429	0.022	0.022	0.004	0.022	0.004	1.570	-	0.153	0.012	0.011	-	0.011	-		
ASR17	741642.2	2362413.07	Ta Pin Kan (South)	4.771	0.106	0.466	0.029	0.028	0.004	0.028	0.004	1.406	-	0.137	0.013	0.013	-	0.013	-		
ASR18	746698	2366662	Steel Mill Worker Housing	21.359	1.525	2.084	0.322	0.313	0.050	0.313	0.050	2.808	-	0.274	0.041	0.040	-	0.040	-		
ASR19	746795	2365139	Government Technical High School	10.509	0.785	1.026	0.108	0.104	0.026	0.104	0.026	2.401	-	0.234	0.045	0.044	-	0.044	-		
Assessment Criteria (WHO AQGs)^(d)				200	40	500	125	150	70	75	35	200	40	500	125	150	70	75	35		
Maximum % of Project contribution to criterion				10.68%	3.81%	0.42%	0.26%	0.21%	0.07%	0.42%	0.14%	1.44%	-	0.06%	0.04%	0.03%	-	0.07%	-		

Notes:

- a) Reference to UK Air Quality Assessment Guidelines - short-term (1-hour) NO_x = 50% of NO_x long-term (annual) NO_x = 100% of NO_x
- b) A general factor of 1.43 is used to convert hourly SO₂ model results to 10-min averaged results
- c) For conservative approach, emissions of PM₁₀ and PM_{2.5} are assumed to be the same. Therefore, modelling results of PM₁₀ and PM_{2.5} are identical.
- d) WHO Interim Target 1 for 24-hr SO₂, 24-hr PM₁₀, 24-hr PM_{2.5}, Annual PM₁₀ and Annual PM_{2.5}. WHO Guideline value for 1-hr NO_x, Annual NO_x and 10-min SO₂.

Summary of the Predicted Maximum Ground Level Concentrations at ASRs in 2012 (Project only)

ASR	X	Y	Description	Combined Cycle Mode (Main stacks S1 and S3 in operation)									Simple Cycle Mode (Bypass stacks S2 and S4 in operation)									
				Maximum Ground Level Concentration ($\mu\text{g}/\text{m}^3$)									Maximum Ground Level Concentration ($\mu\text{g}/\text{m}^3$)									
				1-hr NO ₂ ^(a)	Annual NO ₂ ^(a)	10-min SO ₂ ^(b)	24-hr SO ₂	24-hr PM ₁₀ ^(c)	Annual PM ₁₀ ^(c)	24-hr PM _{2.5} ^(c)	Annual PM _{2.5} ^(c)	1-hr NO ₂ ^(a)	Annual NO ₂ ^(a)	10-min SO ₂ ^(b)	24-hr SO ₂	24-hr PM ₁₀ ^(c)	Annual PM ₁₀ ^(c)	24-hr PM _{2.5} ^(c)	Annual PM _{2.5} ^(c)			
ASR1	746279.5	2364781.29	Steel Mill Worker Camp	6.476	0.436	0.632	0.062	0.060	0.014	0.014	0.060	0.014	0.008	0.008	2.326	-	0.212	0.028	0.027	-	0.027	-
ASR2	745333.4	2364353.17	Monastery and Pagoda	5.798	0.235	0.566	0.049	0.048	0.008	0.048	0.008	0.008	0.008	0.008	2.326	-	0.227	0.021	0.020	-	0.020	-
ASR3	747539.2	2365154.24	Hnan Ywa	9.499	0.414	0.927	0.065	0.063	0.014	0.063	0.014	0.014	0.014	3.056	-	0.298	0.026	0.025	-	0.025	-	
ASR4	747040.0	2367600.63	Sa Ka Village	7.715	0.839	0.753	0.175	0.170	0.028	0.170	0.028	0.028	2.874	-	0.280	0.039	0.038	-	0.038	-	0.038	-
ASR5	743821.6	2368914.27	Cyoker Pin	4.290	0.170	0.419	0.040	0.039	0.006	0.039	0.006	0.006	1.530	-	0.149	0.012	0.012	-	0.012	-	0.012	-
ASR6	741171.8	2368065.66	Hta Naung Taing	4.342	0.102	0.424	0.032	0.031	0.003	0.031	0.003	0.003	1.619	-	0.158	0.018	0.018	-	0.018	-	0.018	-
ASR7	746154.9	2369881.9	Thein	6.478	0.262	0.632	0.063	0.061	0.009	0.061	0.009	0.009	1.906	-	0.186	0.015	0.015	-	0.015	-	0.015	-
ASR8	746347.6	2371618.89	Ywar Si (North)	5.572	0.199	0.544	0.039	0.038	0.007	0.038	0.007	0.007	1.515	-	0.148	0.013	0.013	-	0.013	-	0.013	-
ASR9	748378.3	2371378.65	Ywar Si (South)	4.803	0.248	0.469	0.034	0.033	0.008	0.033	0.008	0.008	1.807	-	0.176	0.017	0.016	-	0.016	-	0.016	-
ASR10	749757.3	2368956.92	Ku	6.623	0.252	0.646	0.040	0.038	0.008	0.038	0.008	0.008	1.807	-	0.176	0.018	0.018	-	0.017	-	0.017	-
ASR11	748625	2361995.32	Kan Sint	7.216	0.214	0.704	0.045	0.044	0.007	0.044	0.007	0.007	2.127	-	0.208	0.023	0.022	-	0.022	-	0.022	-
ASR12	747339.1	2360828.5	Hpa Yar Hla	5.785	0.211	0.565	0.036	0.035	0.007	0.035	0.007	0.007	1.773	-	0.173	0.018	0.018	-	0.018	-	0.018	-
ASR13	746060.7	2363202.22	Hpet Taw	6.753	0.261	0.659	0.043	0.042	0.009	0.042	0.009	0.009	1.944	-	0.190	0.016	0.016	-	0.016	-	0.016	-
ASR14	743598.4	2364596.44	Nvaung Kan	7.503	0.135	0.732	0.058	0.056	0.004	0.056	0.004	0.004	1.746	-	0.170	0.015	0.015	-	0.015	-	0.015	-
ASR15	744751.5	2361090.44	Unknown Village	6.032	0.143	0.589	0.033	0.032	0.005	0.032	0.005	0.005	1.754	-	0.171	0.015	0.014	-	0.014	-	0.014	-
ASR16	742144.4	2363405.88	Ta Pin Kan Ywar Ma	6.789	0.099	0.663	0.051	0.049	0.003	0.049	0.003	0.003	1.407	-	0.137	0.016	0.015	-	0.015	-	0.015	-
ASR17	741642.2	2362413.07	Ta Pin Kan (South)	6.254	0.089	0.610	0.047	0.045	0.003	0.045	0.003	0.003	1.587	-	0.155	0.018	0.018	-	0.018	-	0.018	-
ASR18	746698	2366662	Steel Mill Worker Housing	21.946	1.455	2.142	0.322	0.312	0.048	0.312	0.048	0.048	2.986	-	0.291	0.044	0.042	-	0.042	-	0.042	-
ASR19	746795	2365139	Government Technical High School	7.439	0.628	0.726	0.114	0.111	0.021	0.111	0.021	0.021	2.870	-	0.280	0.040	0.039	-	0.039	-	0.039	-
			Assessment Criteria (WHO AQGs) ^(d)	200	40	500	125	150	70	75	35	200		40	500	125	150	70	75	35		
			Maximum % of Project contribution to criterion	10.97%	3.64%	0.43%	0.26%	0.21%	0.07%	0.42%	0.14%	1.53%	-	0.06%	0.03%	0.03%	-	0.06%	-	0.06%	-	

- Notes:
- a) Reference to UK Air Quality Assessment Guidelines - short-term (1-hour) NO₂ = 50% of NO₂ long-term (annual) NO₂ = 100% of NO₂
 - b) A general factor of 1.43 is used to convert hourly SO₂ model results to 10-min averaged results
 - c) For conservative approach, emissions of PM₁₀ and PM_{2.5} are assumed to be the same. Therefore, modelling results of PM₁₀ and PM_{2.5} are identical.
 - d) WHO Interim Target 1 for 24-hr SO₂, 24-hr PM₁₀, 24-hr PM_{2.5}, Annual PM₁₀ and Annual PM_{2.5}. WHO Guideline value for 1-hr NO₂, Annual NO₂ and 10-min SO₂.

Summary of the Predicted Maximum Ground Level Concentrations at ASRs in 2013 (Project only)

ASR	X	Y	Description	Combined Cycle Mode (Main stacks S1 and S3 in operation)									Simple Cycle Mode (Bypass stacks S2 and S4 in operation)								
				Maximum Ground Level Concentration (µg/m ³)									Maximum Ground Level Concentration (µg/m ³)								
				1-hr NO _x ^(a)	Annual NO _x ^(a)	10-min SO ₂ ^(b)	24-hr SO ₂	24-hr PM ₁₀ ^(c)	Annual PM ₁₀ ^(c)	24-hr PM _{2.5} ^(c)	Annual PM _{2.5} ^(c)	1-hr NO _x ^(a)	Annual NO _x ^(a)	10-min SO ₂ ^(b)	24-hr SO ₂	24-hr PM ₁₀ ^(c)	Annual PM ₁₀ ^(c)	24-hr PM _{2.5} ^(c)	Annual PM _{2.5} ^(c)		
ASR1	746279.5	2364781.29	Steel Mill Worker Camp	8.800	0.346	0.859	0.056	0.054	0.011	0.054	0.011	2.014	-	0.197	0.024	0.023	-	0.023	-		
ASR2	745333.4	2364353.17	Monastery and Pagoda	7.930	0.216	0.774	0.040	0.039	0.007	0.039	0.007	1.909	-	0.186	0.017	0.016	-	0.016	-		
ASR3	747539.2	2365154.24	Hnan Ywa	9.080	0.366	0.886	0.059	0.057	0.012	0.057	0.012	2.703	-	0.264	0.024	0.023	-	0.023	-		
ASR4	747040.9	2367600.63	Sa Ka Village	7.733	1.064	0.755	0.184	0.179	0.035	0.179	0.035	3.112	-	0.304	0.038	0.036	-	0.036	-		
ASR5	743821.6	2368914.27	Gyoke Pin	4.487	0.177	0.438	0.034	0.033	0.006	0.033	0.006	2.038	-	0.199	0.013	0.013	-	0.013	-		
ASR6	741171.8	2368065.66	Hta Nnung Taing	4.878	0.102	0.476	0.028	0.027	0.003	0.027	0.003	1.502	-	0.147	0.011	0.011	-	0.011	-		
ASR7	746154.9	2369881.9	Thein	3.959	0.305	0.386	0.051	0.050	0.010	0.050	0.010	1.880	-	0.183	0.016	0.015	-	0.015	-		
ASR8	746347.6	2371618.89	Ywar Si (North)	4.081	0.230	0.398	0.037	0.036	0.008	0.036	0.008	1.770	-	0.173	0.014	0.014	-	0.014	-		
ASR9	748378.3	2371378.65	Ywar Si (South)	5.094	0.299	0.497	0.049	0.047	0.010	0.047	0.010	1.924	-	0.188	0.015	0.014	-	0.014	-		
ASR10	749757.3	2368956.92	Ku	5.722	0.255	0.558	0.040	0.039	0.008	0.039	0.008	2.144	-	0.209	0.016	0.016	-	0.016	-		
ASR11	748625	2361995.32	Kan Sint	6.617	0.178	0.646	0.033	0.032	0.006	0.032	0.006	2.331	-	0.228	0.016	0.015	-	0.015	-		
ASR12	747339.1	2360828.5	Hpa Yar Hla	5.277	0.158	0.515	0.035	0.034	0.005	0.034	0.005	2.032	-	0.198	0.020	0.019	-	0.019	-		
ASR13	746060.7	2363202.22	Hpet Taw	5.913	0.207	0.577	0.036	0.035	0.007	0.035	0.007	2.004	-	0.196	0.019	0.018	-	0.018	-		
ASR14	743398.4	2364596.44	Nyung Kan	6.104	0.137	0.596	0.043	0.042	0.005	0.042	0.005	1.878	-	0.183	0.016	0.016	-	0.016	-		
ASR15	744751.5	2361090.44	Unknown Village	7.718	0.123	0.753	0.033	0.032	0.004	0.032	0.004	1.888	-	0.184	0.014	0.014	-	0.014	-		
ASR16	742144.4	2363405.88	Ta Pin Kan Ywar Ma	6.634	0.102	0.647	0.039	0.038	0.003	0.038	0.003	1.807	-	0.176	0.014	0.014	-	0.014	-		
ASR17	741642.2	2362413.07	Ta Pin Kan (South)	6.475	0.091	0.632	0.038	0.037	0.003	0.037	0.003	1.701	-	0.166	0.013	0.013	-	0.013	-		
ASR18	746698	2366662	Steel Mill Worker Housing	22.135	1.328	2.160	0.311	0.302	0.044	0.302	0.044	2.768	-	0.270	0.042	0.041	-	0.041	-		
ASR19	746795	2365139	Government Technical High School	8.493	0.466	0.829	0.109	0.106	0.015	0.106	0.015	2.561	-	0.250	0.033	0.032	-	0.032	-		
			Assessment Criteria (WHO AQGs) ^(d)	200	40	500	125	150	70	75	35	200	40	500	125	150	70	75	35		
			Maximum % of Project contribution to criterion	11.07%	3.32%	0.43%	0.25%	0.20%	0.06%	0.40%	0.13%	1.56%	-	0.06%	0.03%	0.03%	-	0.05%	-		

Notes:

- a) Reference to UK Air Quality Assessment Guidelines - short-term (1-hour) NO_x = 50% of NO_x long-term (annual) NO_x = 100% of NO_x
- b) A general factor of 1.43 is used to convert hourly SO₂ model results to 10-min averaged results
- c) For conservative approach, emissions of PM₁₀ and PM_{2.5} are assumed to be the same. Therefore, modelling results of PM₁₀ and PM_{2.5} are identical.
- d) WHO Interim Target 1 for 24-hr SO₂, 24-hr PM₁₀, 24-hr PM_{2.5}, Annual PM₁₀ and Annual PM_{2.5}. WHO Guideline value for 1-hr NO_x, Annual NO_x and 10-min SO₂.

Summary of the Predicted Maximum Ground Level Concentrations at ASRs in 2014 (Project only)

ASR	X	Y	Description	Combined Cycle Mode (Main stacks S1 and S3 in operation)									Simple Cycle Mode (Bypass stacks S2 and S4 in operation)								
				Maximum Ground Level Concentration (µg/m ³)									Maximum Ground Level Concentration (µg/m ³)								
				1-hr NO _x ^(a)	Annual NO _x ^(a)	10-min SO ₂ ^(b)	24-hr SO ₂	24-hr PM ₁₀ ^(c)	Annual PM ₁₀ ^(c)	24-hr PM _{2.5} ^(c)	Annual PM _{2.5} ^(c)	1-hr NO _x ^(a)	Annual NO _x ^(a)	10-min SO ₂ ^(b)	24-hr SO ₂	24-hr PM ₁₀ ^(c)	Annual PM ₁₀ ^(c)	24-hr PM _{2.5} ^(c)	Annual PM _{2.5} ^(c)		
ASR1	746279.5	2364781.29	Steel Mill Worker Camp	7.906	0.477	0.772	0.076	0.074	0.016	0.074	0.016	1.808	-	0.176	0.023	0.022	-	0.022	-		
ASR2	745333.4	2364353.17	Monastery and Pagoda	7.919	0.254	0.773	0.062	0.060	0.008	0.060	0.008	2.047	-	0.200	0.020	0.019	-	0.019	-		
ASR3	747339.2	2365154.24	Hnan Ywa	10.248	0.477	1.000	0.068	0.066	0.016	0.066	0.016	2.951	-	0.288	0.027	0.026	-	0.026	-		
ASR4	747040.9	2367600.63	Sa Ka Village	10.097	0.985	0.985	0.178	0.171	0.029	0.171	0.029	2.930	-	0.286	0.041	0.040	-	0.040	-		
ASR5	743821.6	2368914.27	Cyoker Pin	5.942	0.185	0.551	0.038	0.037	0.006	0.037	0.006	1.747	-	0.170	0.016	0.016	-	0.016	-		
ASR6	741171.8	2368065.66	Hta Naung Taing	5.300	0.111	0.517	0.024	0.023	0.004	0.023	0.004	1.204	-	0.118	0.015	0.015	-	0.015	-		
ASR7	746154.9	2369881.9	Thein	6.165	0.303	0.602	0.054	0.053	0.010	0.053	0.010	2.108	-	0.206	0.017	0.016	-	0.016	-		
ASR8	746347.6	2371618.89	Ywar Si (North)	6.206	0.221	0.606	0.036	0.035	0.007	0.035	0.007	1.757	-	0.172	0.017	0.017	-	0.017	-		
ASR9	748378.3	2371378.65	Ywar Si (South)	5.076	0.231	0.495	0.032	0.031	0.008	0.031	0.008	1.657	-	0.162	0.012	0.012	-	0.012	-		
ASR10	749757.3	2368956.92	Ku	5.863	0.252	0.572	0.034	0.033	0.008	0.033	0.008	1.781	-	0.174	0.014	0.014	-	0.014	-		
ASR11	748625	2361995.32	Kan Sint	6.272	0.256	0.612	0.052	0.051	0.008	0.051	0.008	2.041	-	0.199	0.022	0.021	-	0.021	-		
ASR12	747339.1	2360828.5	Hpa Yar Hla	6.216	0.238	0.607	0.042	0.041	0.008	0.041	0.008	1.843	-	0.180	0.020	0.020	-	0.020	-		
ASR13	746060.7	2363202.22	Hpet Taw	6.892	0.288	0.673	0.060	0.059	0.010	0.059	0.010	1.984	-	0.194	0.022	0.021	-	0.021	-		
ASR14	743398.4	2364596.44	Nyaung Kan	5.560	0.149	0.543	0.027	0.026	0.005	0.026	0.005	1.186	-	0.116	0.013	0.013	-	0.013	-		
ASR15	744751.5	2361090.44	Unknown Village	5.734	0.156	0.560	0.038	0.037	0.005	0.037	0.005	1.863	-	0.182	0.018	0.017	-	0.017	-		
ASR16	742144.4	2363405.88	Ta Pin Kan Ywar Ma	6.361	0.110	0.621	0.027	0.026	0.004	0.026	0.004	1.162	-	0.113	0.009	0.009	-	0.009	-		
ASR17	741642.2	2362413.07	Ta Pin Kan (South)	6.036	0.097	0.589	0.025	0.025	0.003	0.025	0.003	1.166	-	0.114	0.008	0.008	-	0.008	-		
ASR18	746698	2366662	Steel Mill Worker Housing	21.650	1.738	2.113	0.279	0.271	0.058	0.271	0.058	2.759	-	0.269	0.036	0.035	-	0.035	-		
ASR19	746795	2365139	Government Technical High School	8.721	0.678	0.856	0.117	0.113	0.022	0.113	0.022	2.448	-	0.239	0.028	0.027	-	0.027	-		
			Assessment Criteria (WHO AQGs) ^(d)	200	40	500	125	150	70	35	200		500	125	150	70	75	35			
			Maximum % of Project contribution to criterion	10.83%	4.35%	0.42%	0.22%	0.18%	0.08%	0.36%	0.16%	1.48%	-	0.06%	0.03%	0.03%	-	0.05%	-		

- Notes:
a) Reference to UK Air Quality Assessment Guidelines - short-term (1-hour) NO_x = 50% of NO_x long-term (annual) NO_x = 100% of NO_x
b) A general factor of 1.43 is used to convert hourly SO₂ model results to 10-min averaged results
c) For conservative approach, emissions of PM₁₀ and PM_{2.5} are assumed to be the same. Therefore, modelling results of PM₁₀ and PM_{2.5} are identical.
d) WHO Interim Target 1 for 24-hr SO₂, 24-hr PM₁₀, 24-hr PM_{2.5}, Annual PM₁₀ and Annual PM_{2.5}. WHO Guideline value for 1-hr NO_x, Annual NO_x and 10-min SO₂.

Annex E2 - Summary of Cumulative Maximum Ground Level Concentrations at ASRs from 2010 to 2014 (Project Contribution and Background)

Summary of Cumulative Maximum Ground Level Concentrations at ASRs in 2010 (Project Contribution and Background)

ASR	X	Y	Description	Combined Cycle Mode (Main stacks S1 and S3 in operation)								Simple Cycle Mode (Bypass stacks S2 and S4 in operation)							
				Maximum Ground Level Concentration (µg/m ³)								Maximum Ground Level Concentration (µg/m ³)							
				1-hr NO ₂ ^(a)	Annual NO ₂ ^(a)	10-min SO ₂ ^(b)	24-hr SO ₂	24-hr PM ₁₀ ^(c)	Annual PM ₁₀ ^(c)	24-hr PM _{2.5} ^(c)	Annual PM _{2.5} ^(c)	1-hr NO ₂ ^(a)	Annual NO ₂ ^(a)	10-min SO ₂ ^(b)	24-hr SO ₂	24-hr PM ₁₀ ^(c)	Annual PM ₁₀ ^(c)	24-hr PM _{2.5} ^(c)	Annual PM _{2.5} ^(c)
			Background Concentration^(d)	54.0	54.0	6.2	6.2	43.3	43.3	26.7	26.7	54.0	54.0	6.2	6.2	43.3	43.3	26.7	26.7
ASR1	746280	2364781	Steel Mill Worker Camp	61.5	54.5	6.9	6.2	43.4	43.3	26.8	26.7	56.3	-	6.4	6.2	43.3	-	26.7	-
ASR2	745333	2364353	Monastery and Pagoda	59.7	54.2	6.7	6.2	43.4	43.3	26.7	26.7	55.6	-	6.3	6.2	43.3	-	26.7	-
ASR3	747339	2365154	Hnan Ywa	61.1	54.4	6.8	6.2	43.4	43.3	26.7	26.7	56.6	-	6.4	6.2	43.3	-	26.7	-
ASR4	747041	2367601	Sa Ka Village	61.7	54.7	6.9	6.3	43.4	43.3	26.8	26.7	56.8	-	6.4	6.2	43.3	-	26.7	-
ASR5	743822	2368914	Gvoko Pin	59.3	54.2	6.7	6.2	43.3	43.3	26.7	26.7	55.9	-	6.3	6.2	43.3	-	26.7	-
ASR6	741172	2368066	Htu Naung Taing	61.1	54.1	6.8	6.2	43.3	43.3	26.7	26.7	55.6	-	6.3	6.2	43.3	-	26.7	-
ASR7	746155	2369882	Thein	61.8	54.2	6.9	6.2	43.3	43.3	26.7	26.7	55.9	-	6.3	6.2	43.3	-	26.7	-
ASR8	746348	2371619	Ywar Si (North)	62.3	54.1	7.0	6.2	43.3	43.3	26.7	26.7	55.5	-	6.3	6.2	43.3	-	26.7	-
ASR9	748378	2371379	Ywar Si (South)	59.4	54.2	6.7	6.2	43.3	43.3	26.7	26.7	55.4	-	6.3	6.2	43.3	-	26.7	-
ASR10	749757	2368957	Ku	59.1	54.2	6.7	6.2	43.3	43.3	26.7	26.7	55.9	-	6.3	6.2	43.3	-	26.7	-
ASR11	748625	2361995	Kan Sint	59.7	54.2	6.7	6.2	43.4	43.3	26.7	26.7	56.1	-	6.4	6.2	43.3	-	26.7	-
ASR12	747339	2360829	Hpa Yar Hla	59.7	54.2	6.7	6.2	43.3	43.3	26.7	26.7	55.9	-	6.3	6.2	43.3	-	26.7	-
ASR13	746061	2363202	Hpet Taw	60.9	54.3	6.8	6.2	43.4	43.3	26.7	26.7	55.9	-	6.3	6.2	43.3	-	26.7	-
ASR14	743398	2364596	Nvaung Kan	60.1	54.1	6.7	6.2	43.3	43.3	26.7	26.7	56.0	-	6.3	6.2	43.3	-	26.7	-
ASR15	744752	2361090	Unknown Village	58.9	54.1	6.6	6.2	43.3	43.3	26.7	26.7	55.5	-	6.3	6.2	43.3	-	26.7	-
ASR16	742144	2363406	Ta Pin Kan Ywar Ma	58.9	54.1	6.6	6.2	43.3	43.3	26.7	26.7	55.5	-	6.3	6.2	43.3	-	26.7	-
ASR17	741642	2362413	Ta Pin Kan (South)	59.1	54.1	6.6	6.2	43.3	43.3	26.7	26.7	55.5	-	6.3	6.2	43.3	-	26.7	-
ASR18	746698	2366662	Steel Mill Worker Housing	75.5	55.5	8.3	6.5	43.7	43.4	27.0	26.7	56.7	-	6.4	6.2	43.4	-	26.7	-
ASR19	746795	2365139	Government Technical High School	63.1	54.7	7.0	6.3	43.4	43.3	26.8	26.7	56.2	-	6.4	6.2	43.4	-	26.7	-
			Assessment Criteria (WHO AQGs)^(e)	200	40	500	125	150	70	75	35	200	40	500	125	150	70	75	35
			Maximum % of cumulative impact to criterion	38%	139%	2%	5%	29%	62%	36%	78%	28%	-	1%	5%	29%	-	36%	-

Notes:

- a) Reference to UK Air Quality Assessment Guidelines - short-term (1-hour) NO₂ = 50% of NO₂, long-term (annual) NO₂ = 100% of NO₂.
- b) A general factor of 1.43 is used to convert hourly SO₂ model results to 10-min averaged results.
- c) For conservative approach, emissions of PM₁₀ and PM_{2.5} are assumed to be the same. Therefore, modelling results of PM₁₀ and PM_{2.5} are identical.
- d) WHO Interim Target 1 for 24-hr SO₂, 24-hr PM₁₀, 24-hr PM_{2.5}, Annual PM₁₀ and Annual PM_{2.5}. WHO Guideline value for 1-hr NO₂, Annual NO₂ and 10-min SO₂.
- e) Averaged background pollutant concentrations have been included.

Summary of Cumulative Maximum Ground Level Concentrations at ASRs in 2011 (Project Contribution and Background)

ASR	X	Y	Description	Combined Cycle Mode (Main stacks S1 and S3 in operation)								Simple Cycle Mode (Bypass stacks S2 and S4 in operation)							
				Maximum Ground Level Concentration (µg/m ³)								Maximum Ground Level Concentration (µg/m ³)							
				1-hr NO _x ^(a)	Annual NO _x ^(a)	10-min SO ₂ ^(b)	24-hr SO ₂	24-hr PM ₁₀ ^(c)	Annual PM ₁₀ ^(c)	24-hr PM _{2.5} ^(c)	Annual PM _{2.5} ^(c)	1-hr NO _x ^(a)	Annual NO _x ^(a)	10-min SO ₂ ^(b)	24-hr SO ₂	24-hr PM ₁₀ ^(c)	Annual PM ₁₀ ^(c)	24-hr PM _{2.5} ^(c)	Annual PM _{2.5} ^(c)
Background Concentration^(d)				54.0	54.0	6.2	6.2	43.3	43.3	26.7	26.7	54.0	54.0	6.2	6.2	43.3	43.3	26.7	26.7
ASR1	746280	2364781	Steel Mill Worker Camp	60.8	54.5	6.8	6.2	43.4	43.3	26.7	26.7	56.2	-	6.4	6.2	43.3	-	26.7	-
ASR2	745333	2364353	Monastery and Pagoda	61.7	54.2	6.9	6.2	43.4	43.3	26.7	26.7	55.8	-	6.3	6.2	43.3	-	26.7	-
ASR3	747539	2365154	Hnan Ywa	64.6	54.5	7.2	6.2	43.4	43.3	26.8	26.7	56.6	-	6.4	6.2	43.3	-	26.7	-
ASR4	747041	2367601	Sa Ka Village	61.7	54.6	6.9	6.3	43.5	43.3	26.9	26.7	56.9	-	6.4	6.2	43.4	-	26.7	-
ASR5	743822	2368914	Gvoko Pin	60.7	54.2	6.8	6.2	43.3	43.3	26.7	26.7	55.5	-	6.3	6.2	43.3	-	26.7	-
ASR6	741172	2368066	Hta Naung Taing	60.3	54.1	6.8	6.2	43.3	43.3	26.7	26.7	55.6	-	6.3	6.2	43.3	-	26.7	-
ASR7	746155	2369882	Thein	59.6	54.2	6.7	6.2	43.4	43.3	26.7	26.7	56.2	-	6.4	6.2	43.3	-	26.7	-
ASR8	746348	2371619	Ywar Si (North)	59.2	54.2	6.7	6.2	43.4	43.3	26.7	26.7	55.6	-	6.3	6.2	43.3	-	26.7	-
ASR9	748378	2371379	Ywar Si (South)	61.7	54.2	6.9	6.2	43.3	43.3	26.7	26.7	56.0	-	6.3	6.2	43.3	-	26.7	-
ASR10	749757	2368957	Ku	61.1	54.2	6.8	6.2	43.3	43.3	26.7	26.7	55.7	-	6.3	6.2	43.3	-	26.7	-
ASR11	748625	2361995	Kan Sint	59.7	54.2	6.7	6.2	43.4	43.3	26.7	26.7	56.6	-	6.4	6.2	43.3	-	26.7	-
ASR12	747339	2360829	Hpa Yar Hla	60.2	54.2	6.8	6.2	43.4	43.3	26.7	26.7	56.2	-	6.4	6.2	43.3	-	26.7	-
ASR13	746061	2363202	Hpet Taw	60.1	54.3	6.8	6.2	43.4	43.3	26.7	26.7	56.8	-	6.4	6.2	43.3	-	26.7	-
ASR14	743398	2364596	Nraung Kan	59.2	54.1	6.7	6.2	43.3	43.3	26.7	26.7	55.9	-	6.3	6.2	43.3	-	26.7	-
ASR15	744752	2361090	Unknown Village	58.5	54.1	6.6	6.2	43.3	43.3	26.7	26.7	56.0	-	6.3	6.2	43.3	-	26.7	-
ASR16	742144	2363406	Ta Pin Kan Ywar Ma	58.4	54.1	6.6	6.2	43.3	43.3	26.7	26.7	55.5	-	6.3	6.2	43.3	-	26.7	-
ASR17	741642	2362413	Ta Pin Kan (South)	58.7	54.1	6.6	6.2	43.3	43.3	26.7	26.7	55.4	-	6.3	6.2	43.3	-	26.7	-
ASR18	746698	2366662	Steel Mill Worker Housing	75.3	55.5	8.2	6.5	43.6	43.4	27.0	26.7	56.8	-	6.4	6.2	43.3	-	26.7	-
ASR19	746795	2365139	Government Technical High School	64.5	54.8	7.2	6.3	43.4	43.3	26.8	26.7	56.4	-	6.4	6.2	43.4	-	26.7	-
Assessment Criteria (WHO AQGs)^(e)				200	40	500	125	150	70	75	35	200	40	500	125	150	70	75	35
Maximum % of Cumulative Impact to criterion				38%	139%	2%	5%	29%	62%	36%	76%	28%	-	1%	5%	29%	-	36%	-

Notes:

- a) Reference to UK Air Quality Assessment Guidelines - short-term (1-hour) NO_x = 50% of NO_x long-term (annual) NO_x = 100% of NO_x
- b) A general factor of 1.43 is used to convert hourly SO₂ model results to 10-min averaged results
- c) For conservative approach, emissions of PM₁₀ and PM_{2.5} are assumed to be the same. Therefore, modelling results of PM₁₀ and PM_{2.5} are identical.
- d) WHO Interim Target 1 for 24-hr SO₂, 24-hr PM₁₀, 24-hr PM_{2.5}, Annual PM₁₀ and Annual PM_{2.5}. WHO Guideline value for 1-hr NO_x, Annual NO_x and 10-min SO₂.
- e) Averaged background pollutant concentrations have been included.

Summary of Cumulative Maximum Ground Level Concentrations at ASRs in 2012 (Project Contribution and Background)

ASR	X	Y	Description	Combined Cycle Mode (Main stacks S1 and S3 in operation)								Simple Cycle Mode (Bypass stacks S2 and S4 in operation)							
				Maximum Ground Level Concentration (µg/m ³)								Maximum Ground Level Concentration (µg/m ³)							
				1-hr NO ₂ ^(a)	Annual NO ₂ ^(a)	10-min SO ₂ ^(b)	24-hr SO ₂	24-hr PM ₁₀ ^(c)	Annual PM ₁₀ ^(c)	24-hr PM _{2.5} ^(c)	Annual PM _{2.5} ^(c)	1-hr NO ₂ ^(a)	Annual NO ₂ ^(a)	10-min SO ₂ ^(b)	24-hr SO ₂	24-hr PM ₁₀ ^(c)	Annual PM ₁₀ ^(c)	24-hr PM _{2.5} ^(c)	Annual PM _{2.5} ^(c)
			Background Concentration^(d)	54.0	54.0	6.2	6.2	43.3	43.3	26.7	26.7	54.0	54.0	6.2	6.2	43.3	43.3	26.7	26.7
ASR1	746280	2364781	Steel Mill Worker Camp	60.4	54.4	6.8	6.2	43.4	43.3	26.7	26.7	56.1	-	6.4	6.2	43.3	-	26.7	-
ASR2	745333	2364353	Monastery and Pagoda	59.8	54.2	6.7	6.2	43.4	43.3	26.7	26.7	56.3	-	6.4	6.2	43.3	-	26.7	-
ASR3	747539	2365154	Hnan Ywa	63.5	54.4	7.1	6.2	43.4	43.3	26.7	26.7	57.0	-	6.4	6.2	43.3	-	26.7	-
ASR4	747041	2367601	Sa Ka Village	61.7	54.8	6.9	6.3	43.5	43.3	26.8	26.7	56.8	-	6.4	6.2	43.3	-	26.7	-
ASR5	743822	2368914	Gyoke Pin	58.3	54.1	6.6	6.2	43.3	43.3	26.7	26.7	55.5	-	6.3	6.2	43.3	-	26.7	-
ASR6	741172	2368066	Htu Naung Taing	58.3	54.1	6.6	6.2	43.3	43.3	26.7	26.7	55.6	-	6.3	6.2	43.3	-	26.7	-
ASR7	746155	2369882	Thein	60.4	54.2	6.8	6.2	43.4	43.3	26.7	26.7	55.9	-	6.3	6.2	43.3	-	26.7	-
ASR8	746348	2371619	Ywar Si (North)	59.5	54.2	6.7	6.2	43.3	43.3	26.7	26.7	55.5	-	6.3	6.2	43.3	-	26.7	-
ASR9	748378	2371379	Ywar Si (South)	58.8	54.2	6.6	6.2	43.3	43.3	26.7	26.7	55.8	-	6.3	6.2	43.3	-	26.7	-
ASR10	749757	2368957	Ku	60.6	54.2	6.8	6.2	43.3	43.3	26.7	26.7	55.8	-	6.3	6.2	43.3	-	26.7	-
ASR11	748625	2361995	Kan Sint	61.2	54.2	6.9	6.2	43.4	43.3	26.7	26.7	56.1	-	6.4	6.2	43.3	-	26.7	-
ASR12	747339	2368829	Hpa Yar Hla	59.8	54.2	6.7	6.2	43.3	43.3	26.7	26.7	55.7	-	6.3	6.2	43.3	-	26.7	-
ASR13	746061	2363202	Hpet Taw	60.7	54.2	6.8	6.2	43.4	43.3	26.7	26.7	55.9	-	6.3	6.2	43.3	-	26.7	-
ASR14	743398	2364596	Nyaung Kan	61.5	54.1	6.9	6.2	43.4	43.3	26.7	26.7	55.7	-	6.3	6.2	43.3	-	26.7	-
ASR15	744752	2361090	Unknown Village	60.0	54.1	6.7	6.2	43.3	43.3	26.7	26.7	55.7	-	6.3	6.2	43.3	-	26.7	-
ASR16	742144	2363406	Ta Pin Kan Ywar Ma	60.8	54.1	6.8	6.2	43.4	43.3	26.7	26.7	55.4	-	6.3	6.2	43.3	-	26.7	-
ASR17	741642	2362413	Ta Pin Kan (South)	60.2	54.1	6.8	6.2	43.4	43.3	26.7	26.7	55.6	-	6.3	6.2	43.3	-	26.7	-
ASR18	746698	2366662	Steel Mill Worker Housing	75.9	55.4	8.3	6.5	45.6	43.4	27.0	26.7	57.0	-	6.4	6.2	43.4	-	26.7	-
ASR19	746795	2365139	Government Technical High School	61.4	54.6	6.9	6.3	43.4	43.3	26.8	26.7	56.8	-	6.4	6.2	43.3	-	26.7	-
			Assessment Criteria (WHO AQG)^(e)	200	40	500	125	150	70	75	35	200	40	500	125	150	70	75	35
			Maximum % of Cumulative Impact to criterion	38%	139%	2%	5%	29%	62%	36%	78%	29%	-	1%	5%	29%	-	36%	-

Notes:

- a) Reference to UK Air Quality Assessment Guidelines - short-term (1-hour) NO₂ = 50% of NO₂, long-term (annual) NO₂ = 100% of NO₂
- b) A general factor of 1.43 is used to convert hourly SO₂ model results to 10-min averaged results
- c) For conservative approach, emissions of PM₁₀ and PM_{2.5} are assumed to be the same. Therefore, modelling results of PM₁₀ and PM_{2.5} are identical.
- d) WHO Interim Target 1 for 24-hr SO₂, 24-hr PM₁₀, 24-hr PM_{2.5}, Annual PM₁₀ and Annual PM_{2.5}. WHO Guideline value for 1-hr NO₂, Annual NO₂ and 10-min SO₂.
- e) Averaged background pollutant concentrations have been included.

Summary of Cumulative Maximum Ground Level Concentrations at ASRs in 2013 (Project Contribution and Background)

ASR	X	Y	Description	Combined Cycle Mode (Main stacks S1 and S3 in operation)								Simple Cycle Mode (Bypass stacks S2 and S4 in operation)							
				Maximum Ground Level Concentration (µg/m ³)								Maximum Ground Level Concentration (µg/m ³)							
				1-hr NO _x ^(a)	Annual NO _x ^(a)	10-min SO ₂ ^(b)	24-hr SO ₂	24-hr PM ₁₀ ^(c)	Annual PM ₁₀ ^(c)	24-hr PM _{2.5} ^(c)	Annual PM _{2.5} ^(c)	1-hr NO _x ^(a)	Annual NO _x ^(a)	10-min SO ₂ ^(b)	24-hr SO ₂	24-hr PM ₁₀ ^(c)	Annual PM ₁₀ ^(c)	24-hr PM _{2.5} ^(c)	Annual PM _{2.5} ^(c)
			Background Concentration^(d)	54.0	54.0	6.2	6.2	43.3	43.3	26.7	26.7	54.0	54.0	6.2	6.2	43.3	43.3	26.7	26.7
ASR1	746280	2364781	Steel Mill Worker Camp	62.8	54.3	7.0	6.2	43.4	43.3	26.7	26.7	56.0	-	6.3	6.2	43.3	-	26.7	-
ASR2	745333	2364353	Monastery and Pagoda	61.9	54.2	6.9	6.2	43.3	43.3	26.7	26.7	55.9	-	6.3	6.2	43.3	-	26.7	-
ASR3	747539	2365154	Hnan Ywa	63.0	54.3	7.0	6.2	43.4	43.3	26.7	26.7	56.7	-	6.4	6.2	43.3	-	26.7	-
ASR4	747041	2367401	Sa Ka Village	61.7	55.0	6.9	6.3	43.5	43.3	26.8	26.7	57.1	-	6.5	6.2	43.3	-	26.7	-
ASR5	743822	2368914	Cyoke Pin	58.5	54.1	6.6	6.2	43.3	43.3	26.7	26.7	56.0	-	6.3	6.2	43.3	-	26.7	-
ASR6	741172	2368066	Hta Naung Taing	58.8	54.1	6.6	6.2	43.3	43.3	26.7	26.7	55.5	-	6.3	6.2	43.3	-	26.7	-
ASR7	746155	2369882	Thein	57.9	54.3	6.5	6.2	43.4	43.3	26.7	26.7	55.9	-	6.3	6.2	43.3	-	26.7	-
ASR8	746348	2371619	Ywar Si (North)	58.1	54.2	6.5	6.2	43.3	43.3	26.7	26.7	55.7	-	6.3	6.2	43.3	-	26.7	-
ASR9	748378	2371379	Ywar Si (South)	59.1	54.3	6.6	6.2	43.4	43.3	26.7	26.7	55.9	-	6.3	6.2	43.3	-	26.7	-
ASR10	749757	2368957	Ku	59.7	54.2	6.7	6.2	43.3	43.3	26.7	26.7	56.1	-	6.4	6.2	43.3	-	26.7	-
ASR11	748625	2361995	Kan Sint	60.6	54.1	6.8	6.2	43.3	43.3	26.7	26.7	56.3	-	6.4	6.2	43.3	-	26.7	-
ASR12	747339	2360829	Hpa Yar Hla	59.2	54.1	6.7	6.2	43.3	43.3	26.7	26.7	56.0	-	6.3	6.2	43.3	-	26.7	-
ASR13	746061	2365202	Hpet Taw	59.9	54.2	6.7	6.2	43.3	43.3	26.7	26.7	56.0	-	6.3	6.2	43.3	-	26.7	-
ASR14	743398	2364596	Nvaung Kan	60.1	54.1	6.7	6.2	43.4	43.3	26.7	26.7	55.8	-	6.3	6.2	43.3	-	26.7	-
ASR15	744752	2361090	Unknown Village	61.7	54.1	6.9	6.2	43.3	43.3	26.7	26.7	55.9	-	6.3	6.2	43.3	-	26.7	-
ASR16	742144	2363406	Ta Pin Kan Ywar Ma	60.6	54.1	6.8	6.2	43.3	43.3	26.7	26.7	55.8	-	6.3	6.2	43.3	-	26.7	-
ASR17	741642	2362413	Ta Pin Kan (South)	60.4	54.1	6.8	6.2	43.3	43.3	26.7	26.7	55.7	-	6.3	6.2	43.3	-	26.7	-
ASR18	746698	2366662	Steel Mill Worker Housing	76.1	55.3	8.3	6.5	43.6	43.4	27.0	26.7	56.7	-	6.4	6.2	43.4	-	26.7	-
ASR19	746795	2365139	Government Technical High School	62.5	54.4	7.0	6.3	43.4	43.3	26.8	26.7	56.5	-	6.4	6.2	43.3	-	26.7	-
			Assessment Criteria (WHO AQGs)^(e)	200	40	500	125	150	70	75	35	200	40	500	125	150	70	75	35
			Maximum % of Cumulative Impact to criterion	38%	138%	2%	5%	29%	62%	36%	76%	29%	-	1%	5%	29%	-	36%	-

Notes:

- a) Reference to UK Air Quality Assessment Guidelines - short-term (1-hour) NO_x = 50% of NO_x long-term (annual) NO_x = 100% of NO_x
- b) A general factor of 1.43 is used to convert hourly SO₂ model results to 10-min averaged results
- c) For conservative approach, emissions of PM₁₀ and PM_{2.5} are assumed to be the same. Therefore, modelling results of PM₁₀ and PM_{2.5} are identical.
- d) WHO Interim Target 1 for 24-hr SO₂, 24-hr PM₁₀, 24-hr PM_{2.5}, Annual PM₁₀ and Annual PM_{2.5}. WHO Guideline value for 1-hr NO_x, Annual NO_x and 10-min SO₂.
- e) Averaged background pollutant concentrations have been included.

Summary of Cumulative Maximum Ground Level Concentrations at ASRs in 2014 (Project Contribution and Background)

ASR	X	Y	Description	Combined Cycle Mode (Main stacks S1 and S3 in operation)								Simple Cycle Mode (Bypass stacks S2 and S4 in operation)							
				Maximum Ground Level Concentration (µg/m ³)								Maximum Ground Level Concentration (µg/m ³)							
				1-hr NO _x ^(a)	Annual NO _x ^(a)	10-min SO ₂ ^(b)	24-hr SO ₂	24-hr PM ₁₀ ^(c)	Annual PM ₁₀ ^(c)	24-hr PM _{2.5} ^(c)	Annual PM _{2.5} ^(c)	1-hr NO _x ^(a)	Annual NO _x ^(a)	10-min SO ₂ ^(b)	24-hr SO ₂	24-hr PM ₁₀ ^(c)	Annual PM ₁₀ ^(c)	24-hr PM _{2.5} ^(c)	Annual PM _{2.5} ^(c)
Background Concentration^(d)				54.0	54.0	6.2	6.2	43.3	43.3	26.7	26.7	54.0	54.0	6.2	6.2	43.3	43.3	26.7	
ASR1	746280	2364781	Steel Mill Worker Camp	61.9	54.4	6.9	6.2	43.4	43.3	26.7	26.7	55.8	-	6.3	6.2	43.3	-	26.7	-
ASR2	745333	2364353	Monastery and Pagoda	61.9	54.2	6.9	6.2	43.4	43.3	26.7	26.7	56.0	-	6.3	6.2	43.3	-	26.7	-
ASR3	747339	2365154	Hnan Ywa	64.2	54.4	7.2	6.2	43.4	43.3	26.7	26.7	56.9	-	6.4	6.2	43.3	-	26.7	-
ASR4	747041	2367601	Sa Ka Village	64.1	54.8	7.1	6.3	43.5	43.3	26.8	26.7	56.9	-	6.4	6.2	43.3	-	26.7	-
ASR5	743822	2368914	Gvoko Pin	59.6	54.2	6.7	6.2	43.3	43.3	26.7	26.7	55.7	-	6.3	6.2	43.3	-	26.7	-
ASR6	741172	2368066	Hta Naung Taing	59.3	54.1	6.7	6.2	43.3	43.3	26.7	26.7	55.2	-	6.3	6.2	43.3	-	26.7	-
ASR7	746155	2369882	Thein	60.1	54.3	6.8	6.2	43.4	43.3	26.7	26.7	56.1	-	6.4	6.2	43.3	-	26.7	-
ASR8	746348	2371619	Ywar Si (North)	60.2	54.2	6.8	6.2	43.3	43.3	26.7	26.7	55.7	-	6.3	6.2	43.3	-	26.7	-
ASR9	748378	2371379	Ywar Si (South)	59.0	54.2	6.6	6.2	43.3	43.3	26.7	26.7	55.6	-	6.3	6.2	43.3	-	26.7	-
ASR10	749757	2368957	Ku	59.8	54.2	6.7	6.2	43.3	43.3	26.7	26.7	55.8	-	6.3	6.2	43.3	-	26.7	-
ASR11	748625	2361995	Kan Sint	60.2	54.2	6.8	6.2	43.4	43.3	26.7	26.7	56.0	-	6.3	6.2	43.3	-	26.7	-
ASR12	747339	2360829	Hpa Yar Hla	60.2	54.2	6.8	6.2	43.4	43.3	26.7	26.7	55.8	-	6.3	6.2	43.3	-	26.7	-
ASR13	746061	2365202	Hpet Law	60.9	54.3	6.8	6.2	43.4	43.3	26.7	26.7	56.0	-	6.3	6.2	43.3	-	26.7	-
ASR14	743398	2364596	Nraung Kan	59.5	54.1	6.7	6.2	43.3	43.3	26.7	26.7	55.2	-	6.3	6.2	43.3	-	26.7	-
ASR15	744752	2361090	Unknown Village	59.7	54.1	6.7	6.2	43.3	43.3	26.7	26.7	55.8	-	6.3	6.2	43.3	-	26.7	-
ASR16	742144	2363406	Ta Pin Kan Ywar Ma	60.3	54.1	6.8	6.2	43.3	43.3	26.7	26.7	55.1	-	6.3	6.2	43.3	-	26.7	-
ASR17	741642	2362413	Ta Pin Kan (South)	60.0	54.1	6.7	6.2	43.3	43.3	26.7	26.7	55.1	-	6.3	6.2	43.3	-	26.7	-
ASR18	746698	2366662	Steel Mill Worker Housing	75.6	55.7	8.3	6.4	43.6	43.4	26.9	26.7	56.7	-	6.4	6.2	43.3	-	26.7	-
ASR19	746795	2365139	Government Technical High School	62.7	54.6	7.0	6.3	43.4	43.3	26.8	26.7	56.4	-	6.4	6.2	43.3	-	26.7	-
Assessment Criteria (WHO AQG)^(e)				200	40	500	125	150	70	75	35	200	40	500	125	150	70	75	35
Maximum % of Cumulative Impact to criterion				38%	139%	2%	5%	29%	62%	36%	76%	28%	-	1%	5%	29%	-	36%	-

Notes:

- a) Reference to UK Air Quality Assessment Guidelines - short-term (1-hour) NO_x = 50% of NO_x long-term (annual) NO_x = 100% of NO_x
- b) A general factor of 1.43 is used to convert hourly SO₂ model results to 10-min averaged results
- c) For conservative approach, emissions of PM₁₀ and PM_{2.5} are assumed to be the same. Therefore, modelling results of PM₁₀ and PM_{2.5} are identical.
- d) WHO Interim Target 1 for 24-hr SO₂, 24-hr PM₁₀, 24-hr PM_{2.5}, Annual PM₁₀ and Annual PM_{2.5}. WHO Guideline value for 1-hr NO_x, Annual NO_x and 10-min SO₂.
- e) Averaged background pollutant concentrations have been included.