

Appendix 3.8 Detailed Prediction Results (Construction Phase)

YLSEPP (Construction Phase, Year 2028)

Predicted Maximum Cumulative Unmitigated Hourly TSP Concentration ($\mu\text{g}/\text{m}^3$)

Receptor ID	Height (mAG)	Project Contribution (Unmitigated)	Proposed Water Reclamation Facilities Contribution	YLSDA Contribution	Background Contribution	Cumulative Concentration
YAE01	1.5	814.63	2.77	35.96	34.41	887.77
YAE01	5.0	817.81	2.78	36.16	34.41	891.16
YAE02	1.5	1179.03	6.27	62.84	112.57	1360.71
YAE02	5.0	1185.42	6.31	63.37	112.57	1367.67
YAE02	10.0	1222.52	3.30	56.56	112.57	1394.94
YAE03	1.5	1215.93	8.88	70.51	15.50	1310.82
YAE03	5.0	1222.56	8.94	71.11	15.50	1318.12
YAE03	10.0	1286.16	5.64	62.49	15.50	1369.80
YAE04	1.5	1193.71	8.54	85.35	94.51	1382.12
YAE04	5.0	1199.44	8.60	86.03	94.51	1388.58
YAE04	10.0	1293.60	5.99	76.58	94.51	1470.68
YAE05	1.5	366.23	4.11	54.85	63.00	488.18
YAE05	5.0	366.72	4.11	55.05	63.00	488.88
YAE05	10.0	407.61	2.84	61.50	63.00	534.95
YAE06	1.5	2140.29	67.21	0.83	92.16	2300.48
YAE06	5.0	2156.18	66.79	0.65	92.16	2315.78
YAE06	10.0	2011.48	42.31	0.00	92.16	2145.94
YAE07	1.5	2875.12	199.02	3.20	57.26	3134.60
YAE07	5.0	2875.06	122.19	3.22	57.26	3057.73
YAE07	10.0	2309.06	16.60	19.25	41.26	2386.17

Note: Bolded value indicates exceedance of the criteria at 500 $\mu\text{g}/\text{m}^3$

Appendix 3.8 Detailed Prediction Results (Construction Phase)

YLSEPP (Construction Phase, Year 2028)

Predicted 10th Highest Cumulative Unmitigated Daily RSP Concentration (µg/m³)

Receptor ID	Height (mAG)	Project Contribution (Unmitigated)	Proposed Water Reclamation Facilities Contribution	YLSDA Contribution	Background Contribution	Cumulative Concentration
YAE01	1.5	0.09	0.00	0.09	69.08	69.27
YAE01	5.0	0.08	0.00	0.09	69.08	69.26
YAE02	1.5	0.03	0.11	0.62	75.37	76.12
YAE02	5.0	0.03	0.11	0.59	75.37	76.10
YAE02	10.0	25.20	0.39	42.82	2.97	71.39
YAE03	1.5	22.92	1.06	4.95	42.82	71.75
YAE03	5.0	22.15	1.02	4.68	42.82	70.66
YAE03	10.0	0.00	0.00	0.52	69.14	69.67
YAE04	1.5	23.05	0.04	6.62	42.43	72.14
YAE04	5.0	22.86	0.03	6.48	42.43	71.81
YAE04	10.0	0.00	0.00	0.66	69.14	69.80
YAE05	1.5	0.03	0.00	0.56	73.94	74.53
YAE05	5.0	0.03	0.00	0.52	73.94	74.49
YAE05	10.0	0.03	0.01	2.47	71.33	73.84
YAE06	1.5	67.39	2.89	13.21	25.51	108.99
YAE06	5.0	63.91	2.54	8.71	25.51	100.68
YAE06	10.0	0.00	0.00	6.12	80.93	87.05
YAE07	1.5	121.98	15.76	4.87	24.49	167.09
YAE07	5.0	44.37	7.98	0.87	94.39	147.61
YAE07	10.0	76.71	2.38	5.07	28.32	112.48

Note: Bolded value indicates exceedance of the criteria at 100 µg/m³

YLSEPP (Construction Phase, Year 2028)

Predicted Cumulative Unmitigated Annual RSP Concentration (µg/m³)

Receptor ID	Height (mAG)	Project Contribution (Unmitigated)	Proposed Water Reclamation Facilities Contribution	YLSDA Contribution	Background Contribution	Cumulative Concentration
YAE01	1.5	1.11	0.02	0.31	28.06	29.50
YAE01	5.0	1.09	0.02	0.30	28.06	29.47
YAE02	1.5	2.16	0.05	0.91	27.24	30.36
YAE02	5.0	2.10	0.05	0.86	27.24	30.25
YAE02	10.0	1.91	0.04	0.70	27.24	29.89
YAE03	1.5	2.15	0.06	1.04	27.24	30.50
YAE03	5.0	2.09	0.06	0.99	27.24	30.38
YAE03	10.0	1.90	0.05	0.78	27.24	29.97
YAE04	1.5	1.94	0.07	1.34	27.24	30.59
YAE04	5.0	1.89	0.06	1.26	27.24	30.45
YAE04	10.0	1.71	0.06	0.95	27.24	29.96
YAE05	1.5	0.46	0.02	0.84	28.78	30.10
YAE05	5.0	0.46	0.02	0.83	28.78	30.08
YAE05	10.0	0.41	0.02	0.73	28.78	29.94
YAE06	1.5	7.34	0.47	13.91	27.24	48.96
YAE06	5.0	7.04	0.42	10.59	27.24	45.29
YAE06	10.0	5.97	0.26	4.77	27.24	38.25
YAE07	1.5	42.88	8.84	2.43	27.24	81.39
YAE07	5.0	39.96	5.17	2.39	27.24	74.75
YAE07	10.0	28.13	1.54	2.15	27.24	59.06

Note: Bolded value indicates exceedance of the criteria at 50 µg/m³

Appendix 3.8 Detailed Prediction Results (Construction Phase)

YLSEPP (Construction Phase, Year 2028)

Predicted 19th Highest Cumulative Unmitigated Daily FSP Concentration (µg/m³)

Receptor ID	Height (mAG)	Project Contribution (Unmitigated)	Proposed Water Reclamation Facilities Contribution	YLSDA Contribution	Background Contribution	Cumulative Concentration
YAE01	1.5	0.00	0.00	0.00	38.65	38.65
YAE01	5.0	0.00	0.00	0.00	38.65	38.65
YAE02	1.5	0.00	0.00	0.00	38.19	38.19
YAE02	5.0	0.00	0.00	0.00	38.19	38.19
YAE02	10.0	0.00	0.00	0.00	38.19	38.19
YAE03	1.5	0.00	0.00	0.00	38.19	38.19
YAE03	5.0	0.00	0.00	0.00	38.19	38.19
YAE03	10.0	0.00	0.00	0.00	38.19	38.19
YAE04	1.5	0.00	0.00	0.00	38.19	38.19
YAE04	5.0	0.00	0.00	0.00	38.19	38.19
YAE04	10.0	0.00	0.00	0.00	38.19	38.19
YAE05	1.5	0.01	0.00	0.06	42.40	42.48
YAE05	5.0	0.01	0.00	0.06	42.40	42.48
YAE05	10.0	0.01	0.00	0.05	42.40	42.46
YAE06	1.5	0.00	0.00	3.45	38.19	41.64
YAE06	5.0	0.00	0.00	2.64	38.19	40.83
YAE06	10.0	0.00	0.00	0.93	38.19	39.12
YAE07	1.5	6.13	1.79	0.84	38.19	46.94
YAE07	5.0	0.00	0.00	0.03	45.87	45.90
YAE07	10.0	0.00	0.00	0.09	43.73	43.82

Note: Bolded value indicates exceedance of the criteria at 50 µg/m³

YLSEPP (Construction Phase, Year 2028)

Predicted Cumulative Annual Unmitigated FSP Concentration (µg/m³)

Receptor ID	Height (mAG)	Project Contribution (Unmitigated)	Proposed Water Reclamation Facilities Contribution	YLSDA Contribution	Background Contribution	Cumulative Concentration
YAE01	1.5	0.18	0.00	0.05	15.95	16.19
YAE01	5.0	0.18	0.00	0.05	15.95	16.18
YAE02	1.5	0.35	0.01	0.15	15.54	16.05
YAE02	5.0	0.34	0.01	0.14	15.54	16.03
YAE02	10.0	0.31	0.01	0.11	15.54	15.97
YAE03	1.5	0.35	0.01	0.17	15.54	16.08
YAE03	5.0	0.34	0.01	0.16	15.54	16.05
YAE03	10.0	0.31	0.01	0.13	15.54	15.98
YAE04	1.5	0.32	0.01	0.22	15.54	16.09
YAE04	5.0	0.31	0.01	0.21	15.54	16.07
YAE04	10.0	0.28	0.01	0.16	15.54	15.98
YAE05	1.5	0.09	0.00	0.16	16.82	17.06
YAE05	5.0	0.09	0.00	0.15	16.82	17.06
YAE05	10.0	0.08	0.00	0.13	16.82	17.03
YAE06	1.5	1.21	0.08	2.38	15.54	19.21
YAE06	5.0	1.15	0.07	1.82	15.54	18.57
YAE06	10.0	0.96	0.04	0.82	15.54	17.36
YAE07	1.5	7.45	1.45	0.44	15.54	24.89
YAE07	5.0	6.81	0.86	0.43	15.54	23.64
YAE07	10.0	4.68	0.26	0.38	15.54	20.86

Note: Bolded value indicates exceedance of the criteria at 25 µg/m³

Appendix 3.8 Detailed Prediction Results (Construction Phase)

YLSEPP (Construction Phase, Year 2028)

Predicted Maximum Cumulative Mitigated Hourly TSP Concentration ($\mu\text{g}/\text{m}^3$)

Receptor ID	Height (mAG)	Project Contribution	Proposed Water Reclamation Facilities Contribution	YLSDA Contribution	Background Contribution	Cumulative Concentration
YAE01	1.5	53.98	0.01	36.01	110.67	200.67
YAE01	5	54.19	0.01	36.20	110.67	201.07
YAE02	1.5	97.86	6.27	62.84	112.57	279.54
YAE02	5	98.39	6.31	63.37	112.57	280.65
YAE02	10	101.47	3.30	56.56	112.57	273.90
YAE03	1.5	85.47	20.65	68.68	112.57	287.37
YAE03	5	85.95	20.80	69.26	112.57	288.57
YAE03	10	88.53	18.37	59.50	112.57	278.97
YAE04	1.5	99.08	8.54	85.35	94.51	287.48
YAE04	5	99.56	8.60	86.03	94.51	288.70
YAE04	10	107.37	5.99	76.58	94.51	284.46
YAE05	1.5	3.38	1.29	9.30	159.01	172.98
YAE05	5	3.38	1.29	9.37	159.01	173.06
YAE05	10	3.18	1.68	9.14	159.01	173.02
YAE06	1.5	177.65	67.21	0.83	92.16	337.84
YAE06	5	178.97	66.79	0.65	92.16	338.57
YAE06	10	166.96	42.31	<0.01	92.16	301.42
YAE07	1.5	238.64	199.02	3.20	57.26	498.12
YAE07	5	227.65	128.94	25.17	41.26	423.02
YAE07	10	191.66	16.60	19.25	41.26	268.77

Appendix 3.8 Detailed Prediction Results (Construction Phase)

YLSEPP (Construction Phase, Year 2028)

Predicted 10th Highest Cumulative Mitigated Daily RSP Concentration ($\mu\text{g}/\text{m}^3$)

Receptor ID	Height (mAG)	Project Contribution	Proposed Water Reclamation Facilities Contribution	YLSDA Contribution	Background Contribution	Cumulative Concentration
YAE01	1.5	<0.01	<0.01	0.09	69.08	69.19
YAE01	5	<0.01	<0.01	0.09	69.08	69.18
YAE02	1.5	<0.01	<0.01	0.50	69.14	69.65
YAE02	5	<0.01	<0.01	0.48	69.14	69.63
YAE02	10	<0.01	<0.01	0.46	69.14	69.61
YAE03	1.5	<0.01	<0.01	0.57	69.14	69.72
YAE03	5	<0.01	<0.01	0.55	69.14	69.70
YAE03	10	<0.01	<0.01	0.52	69.14	69.67
YAE04	1.5	<0.01	<0.01	0.74	69.14	69.89
YAE04	5	<0.01	<0.01	0.71	69.14	69.85
YAE04	10	<0.01	<0.01	0.66	69.14	69.80
YAE05	1.5	0.03	0.04	2.94	71.33	74.34
YAE05	5	0.03	0.04	2.89	71.33	74.29
YAE05	10	<0.01	<0.01	2.47	71.33	73.81
YAE06	1.5	0.02	<0.01	8.79	75.37	84.20
YAE06	5	<0.01	<0.01	22.08	61.36	83.44
YAE06	10	<0.01	<0.01	4.80	69.14	73.94
YAE07	1.5	5.28	7.97	3.40	62.62	79.26
YAE07	5	1.07	0.64	0.93	75.37	78.01
YAE07	10	1.46	0.60	0.67	69.91	72.64

Note: Bolded value indicates exceedance of the criteria at 100 $\mu\text{g}/\text{m}^3$

YLSEPP (Construction Phase, Year 2028)

Predicted Cumulative Mitigated Annual RSP Concentration ($\mu\text{g}/\text{m}^3$)

Receptor ID	Height (mAG)	Project Contribution	Proposed Water Reclamation Facilities Contribution	YLSDA Contribution	Background Contribution	Cumulative Concentration
YAE01	1.5	0.15	0.02	0.31	28.06	28.53
YAE01	5	0.14	0.02	0.30	28.06	28.52
YAE02	1.5	0.29	0.05	0.91	27.24	28.49
YAE02	5	0.28	0.05	0.86	27.24	28.44
YAE02	10	0.25	0.04	0.70	27.24	28.23
YAE03	1.5	0.29	0.06	1.04	27.24	28.63
YAE03	5	0.28	0.06	0.99	27.24	28.57
YAE03	10	0.25	0.05	0.78	27.24	28.32
YAE04	1.5	0.27	0.07	1.34	27.24	28.92
YAE04	5	0.27	0.06	1.26	27.24	28.82
YAE04	10	0.24	0.06	0.95	27.24	28.49
YAE05	1.5	0.08	0.02	0.84	28.78	29.72
YAE05	5	0.08	0.02	0.83	28.78	29.70
YAE05	10	0.07	0.02	0.73	28.78	29.60
YAE06	1.5	0.99	0.47	13.91	27.24	42.60
YAE06	5	0.94	0.42	10.59	27.24	39.19
YAE06	10	0.75	0.26	4.77	27.24	33.02
YAE07	1.5	5.68	8.84	2.43	27.24	44.19
YAE07	5	5.22	5.17	2.39	27.24	40.02
YAE07	10	3.34	1.54	2.15	27.24	34.26

Note: Bolded value indicates exceedance of the criteria at 50 $\mu\text{g}/\text{m}^3$

Appendix 3.8 Detailed Prediction Results (Construction Phase)

YLSEPP (Construction Phase, Year 2028)

Predicted 19th Highest Cumulative Mitigated Daily FSP Concentration (µg/m³)

Receptor ID	Height (mAG)	Project Contribution	Proposed Water Reclamation Facilities Contribution	YLSDA Contribution	Background Contribution	Cumulative Concentration
YAE01	1.5	<0.01	<0.01	<0.01	38.65	38.65
YAE01	5	<0.01	<0.01	<0.01	38.65	38.65
YAE02	1.5	<0.01	<0.01	<0.01	38.19	38.19
YAE02	5	<0.01	<0.01	<0.01	38.19	38.19
YAE02	10	<0.01	<0.01	<0.01	38.19	38.19
YAE03	1.5	<0.01	<0.01	<0.01	38.19	38.19
YAE03	5	<0.01	<0.01	<0.01	38.19	38.19
YAE03	10	<0.01	<0.01	<0.01	38.19	38.19
YAE04	1.5	<0.01	<0.01	<0.01	38.19	38.19
YAE04	5	<0.01	<0.01	<0.01	38.19	38.19
YAE04	10	<0.01	<0.01	<0.01	38.19	38.19
YAE05	1.5	<0.01	<0.01	0.06	42.40	42.48
YAE05	5	<0.01	<0.01	0.06	42.40	42.48
YAE05	10	<0.01	<0.01	0.05	42.40	42.46
YAE06	1.5	<0.01	<0.01	3.45	38.19	41.64
YAE06	5	<0.01	<0.01	2.64	38.19	40.83
YAE06	10	<0.01	<0.01	0.93	38.19	39.12
YAE07	1.5	0.82	1.79	0.84	38.19	41.64
YAE07	5	0.72	1.27	0.82	38.19	41.00
YAE07	10	0.33	0.53	0.69	38.19	39.74

Note: Bolded value indicates exceedance of the criteria at 50 µg/m³

YLSEPP (Construction Phase, Year 2028)

Predicted Cumulative Mitigated Annual FSP Concentration (µg/m³)

Receptor ID	Height (mAG)	Project Contribution	Proposed Water Reclamation Facilities Contribution	YLSDA Contribution	Background Contribution	Cumulative Concentration
YAE01	1.5	0.02	<0.01	0.05	15.95	16.03
YAE01	5	0.02	<0.01	0.05	15.95	16.03
YAE02	1.5	0.05	<0.01	0.15	15.54	15.75
YAE02	5	0.05	<0.01	0.14	15.54	15.74
YAE02	10	0.04	<0.01	0.11	15.54	15.70
YAE03	1.5	0.05	0.01	0.17	15.54	15.77
YAE03	5	0.05	<0.01	0.16	15.54	15.76
YAE03	10	0.04	<0.01	0.13	15.54	15.72
YAE04	1.5	0.04	0.01	0.22	15.54	15.82
YAE04	5	0.04	0.01	0.21	15.54	15.80
YAE04	10	0.04	<0.01	0.16	15.54	15.74
YAE05	1.5	0.01	<0.01	0.16	16.82	16.99
YAE05	5	0.01	<0.01	0.15	16.82	16.98
YAE05	10	0.01	<0.01	0.13	16.82	16.96
YAE06	1.5	0.16	0.08	2.38	15.54	18.16
YAE06	5	0.15	0.07	1.82	15.54	17.58
YAE06	10	0.12	0.04	0.82	15.54	16.52
YAE07	1.5	0.96	1.45	0.44	15.54	18.40
YAE07	5	0.87	0.86	0.43	15.54	17.70
YAE07	10	0.55	0.26	0.38	15.54	16.73

Note: Bolded value indicates exceedance of the criteria at 25 µg/m³