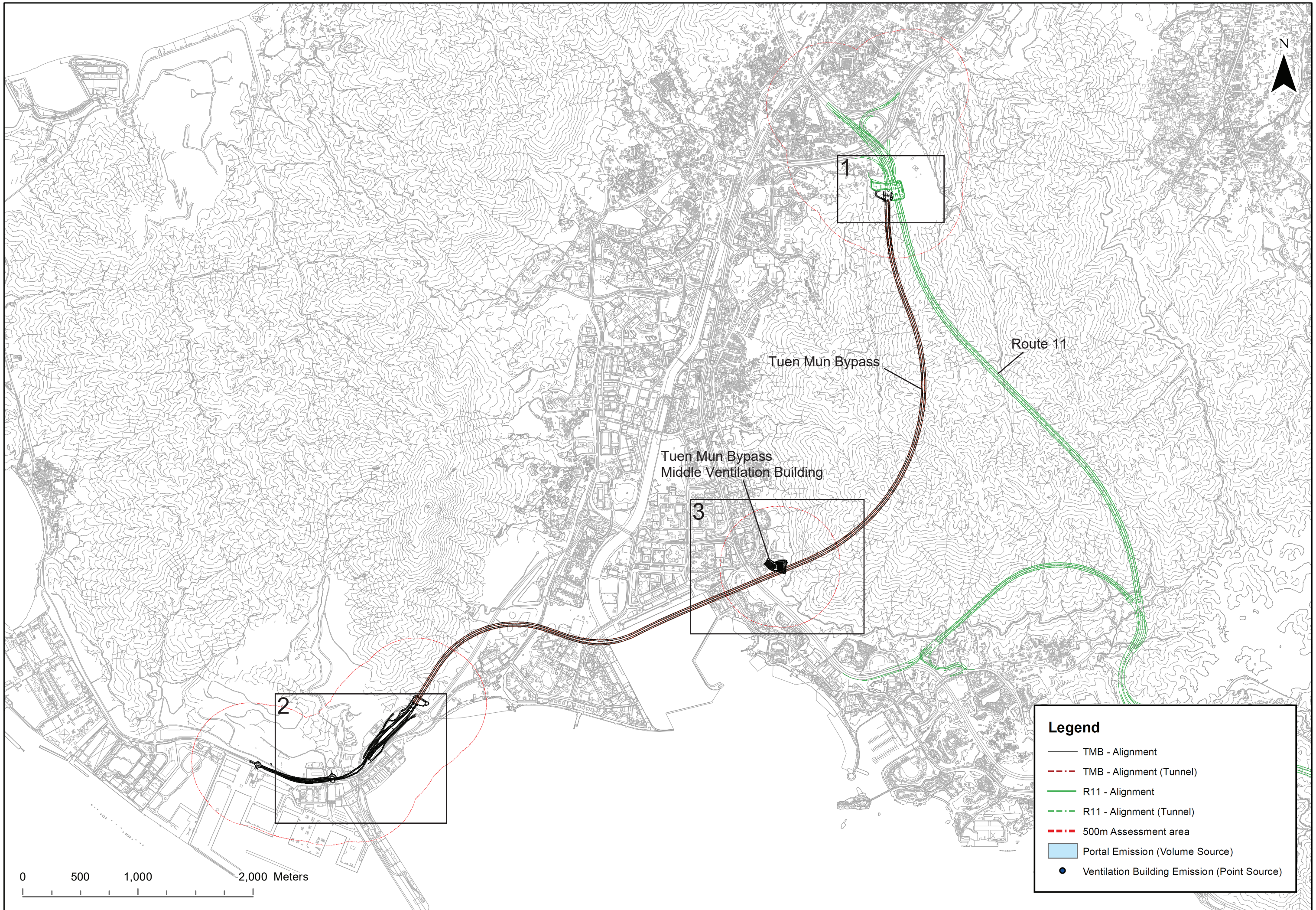


Annex - 1

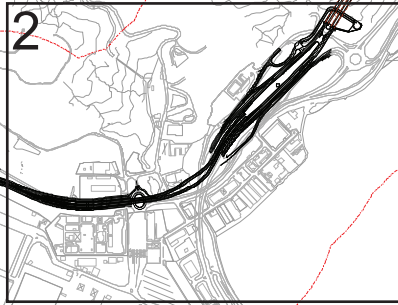
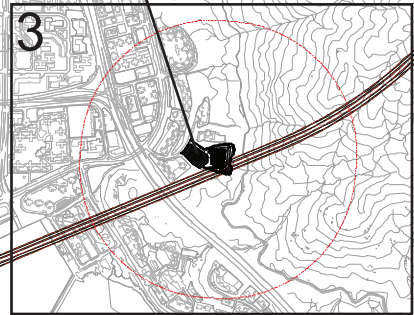
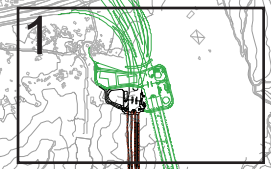
Source Location for Portals and
Ventilation Buildings



0 500 1,000 2,000 Meters

Legend

- TMB - Alignment
- - - TMB - Alignment (Tunnel)
- R11 - Alignment
- - - R11 - Alignment (Tunnel)
- - - 500m Assessment area
- Portal Emission (Volume Source)
- Ventilation Building Emission (Point Source)



Tuen Mun Bypass

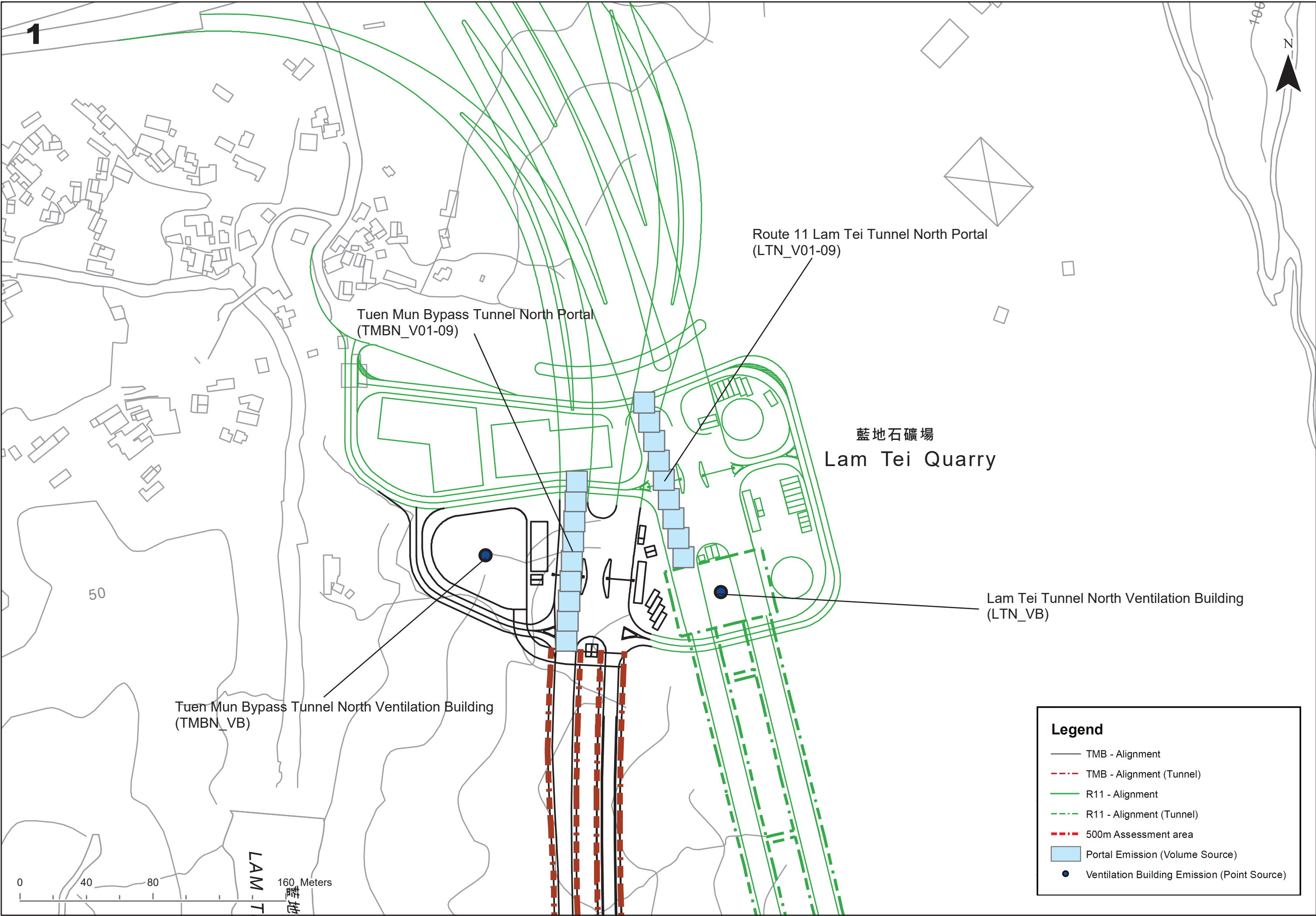
Route 11

Tuen Mun Bypass
Middle Ventilation Building

1

3

2



1



Route 11 Lam Tei Tunnel North Portal
(LTN_V01-09)

Tuen Mun Bypass Tunnel North Portal
(TMBN_V01-09)

藍地石礦場
Lam Tei Quarry

Lam Tei Tunnel North Ventilation Building
(LTN_VB)

Tuen Mun Bypass Tunnel North Ventilation Building
(TMBN_VB)

Legend

- TMB - Alignment
- - - TMB - Alignment (Tunnel)
- R11 - Alignment
- - - R11 - Alignment (Tunnel)
- - - 500m Assessment area
- Portal Emission (Volume Source)
- Ventilation Building Emission (Point Source)



50

100

2

Tuen Mun Bypass Tunnel South Portal
(TMBS_V01-12)

Tuen Mun Bypass Tunnel South Ventilation Building
(TMBS_VB)

Tuen Mun Chek Lap Kok Link Underpass Portal
(CLKUP_V01-12)

PILLAR POINT
(MONG HAU SHEK)

Tuen Mun Chek Lap Kok Link Tuen Mun Portal
(CLKTM_V01-09)

蝴蝶灣泳灘
BUTTERFLY BEACH

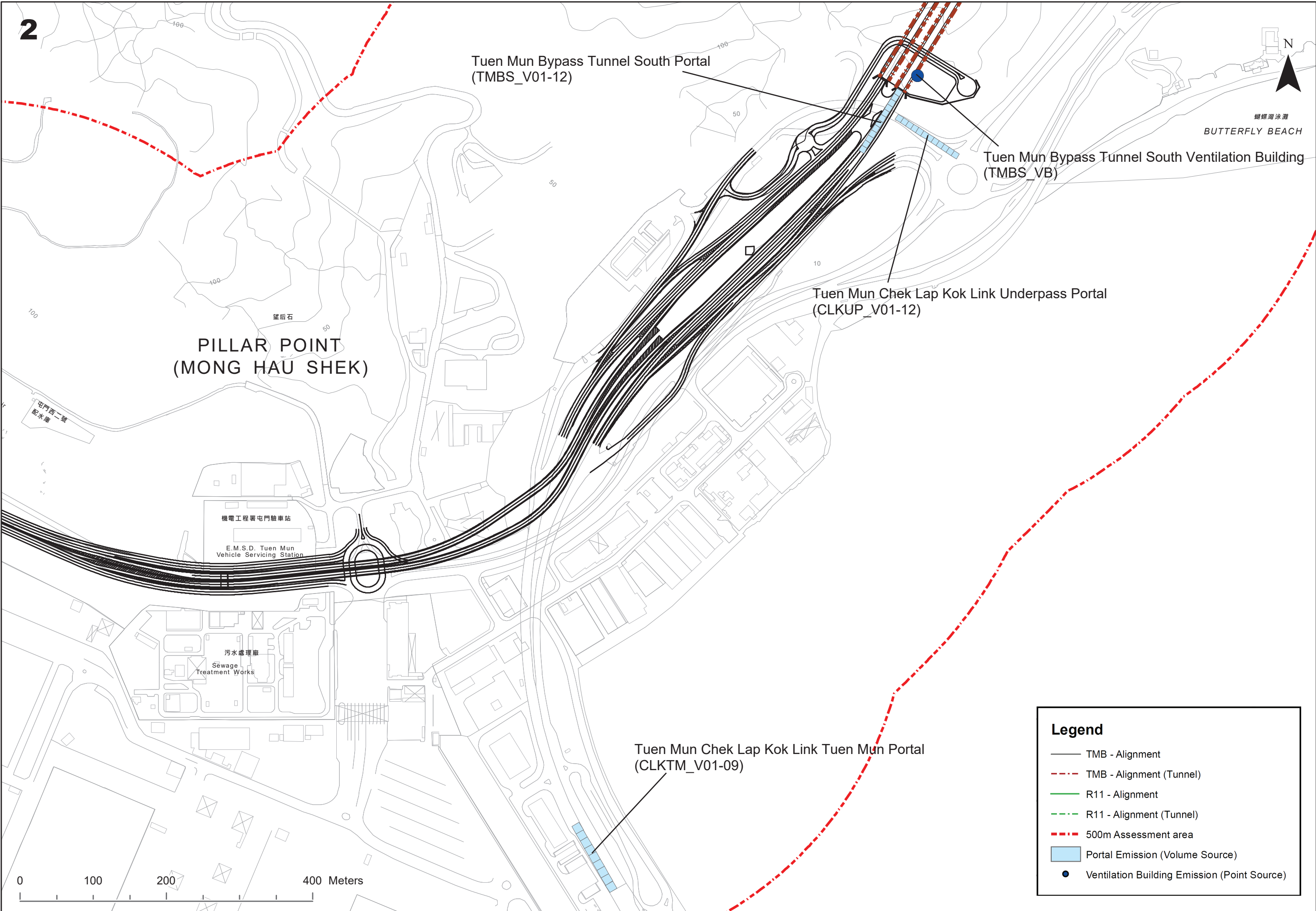
機電工程署屯門驗車站
E.M.S.D. Tuen Mun
Vehicle Servicing Station

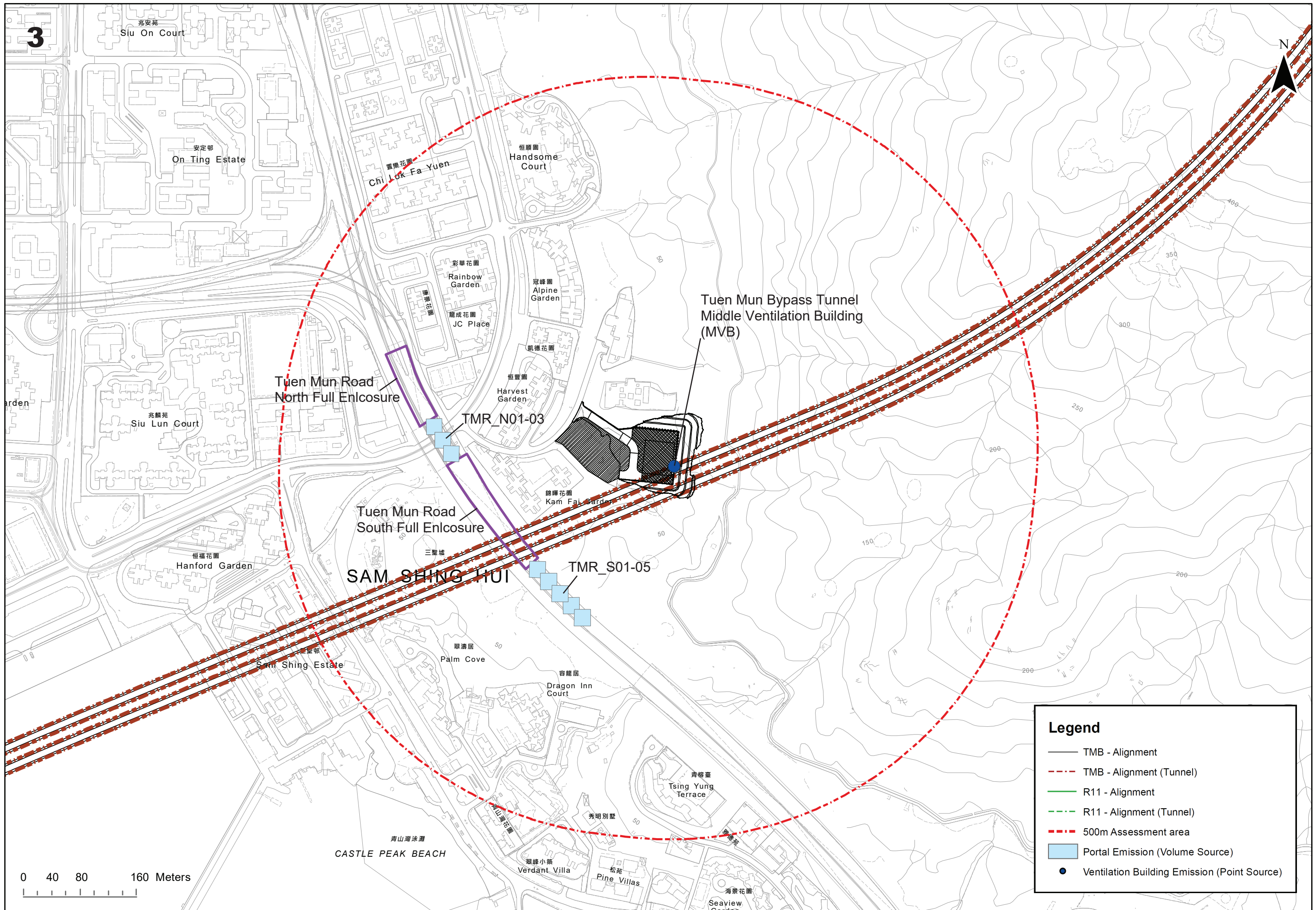
污水處理廠
Sewage
Treatment Works

Legend

- TMB - Alignment
- - - TMB - Alignment (Tunnel)
- R11 - Alignment
- - - R11 - Alignment (Tunnel)
- . - . 500m Assessment area
- Portal Emission (Volume Source)
- Ventilation Building Emission (Point Source)

0 100 200 400 Meters





Annex - 2

Emission Calculation for
Portals

Emission Inventory for Tunnel Portal and Full Enclosure

Location	Portal/ Full Enclosure Name	Source ID	Type	X	Y	Base Elevation	Release Height	Lateral Dim. (Sy)	Vertical Dim. (Sz)	Emission Split
				(m)	(m)	(m)	(m)	(m)	(m)	
Lam Tei	Lam Tei Tunnel North Portal (LTT - North Portal)	LTN_V01	VOLUME	817300	830413	34.1	2.55	5.58	2.37	Emission of first 50m * (1 / 4.5)
		LTN_V02	VOLUME	817297	830425	34.1	2.55	5.58	2.37	
		LTN_V03	VOLUME	817294	830436	34.1	2.55	5.58	2.37	
		LTN_V04	VOLUME	817291	830448	34.1	2.55	5.58	2.37	Emission of first 50m * 0.5 * (1 / 4.5) + Emission of second 50m * 0.5 * (1 / 4.5)
		LTN_V05	VOLUME	817288	830460	34.1	2.55	5.58	2.37	
		LTN_V06	VOLUME	817285	830471	34.1	2.55	5.58	2.37	
		LTN_V07	VOLUME	817282	830483	34.1	2.55	5.58	2.37	Emission of second 50m * (1 / 4.5)
		LTN_V08	VOLUME	817279	830495	34.1	2.55	5.58	2.37	
		LTN_V09	VOLUME	817276	830506	34.1	2.55	5.58	2.37	
	Tuen Mun Bypass Tunnel North Portal (TMB - North Portal)	TMBN_V01	VOLUME	817230	830363	45.0	2.55	5.58	2.37	Emission of first 50m * (1 / 4.5)
		TMBN_V02	VOLUME	817231	830375	45.0	2.55	5.58	2.37	
		TMBN_V03	VOLUME	817231	830387	45.0	2.55	5.58	2.37	
		TMBN_V04	VOLUME	817232	830399	45.0	2.55	5.58	2.37	Emission of first 50m * 0.5 * (1 / 4.5) + Emission of second 50m * 0.5 * (1 / 4.5)
		TMBN_V05	VOLUME	817233	830411	45.0	2.55	5.58	2.37	
		TMBN_V06	VOLUME	817234	830423	45.0	2.55	5.58	2.37	
		TMBN_V07	VOLUME	817234	830435	45.0	2.55	5.58	2.37	Emission of second 50m * (1 / 4.5)
TMBN_V08		VOLUME	817235	830447	45.0	2.55	5.58	2.37		
TMBN_V09		VOLUME	817236	830459	45.0	2.55	5.58	2.37		
Pillar Point	Tuen Mun Bypass Tunnel South Portal (TMB - South Portal)	TMBS_V01	VOLUME	813145	825982	23.0	2.55	3.86	2.37	Emission of first 50m * (1 / 6)
		TMBS_V02	VOLUME	813140	825975	23.0	2.55	3.86	2.37	
		TMBS_V03	VOLUME	813136	825968	23.0	2.55	3.86	2.37	
		TMBS_V04	VOLUME	813131	825961	23.0	2.55	3.86	2.37	
		TMBS_V05	VOLUME	813127	825954	23.0	2.55	3.86	2.37	
		TMBS_V06	VOLUME	813123	825947	23.0	2.55	3.86	2.37	
		TMBS_V07	VOLUME	813118	825940	23.0	2.55	3.86	2.37	Emission of second 50m * (1 / 6)
		TMBS_V08	VOLUME	813114	825932	23.0	2.55	3.86	2.37	
		TMBS_V09	VOLUME	813110	825925	23.0	2.55	3.86	2.37	
		TMBS_V10	VOLUME	813105	825918	23.0	2.55	3.86	2.37	
		TMBS_V11	VOLUME	813101	825911	23.0	2.55	3.86	2.37	
		TMBS_V12	VOLUME	813096	825904	23.0	2.55	3.86	2.37	
	Tuen Mun Chek Lap Kok Link Underpass Portal (TMCLKL - Underpass Portal)	CLKUP_V01	VOLUME	813146	825946	11.0	2.55	3.86	2.37	Emission of first 50m * (1 / 6)
		CLKUP_V02	VOLUME	813153	825942	11.0	2.55	3.86	2.37	
		CLKUP_V03	VOLUME	813160	825937	11.0	2.55	3.86	2.37	
		CLKUP_V04	VOLUME	813167	825933	11.0	2.55	3.86	2.37	
		CLKUP_V05	VOLUME	813174	825928	11.0	2.55	3.86	2.37	
		CLKUP_V06	VOLUME	813181	825924	11.0	2.55	3.86	2.37	
		CLKUP_V07	VOLUME	813188	825919	11.0	2.55	3.86	2.37	Emission of second 50m * (1 / 6)
		CLKUP_V08	VOLUME	813195	825915	11.0	2.55	3.86	2.37	
		CLKUP_V09	VOLUME	813202	825910	11.0	2.55	3.86	2.37	
		CLKUP_V10	VOLUME	813209	825906	11.0	2.55	3.86	2.37	
		CLKUP_V11	VOLUME	813216	825901	11.0	2.55	3.86	2.37	
		CLKUP_V12	VOLUME	813223	825897	11.0	2.55	3.86	2.37	
Tuen Mun Chek Lap Kok Link Tuen Mun Portal (TMCLKL - Tuen Mun Portal)	CLKTM_V01	VOLUME	812752	824896	0.0	2.60	5.40	2.42	Emission of first 50m * (1 / 4.5)	
	CLKTM_V02	VOLUME	812747	824906	0.0	2.60	5.40	2.42		
	CLKTM_V03	VOLUME	812741	824916	0.0	2.60	5.40	2.42		
	CLKTM_V04	VOLUME	812735	824926	0.0	2.60	5.40	2.42	Emission of first 50m * 0.5 * (1 / 4.5) + Emission of second 50m * 0.5 * (1 / 4.5)	
	CLKTM_V05	VOLUME	812729	824936	0.0	2.60	5.40	2.42		
	CLKTM_V06	VOLUME	812723	824946	0.0	2.60	5.40	2.42		
	CLKTM_V07	VOLUME	812718	824956	0.0	2.60	5.40	2.42	Emission of second 50m * (1 / 4.5)	
	CLKTM_V08	VOLUME	812712	824966	0.0	2.60	5.40	2.42		
	CLKTM_V09	VOLUME	812706	824976	0.0	2.60	5.40	2.42		

Emission Inventory for Tunnel Portal and Full Enclosure

Location	Portal/ Full Enclosure Name	Source ID	Type	X	Y	Base Elevation	Release Height	Lateral Dim. (Sy)	Vertical Dim. (Sz)	Emission Split
				(m)	(m)	(m)	(m)	(m)	(m)	
Sam Shing	Tuen Mun Road North Full Enclosure (TMR - North Full Enclosure) ^[1]	TMR_N01	VOLUME	816000	827220	12.0	3.50	10.19	3.26	Emission of first 50m * (1 / 2.5)
		TMR_N02	VOLUME	816012	827201	13.2	3.50	10.19	3.26	
		TMR_N03	VOLUME	816024	827183	14.5	3.50	10.19	3.26	Emission of first 50m * 0.5 * (1 / 2.5) + Emission of second 50m * 0.5 * (1 / 2.5)
	Tuen Mun Road South Full Enclosure (TMR - South Full Enclosure)	TMR_S01	VOLUME	816142	827024	27.2	4.00	10.19	3.72	Emission of first 50m * (1 / 2.5)
		TMR_S02	VOLUME	816158	827007	28.5	4.00	10.19	3.72	
		TMR_S03	VOLUME	816173	826990	29.5	4.00	10.19	3.72	Emission of first 50m * 0.5 * (1 / 2.5) + Emission of second 50m * 0.5 * (1 / 2.5)
		TMR_S04	VOLUME	816189	826974	31.0	4.00	10.19	3.72	Emission of second 50m * (1 / 2.5)
TMR_S05	VOLUME	816204	826957	32.0	4.00	10.19	3.72			

Note:

1. Approximately 40m of the portal emission from Tuen Mun Road North Full Enclosure will enter and emit from Tuen Mun Road South Full Enclosure.
2. The traffic direction is one-way for each single tunnel tube for portal emission calculation.

Hourly Emission of Route 11 Lam Tei Tunnel Portal (1st Jan, Long Term, Year 2048)

Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 01			Hr 02			Hr 03			Hr 04			Hr 05			Hr 06			Hr 07			Hr 08					
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
NO	1010	LTT - North Portal	4223	4850	40%	971	0.1486	435.0	663	0.1531	305.9	455	0.1554	213.1	347	0.1565	163.6	400	0.1592	192.0	738	0.1628	362.1	1678	0.1676	847.7	3434	0.1667	1725.7			
						<i>Emission of first 50m (g/hr)</i>			101.0			71.0			49.5			38.0			44.6			84.1			196.8			400.7		
						<i>Emission of second 50m (g/hr)</i>			50.5			35.5			24.7			19.0			22.3			42.0			98.4			200.3		
NO2	1010	LTT - North Portal	4223	4850	40%	971	0.0261	76.4	663	0.0276	55.2	455	0.029	39.8	347	0.0298	31.1	400	0.031	37.3	738	0.0326	72.5	1678	0.0342	173.1	3434	0.0328	339.2			
						<i>Emission of first 50m (g/hr)</i>			17.7			12.8			9.2			7.2			8.7			16.8			40.2			78.8		
						<i>Emission of second 50m (g/hr)</i>			8.9			6.4			4.6			3.6			4.3			8.4			20.1			39.4		
Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 09			Hr 10			Hr 11			Hr 12			Hr 13			Hr 14			Hr 15			Hr 16					
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
NO	1010	LTT - North Portal	4223	4850	40%	3493	0.1543	1624.4	3162	0.1805	1720.0	2983	0.1892	1701.0	2865	0.1791	1546.2	2998	0.1607	1452.1	3095	0.1644	1534.1	3294	0.1602	1590.2	3400	0.1668	1709.0			
						<i>Emission of first 50m (g/hr)</i>			377.2			399.4			394.9			359.0			337.2			356.2			369.2			396.8		
						<i>Emission of second 50m (g/hr)</i>			188.6			199.7			197.5			179.5			168.6			178.1			184.6			198.4		
NO2	1010	LTT - North Portal	4223	4850	40%	3493	0.0332	349.9	3162	0.0422	402.5	2983	0.0451	405.4	2865	0.0411	355.1	2998	0.0363	328.2	3095	0.0342	319.5	3294	0.0361	358.0	3400	0.0349	357.9			
						<i>Emission of first 50m (g/hr)</i>			81.3			93.5			94.1			82.5			76.2			74.2			83.1			83.1		
						<i>Emission of second 50m (g/hr)</i>			40.6			46.7			47.1			41.2			38.1			37.1			41.6			41.5		
Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 17			Hr 18			Hr 19			Hr 20			Hr 21			Hr 22			Hr 23			Hr 24					
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
NO	1010	LTT - North Portal	4223	4850	40%	3613	0.1620	1763.8	4163	0.1496	1877.4	4449	0.1221	1637.0	3411	0.1188	1221.6	2844	0.1295	1109.9	2681	0.1321	1067.2	2655	0.1323	1058.8	2038	0.1341	823.9			
						<i>Emission of first 50m (g/hr)</i>			409.5			435.9			390.1			283.6			257.7			247.8			245.8			191.3		
						<i>Emission of second 50m (g/hr)</i>			204.8			218.0			190.0			141.8			128.9			123.9			122.9			95.7		
NO2	1010	LTT - North Portal	4223	4850	40%	3613	0.0343	373.1	4163	0.0296	371.0	4449	0.0218	292.6	3411	0.0214	219.6	2844	0.0212	181.7	2681	0.0188	152.0	2655	0.0174	138.9	2038	0.0185	113.7			
						<i>Emission of first 50m (g/hr)</i>			86.6			86.1			67.9			51.0			42.2			35.3			32.2			26.4		
						<i>Emission of second 50m (g/hr)</i>			43.3			43.1			34.0			25.5			21.1			17.6			16.1			13.2		

Hourly Emission of Tuen Mun Bypass Tunnel Portal (1st Jan, Long Term, Year 2048)

Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 01			Hr 02			Hr 03			Hr 04			Hr 05			Hr 06			Hr 07			Hr 08					
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
NO	5009	TMB - North Portal	7453	7532	40%	496	0.1561	362.4	339	0.1563	254.3	234	0.1614	176.9	181	0.1643	139.2	213	0.1679	167.4	392	0.1705	312.9	894	0.1749	732.0	1852	0.1703	1476.1			
						<i>Emission of first 50m (g/hr)</i>			95.6			67.1			46.7			36.7			44.2			82.6			193.1			389.5		
						<i>Emission of second 50m (g/hr)</i>			47.8			33.6			23.3			18.4			22.1			41.3			96.6			194.7		
NO2	5009	TMB - North Portal	7453	7532	40%	496	0.0307	71.3	339	0.0318	50.5	234	0.0325	35.6	181	0.034	28.8	213	0.0362	36.1	392	0.037	67.9	894	0.0386	161.4	1852	0.0372	322.3			
						<i>Emission of first 50m (g/hr)</i>			18.8			13.3			9.4			7.6			9.5			17.9			42.6			85.0		
						<i>Emission of second 50m (g/hr)</i>			9.4			6.7			4.7			3.8			4.8			9.0			21.3			42.5		
NO	5015	TMB - South Portal	7470	7600	40%	676	0.1466	468.0	460	0.1506	327.1	317	0.1532	229.4	241	0.1555	177.0	280	0.1589	210.2	515	0.1612	392.1	1169	0.1657	915.0	2399	0.1608	1822.4			
						<i>Emission of first 50m (g/hr)</i>			122.7			85.7			60.1			46.4			55.1			102.8			239.8			477.6		
						<i>Emission of second 50m (g/hr)</i>			61.3			42.9			30.1			23.2			27.5			51.4			119.9			238.8		
NO2	5015	TMB - South Portal	7470	7600	40%	676	0.0251	80.1	460	0.0263	57.2	317	0.0279	41.8	241	0.029	33.0	280	0.0313	41.4	515	0.0318	77.4	1169	0.0334	184.4	2399	0.032	362.1			
						<i>Emission of first 50m (g/hr)</i>			21.0			15.0			11.0			8.6			10.9			20.3			48.3			94.9		
						<i>Emission of second 50m (g/hr)</i>			10.5			7.5			5.5			4.3			5.4			10.1			24.2			47.4		
Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 09			Hr 10			Hr 11			Hr 12			Hr 13			Hr 14			Hr 15			Hr 16					
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
NO	5009	TMB - North Portal	7453	7532	40%	1896	0.1601	1420.9	1831	0.1832	1570.3	1761	0.1912	1576.0	1668	0.1846	1441.4	2129	0.1866	1859.6	2187	0.1876	1920.6	2441	0.1857	2121.8	2406	0.1875	2111.9			
						<i>Emission of first 50m (g/hr)</i>			374.9			414.3			415.8			380.3			490.7			506.8			559.8			572.2		
						<i>Emission of second 50m (g/hr)</i>			187.5			207.2			207.9			190.2			245.3			253.4			279.9			278.6		
NO2	5009	TMB - North Portal	7453	7532	40%	1896	0.0379	336.7	1831	0.0467	400.7	1761	0.0496	409.2	1668	0.0463	361.3	2129	0.0511	508.9	2187	0.0496	507.8	2441	0.0503	575.2	2406	0.0496	558.5			
						<i>Emission of first 50m (g/hr)</i>			88.8			105.7			108.0			95.3			134.3			134.0			151.8			147.4		
						<i>Emission of second 50m (g/hr)</i>			44.4			52.9			54.0			47.7			67.1			67.0			75.9			73.7		
NO	5015	TMB - South Portal	7470	7600	40%	2440	0.148	1707.2	2212	0.172	1797.8	2088	0.182	1793.3	2008	0.174	1650.0	1431	0.189	1274.5	1468	0.190	1313.9	1639	0.186	1441.3	1613	0.189	1442.4			
						<i>Emission of first 50m (g/hr)</i>			447.5			471.2			470.0			432.5			334.0			344.4			377.8			378.1		
						<i>Emission of second 50m (g/hr)</i>			223.7			235.6			235.0			216.2			167.0			172.2			188.9			189.0		
NO2	5015	TMB - South Portal	7470	7600	40%	2440	0.032	372.8	2212	0.041	427.2	2088	0.044	434.0	2008	0.040	381.6	1431	0.052	351.3	1468	0.051	350.4	1639	0.051	395.4	1613	0.051	384.9			
						<i>Emission of first 50m (g/hr)</i>			97.7			112.0			113.7			100.0			92.1			91.8			103.6			100.9		
						<i>Emission of second 50m (g/hr)</i>			48.9			56.0			56.9			50.0			46.0			45.9			51.8			50.4		
Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 17			Hr 18			Hr 19			Hr 20			Hr 21			Hr 22			Hr 23			Hr 24					
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
NO	5009	TMB - North Portal	7453	7532	40%	2500	0.1840	2153.0	2639	0.1711	2114.0	2396	0.1433	1606.8	1786	0.1430	1195.9	1452	0.1509	1026.0	1353	0.1524	965.5	1312	0.1518	932.6	1026	0.1543	741.1			
						<i>Emission of first 50m (g/hr)</i>			568.1			557.8			424.0			315.5			270.7			254.8			246.1			195.6		
						<i>Emission of second 50m (g/hr)</i>			284.0			278.9			212.0			157.8			135.4			127.4			123.0			97.8		
NO2	5009	TMB - North Portal	7453	7532	40%	2500	0.0468	547.8	2639	0.0409	505.8	2396	0.0312	349.6	1786	0.0317	264.8	1452	0.0315	214.4	1353	0.0300	190.1	1312	0.0290	178.2	1026	0.0304	145.9			
						<i>Emission of first 50m (g/hr)</i>			144.5			133.5			92.3			69.9			56.6			50.2			47.0			38.5		
						<i>Emission of second 50m (g/hr)</i>			72.3			66.7			46.1			34.9			28.3			25.1			23.5			19.2		
NO	5015	TMB - South Portal	7470	7600	40%	1678	0.185	1462.5	1764	0.172	1433.3	1590	0.145	1091.7	1186	0.146	815.8	964	0.154	698.8	898	0.155	658.9	869	0.155	635.0	680	0.156	502.3			
						<i>Emission of first 50m (g/hr)</i>			383.3			375.7			286.1			213.8			183.2			172.7			166.4			131.6		
						<i>Emission of second 50m (g/hr)</i>			191.7			187.8			143.1			106.9			91.6			86.3			83.2			65.8		
NO2	5015	TMB - South Portal	7470	7600	40%	1678	0.048	376.8	1764	0.042	348.3	1590	0.032	240.7	1186	0.033	183.4	964	0.033	149.0	898	0.031	133.4	869	0.030	124.9	680	0.032	101.1			
						<i>Emission of first 50m (g/hr)</i>			98.8			91.3			63.1			48.1			39.0			35.0			32.7			26.5		
						<i>Emission of second 50m (g/hr)</i>			49.4			45.7			31.5			24.0			19.5			17.5			16.4			13.2		

Hourly Emission of Tuen Mun Chek Lap Kok Link Portal (1st Jan, Long Term, Year 2048)

Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emittted at Portal	Hr 01			Hr 02			Hr 03			Hr 04			Hr 05			Hr 06			Hr 07			Hr 08						
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	
NO	3097	TMCLKL - Underpass Portal	236	248	100%	121	0.2046	3.8	88	0.2185	3.0	64	0.2118	2.1	51	0.2297	1.8	53	0.228	1.9	74	0.2425	2.8	201	0.2604	8.1	433	0.2712	18.1				
						<i>Emission of first 50m (g/hr)</i>						2.4	1.9			1.3			1.1			1.2			1.8			5.1			11.5		
						<i>Emission of second 50m (g/hr)</i>						1.2	0.9			0.7			0.6			0.6			0.9			2.6			5.7		
NO2	3097	TMCLKL - Underpass Portal	236	248	100%	121	0.0431	0.8	88	0.0479	0.6	64	0.0442	0.4	51	0.0487	0.4	53	0.0501	0.4	74	0.0546	0.6	201	0.0593	1.8	433	0.059	3.9				
						<i>Emission of first 50m (g/hr)</i>						0.5	0.4			0.3			0.2			0.3			0.4			1.2			2.5		
						<i>Emission of second 50m (g/hr)</i>						0.3	0.2			0.1			0.1			0.1			0.2			0.6			1.2		
NO	3580	TMCLKL - Tuen Mun Portal	5400	2430	10%	467	0.1285	90.6	334	0.1347	67.9	246	0.1367	50.8	197	0.1401	41.7	207	0.1468	45.9	275	0.1498	62.2	761	0.1569	180.4	1649	0.1557	387.9				
						<i>Emission of first 50m (g/hr)</i>						13.4	10.1			7.5			6.2			6.8			9.2			26.7			57.5		
						<i>Emission of second 50m (g/hr)</i>						6.7	5.0			3.8			3.1			3.4			4.6			13.4			28.7		
NO2	3580	TMCLKL - Tuen Mun Portal	5400	2430	10%	467	0.0187	13.2	334	0.0206	10.4	246	0.0213	7.9	197	0.0223	6.6	207	0.0253	7.9	275	0.026	10.8	761	0.0281	32.3	1649	0.0279	69.4				
						<i>Emission of first 50m (g/hr)</i>						1.9	1.5			1.2			1.0			1.2			1.6			4.8			10.3		
						<i>Emission of second 50m (g/hr)</i>						1.0	0.8			0.6			0.5			0.6			0.8			2.4			5.1		
Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emittted at Portal	Hr 09			Hr 10			Hr 11			Hr 12			Hr 13			Hr 14			Hr 15			Hr 16						
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	
NO	3097	TMCLKL - Underpass Portal	236	248	100%	458	0.2458	17.3	395	0.2753	16.2	359	0.2927	16.2	351	0.2787	15.1	461	0.4117	29.2	464	0.4063	29.0	505	0.4250	33.0	520	0.4070	32.6				
						<i>Emission of first 50m (g/hr)</i>						11.0	10.6			10.3			9.6			18.5			21.0			20.7					
						<i>Emission of second 50m (g/hr)</i>						5.5	5.3			5.1			4.8			9.3			9.2			10.5			10.3		
NO2	3097	TMCLKL - Underpass Portal	236	248	100%	458	0.0567	4.0	395	0.0610	3.7	359	0.0695	3.8	351	0.0627	3.4	461	0.1051	7.5	464	0.0927	6.6	505	0.1084	8.4	520	0.0872	7.0				
						<i>Emission of first 50m (g/hr)</i>						2.5	2.4			2.1			4.7			4.2			5.3			4.4					
						<i>Emission of second 50m (g/hr)</i>						1.3	1.2			1.1			2.4			2.1			2.7			2.2					
NO	3580	TMCLKL - Tuen Mun Portal	5400	2430	10%	1748	0.128	337.9	1475	0.141	315.1	1338	0.159	320.2	1313	0.147	292.3	1893	0.196	561.4	1949	0.193	568.7	2104	0.202	641.3	2193	0.203	671.4				
						<i>Emission of first 50m (g/hr)</i>						50.1	46.7			47.4			43.3			83.2			84.2			95.0			99.5		
						<i>Emission of second 50m (g/hr)</i>						25.0	23.3			23.7			21.6			41.6			42.1			47.5			49.7		
NO2	3580	TMCLKL - Tuen Mun Portal	5400	2430	10%	1748	0.024	62.7	1475	0.026	57.5	1338	0.032	64.2	1313	0.028	54.5	1893	0.047	133.2	1949	0.040	117.6	2104	0.047	149.5	2193	0.039	128.6				
						<i>Emission of first 50m (g/hr)</i>						9.3	8.5			9.5			8.1			19.7			17.4			22.2			19.1		
						<i>Emission of second 50m (g/hr)</i>						4.6	4.3			4.8			4.0			9.9			8.7			11.1			9.5		
Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emittted at Portal	Hr 17			Hr 18			Hr 19			Hr 20			Hr 21			Hr 22			Hr 23			Hr 24						
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	
NO	3097	TMCLKL - Underpass Portal	236	248	100%	523	0.4046	32.6	546	0.3955	33.2	458	0.3179	22.4	350	0.2932	15.8	262	0.2864	11.5	244	0.2814	10.6	228	0.2873	10.1	174	0.2900	7.8				
						<i>Emission of first 50m (g/hr)</i>						20.7	21.1			14.2			10.0			7.3			6.4			4.9					
						<i>Emission of second 50m (g/hr)</i>						10.3	10.6			7.1			5.0			3.7			3.4			3.2			2.5		
NO2	3097	TMCLKL - Underpass Portal	236	248	100%	523	0.0904	7.3	546	0.0860	7.2	458	0.0689	4.9	350	0.0730	3.9	262	0.0745	3.0	244	0.0799	3.0	228	0.0709	2.5	174	0.0712	1.9				
						<i>Emission of first 50m (g/hr)</i>						4.6	4.6			3.1			2.5			1.9			1.6			1.2					
						<i>Emission of second 50m (g/hr)</i>						2.3	2.3			1.5			1.2			1.0			1.0			0.8			0.6		
NO	3580	TMCLKL - Tuen Mun Portal	5400	2430	10%	2211	0.201	670.6	2300	0.189	655.6	2029	0.151	461.7	1527	0.140	322.8	1164	0.145	254.3	1061	0.144	230.1	993	0.149	223.5	756	0.153	174.6				
						<i>Emission of first 50m (g/hr)</i>						99.4	97.1			68.4			47.8			37.7			34.1			33.1			25.9		
						<i>Emission of second 50m (g/hr)</i>						49.7	48.6			34.2			23.9			18.8			17.0			16.6			12.9		
NO2	3580	TMCLKL - Tuen Mun Portal	5400	2430	10%	2211	0.040	133.1	2300	0.036	124.4	2029	0.028	85.6	1527	0.029	67.8	1164	0.030	52.1	1061	0.033	53.3	993	0.027	41.2	756	0.029	32.7				
						<i>Emission of first 50m (g/hr)</i>						19.7	18.4			12.7			10.0			7.7			7.9			6.1			4.8		
						<i>Emission of second 50m (g/hr)</i>						9.9	9.2			6.3			5.0			3.9			3.9			3.0			2.4		

Note:

1. The discharge split between portals and ventilation buildings for TMCLKL is based on "Final Report on Management, Operation and Maintenance of Tunnels, Including the Tunnel Operation and Control System and Recurrent Consequence Requirement, Tuen Mun – Chek Lap Kok Link – Design and Construction" as provided by HyD.

Hourly Emission of Tuen Mun Road Full Enclosure (1st Jan, Long Term, Year 2048)

Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 01			Hr 02			Hr 03			Hr 04			Hr 05			Hr 06			Hr 07			Hr 08		
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
NO	3503	TMR - North Full Enclosure	41	266	100%	845	0.1635	22.9	574	0.1675	15.9	392	0.1691	11.0	299	0.1716	8.5	344	0.1740	9.9	628	0.1769	18.4	1422	0.1853	43.6	2851	0.2387	112.6
	3517	TMR - North Full Enclosure	69	69	100%	1305	0.1705	9.5	885	0.1746	6.6	606	0.1767	4.6	458	0.1784	3.5	530	0.1810	4.1	970	0.1842	7.6	2192	0.1887	17.7	4359	0.1796	33.4
	3520	TMR - North Full Enclosure	41	41	100%	417	0.2069	2.2	298	0.2124	1.6	224	0.2183	1.3	180	0.2190	1.0	189	0.2281	1.1	251	0.2401	1.5	702	0.2829	5.1	1516	0.3299	12.8
	<i>Emission of first 50m (g/hr)</i>						10.2			7.1			5.0			3.9			4.5			8.0			19.6			42.4	
<i>Emission of second 50m (g/hr)</i>						5.1			3.6			2.5			1.9			2.2			4.0			9.8			21.2		
NO2	3503	TMR - North Full Enclosure	41	266	100%	845	0.0304	4.2	574	0.0317	3.0	392	0.0331	2.1	299	0.0341	1.7	344	0.0353	2.0	628	0.0363	3.8	1422	0.0384	9.0	2851	0.0506	23.9
	3517	TMR - North Full Enclosure	69	69	100%	1305	0.0345	1.9	885	0.0357	1.3	606	0.0371	1.0	458	0.0376	0.7	530	0.0391	0.9	970	0.0404	1.7	2192	0.0418	3.9	4359	0.0357	6.6
	3520	TMR - North Full Enclosure	41	41	100%	417	0.0385	0.4	298	0.0394	0.3	224	0.0427	0.2	180	0.0432	0.2	189	0.0465	0.2	251	0.0490	0.3	702	0.0593	1.1	1516	0.0689	2.7
	<i>Emission of first 50m (g/hr)</i>						2.0			1.4			1.0			0.8			0.9			1.7			4.2			8.7	
<i>Emission of second 50m (g/hr)</i>						1.0			0.7			0.5			0.4			0.5			0.9			2.1			4.3		
NO	3539	TMR - South Full Enclosure	143	143	100%	95	0.2129	1.8	65	0.2238	1.3	42	0.2113	0.8	32	0.2071	0.6	38	0.2322	0.8	71	0.2370	1.5	160	0.2550	3.6	316	0.2639	7.4
	3540	TMR - South Full Enclosure	146	146	100%	1305	0.1659	19.6	885	0.1697	13.6	606	0.1716	9.4	458	0.1731	7.2	530	0.1753	8.4	970	0.1783	15.7	2192	0.1825	36.2	4359	0.1693	66.8
	3542	TMR - South Full Enclosure	32	561	100%	1399	0.1651	80.5	949	0.1692	56.0	651	0.1712	38.8	494	0.1731	29.8	568	0.1751	34.7	1039	0.1777	64.3	2350	0.1820	149.1	4673	0.1708	278.2
	<i>Emission of first 50m (g/hr)</i>						20.0			13.9			9.6			7.3			8.6			16.0			37.4			71.2	
<i>Emission of second 50m (g/hr)</i>						10.0			7.0			4.8			3.7			4.3			8.0			18.7			35.6		
NO2	3539	TMR - South Full Enclosure	143	143	100%	95	0.0431	0.4	65	0.0455	0.3	42	0.0416	0.2	32	0.0423	0.1	38	0.0502	0.2	71	0.0541	0.3	160	0.0580	0.8	316	0.0575	1.6
	3540	TMR - South Full Enclosure	146	146	100%	1305	0.0341	4.0	885	0.0352	2.8	606	0.0366	2.0	458	0.0371	1.5	530	0.0386	1.9	970	0.0398	3.5	2192	0.0412	8.2	4359	0.0338	13.3
	3542	TMR - South Full Enclosure	32	561	100%	1399	0.0338	16.5	949	0.0351	11.6	651	0.0363	8.2	494	0.0373	6.4	568	0.0384	7.6	1039	0.0397	14.4	2350	0.0409	33.5	4673	0.0338	55.0
	<i>Emission of first 50m (g/hr)</i>						4.1			2.9			2.0			1.6			1.9			3.6			8.4			14.3	
<i>Emission of second 50m (g/hr)</i>						2.0			1.4			1.0			0.8			0.9			1.8			4.2			7.2		

Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 09			Hr 10			Hr 11			Hr 12			Hr 13			Hr 14			Hr 15			Hr 16		
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
NO	3503	TMR - North Full Enclosure	41	266	100%	2896	0.2315	110.9	2546	0.2712	114.2	2363	0.2739	107.0	2291	0.2426	91.9	726	0.1789	21.5	745	0.1813	22.3	787	0.1751	22.8	818	0.1816	24.6
	3517	TMR - North Full Enclosure	69	69	100%	4441	0.1724	32.7	3931	0.2076	34.8	3642	0.2142	33.3	3533	0.2013	30.4	1657	0.2021	14.3	1697	0.2030	14.7	1836	0.1974	15.5	1858	0.2013	16.0
	3520	TMR - North Full Enclosure	41	41	100%	1609	0.2953	12.2	1398	0.3397	12.2	1278	0.3603	11.8	1253	0.3409	11.0	1009	0.4181	10.8	1025	0.4078	10.7	1090	0.4337	12.1	1144	0.4267	12.5
	<i>Emission of first 50m (g/hr)</i>						41.3			43.1			41.1			37.0			19.0			19.2			20.7			21.5	
<i>Emission of second 50m (g/hr)</i>						20.6			21.5			20.5			18.5			9.5			9.6			10.4			10.8		
NO2	3503	TMR - North Full Enclosure	41	266	100%	2896	0.0542	26.0	2546	0.0681	28.7	2363	0.0686	26.8	2291	0.0577	21.9	726	0.0427	5.1	745	0.0401	4.9	787	0.0416	5.4	818	0.0401	5.4
	3517	TMR - North Full Enclosure	69	69	100%	4441	0.0386	7.3	3931	0.0513	8.6	3642	0.0525	8.2	3533	0.0473	7.1	1657	0.0542	3.8	1697	0.0518	3.8	1836	0.0524	4.1	1858	0.0512	4.1
	3520	TMR - North Full Enclosure	41	41	100%	1609	0.0640	2.6	1398	0.0694	2.5	1278	0.0825	2.7	1253	0.0727	2.3	1009	0.1066	2.8	1025	0.0915	2.4	1090	0.1094	3.1	1144	0.0905	2.7
	<i>Emission of first 50m (g/hr)</i>						9.3			10.3			10.0			8.6			4.9			4.6			5.3			5.0	
<i>Emission of second 50m (g/hr)</i>						4.7			5.2			5.0			4.3			2.5			2.3			2.7			2.5		
NO	3539	TMR - South Full Enclosure	143	143	100%	322	0.2496	7.2	281	0.2981	7.5	261	0.3187	7.4	255	0.3008	6.8	80	0.2424	1.7	82	0.2449	1.8	86	0.2467	1.9	91	0.2524	2.0
	3540	TMR - South Full Enclosure	146	146	100%	4441	0.1604	64.5	3931	0.1943	69.1	3642	0.2023	66.7	3533	0.1913	61.2	1657	0.1921	28.8	1697	0.1930	29.6	1836	0.1865	31.0	1858	0.1913	32.2
	3542	TMR - South Full Enclosure	32	561	100%	4765	0.1639	272.1	4214	0.1958	287.7	3906	0.2029	276.2	3784	0.1926	254.1	1735	0.1910	115.5	1781	0.1920	119.2	1923	0.1853	124.2	1949	0.1905	129.4
	<i>Emission of first 50m (g/hr)</i>						69.0			73.3			70.7			64.7			29.7			30.6			32.1			33.4	
<i>Emission of second 50m (g/hr)</i>						34.5			36.7			35.4			32.4			14.9			15.3			16.1			16.7		
NO2	3539	TMR - South Full Enclosure	143	143	100%	322	0.0596	1.7	281	0.0757	1.9	261	0.0823	1.9	255	0.0743	1.7	80	0.0613	0.4	82	0.0556	0.4	86	0.0630	0.5	91	0.0595	0.5
	3540	TMR - South Full Enclosure	146	146	100%	4441	0.0360	14.5	3931	0.0486	17.3	3642	0.0507	16.7	3533	0.0463	14.8	1657	0.0532	8.0	1697	0.0507	7.8	1836	0.0513	8.5	1858	0.0502	8.4
	3542	TMR - South Full Enclosure	32	561	100%	4765	0.0361	60.0	4214	0.0485	71.3	3906	0.0506	68.9	3784	0.0463	61.1	1735	0.0526	31.8	1781	0.0502	31.2	1923	0.0508	34.0	1949	0.0497	33.8
	<i>Emission of first 50m (g/hr)</i>						15.5			18.2			17.7			15.6			8.1			7.9			8.7			8.6	
<i>Emission of second 50m (g/hr)</i>						7.8			9.1			8.8			7.8			4.1			3.9			4.4			4.3		

Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 17			Hr 18			Hr 19			Hr 20			Hr 21			Hr 22			Hr 23			Hr 24		
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
NO	3503	TMR - North Full Enclosure	41	266	100%	874	0.1770	25.6	1022	0.1627	27.5	1113	0.1343	24.7	861	0.1379	19.6	723	0.1512	18.1	685	0.1548	17.5	675	0.1534	17.1	516	0.1549	13.2
	3517	TMR - North Full Enclosure	69	69	100%	1969	0.1986	16.7	2205	0.1858	17.5	2218	0.1560	14.8	1703	0.1599	11.6	1413	0.1726	10.4	1334	0.1761	10.0	1309	0.1743	9.7	1009	0.1763	7.6
	3520	TMR - North Full Enclosure	41	41	100%	1176	0.4190	12.6	1259	0.3887	12.6	1167	0.3011	9.0	917	0.2806	6.6	716	0.2595	4.8	654	0.2574	4.3	616	0.2579	4.1	465	0.2617	3.1
	<i>Emission of first 50m (g/hr)</i>						22.2			22.9			18.4			14.2			12.0			11.4			11.0			8.5	
<i>Emission of second 50m (g/hr)</i>						11.1			11.4			9.2			7.1			6.0			5.7			5.5			4.3		
NO2																													

Hourly Emission of Route 11 Lam Tei Tunnel Portal (1st Jan, Short Term, Year 2048)

Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 01			Hr 02			Hr 03			Hr 04			Hr 05			Hr 06			Hr 07			Hr 08					
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
NO	1010	LTT - North Portal	4223	4850	40%	971	0.1726	505.3	663	0.177	353.6	455	0.1792	245.7	347	0.1813	189.6	400	0.1834	221.1	738	0.185	411.5	1678	0.1886	954.1	3434	0.1881	1947.0			
						<i>Emission of first 50m (g/hr)</i>			117.3			82.1			57.1			44.0			51.3			95.5			221.5			452.1		
						<i>Emission of second 50m (g/hr)</i>			58.7			41.1			28.5			22.0			25.7			47.8			110.8			226.0		
NO2	1010	LTT - North Portal	4223	4850	40%	971	0.0284	83.1	663	0.03	60.0	455	0.0315	43.2	347	0.0324	33.9	400	0.0337	40.6	738	0.0351	78.1	1678	0.0368	186.0	3434	0.0352	364.2			
						<i>Emission of first 50m (g/hr)</i>			19.3			13.9			10.0			7.9			9.4			18.1			43.2			84.6		
						<i>Emission of second 50m (g/hr)</i>			9.6			7.0			5.0			3.9			4.7			9.1			21.6			42.3		
Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 09			Hr 10			Hr 11			Hr 12			Hr 13			Hr 14			Hr 15			Hr 16					
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
NO	1010	LTT - North Portal	4223	4850	40%	3493	0.1735	1827.1	3162	0.2004	1909.6	2983	0.2125	1910.3	2865	0.2053	1772.5	2998	0.1838	1660.8	3095	0.1928	1798.7	3294	0.1868	1854.9	3400	0.1949	1997.7			
						<i>Emission of first 50m (g/hr)</i>			424.2			443.4			443.5			411.6			385.6			417.6			430.7			463.8		
						<i>Emission of second 50m (g/hr)</i>			212.1			221.7			221.8			205.8			192.8			208.8			215.3			231.9		
NO2	1010	LTT - North Portal	4223	4850	40%	3493	0.0356	375.2	3162	0.0451	430.0	2983	0.0484	434.7	2865	0.0445	384.4	2998	0.0392	354.3	3095	0.0373	347.9	3294	0.0394	391.1	3400	0.0381	390.0			
						<i>Emission of first 50m (g/hr)</i>			87.1			99.8			100.9			89.2			82.3			80.8			90.8			90.5		
						<i>Emission of second 50m (g/hr)</i>			43.6			49.9			50.5			44.6			41.1			40.4			45.4			45.3		
Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 17			Hr 18			Hr 19			Hr 20			Hr 21			Hr 22			Hr 23			Hr 24					
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
NO	1010	LTT - North Portal	4223	4850	40%	3613	0.1867	2033.1	4163	0.1732	2173.4	4449	0.1420	1904.5	3411	0.1392	1430.9	2844	0.1536	1316.5	2681	0.1589	1284.0	2655	0.1557	1245.6	2038	0.1580	970.4			
						<i>Emission of first 50m (g/hr)</i>			472.1			504.6			442.2			332.2			305.7			298.1			289.2			225.3		
						<i>Emission of second 50m (g/hr)</i>			236.0			252.3			221.1			166.1			152.8			149.1			144.6			112.7		
NO2	1010	LTT - North Portal	4223	4850	40%	3613	0.0371	404.3	4163	0.0322	404.5	4449	0.0238	318.7	3411	0.0234	240.8	2844	0.0232	199.2	2681	0.0208	167.9	2655	0.0190	151.8	2038	0.0202	124.3			
						<i>Emission of first 50m (g/hr)</i>			93.9			93.9			74.0			55.9			46.2			39.0			35.2			28.9		
						<i>Emission of second 50m (g/hr)</i>			46.9			47.0			37.0			28.0			23.1			19.5			17.6			14.4		

Hourly Emission of Tuen Mun Bypass Tunnel Portal (1st Jan, Short Term, Year 2048)

Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 01			Hr 02			Hr 03			Hr 04			Hr 05			Hr 06			Hr 07			Hr 08						
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	
NO	5009	TMB - North Portal	7453	7532	40%	496	0.1792	416.0	339	0.1833	290.9	234	0.1843	201.9	181	0.1881	159.4	213	0.1908	190.2	392	0.1917	351.7	894	0.1949	815.5	1852	0.1901	1647.9				
						<i>Emission of first 50m (g/hr)</i>						109.8			76.8			53.3			42.1			50.2			92.8			215.2			434.8
						<i>Emission of second 50m (g/hr)</i>						54.9			38.4			26.6			21.0			25.1			46.4			107.6			217.4
NO2	5009	TMB - North Portal	7453	7532	40%	496	0.0333	77.3	339	0.0345	54.7	234	0.0352	38.5	181	0.0369	31.3	213	0.0392	39.1	392	0.0398	73.0	894	0.0413	173.0	1852	0.0398	345.2				
						<i>Emission of first 50m (g/hr)</i>						20.4			14.4			10.2			8.2			10.3			19.3			45.6			91.1
						<i>Emission of second 50m (g/hr)</i>						10.2			7.2			5.1			4.1			5.2			9.6			22.8			45.5
NO	5015	TMB - South Portal	7470	7600	40%	676	0.1705	544.2	460	0.1744	378.9	317	0.1768	264.8	241	0.1803	205.3	280	0.1829	242.0	515	0.1832	445.6	1169	0.1866	1030.5	2399	0.1817	2058.4				
						<i>Emission of first 50m (g/hr)</i>						142.6			99.3			69.4			53.8			63.4			116.8			270.1			539.5
						<i>Emission of second 50m (g/hr)</i>						71.3			49.7			34.7			26.9			31.7			58.4			135.0			269.8
NO2	5015	TMB - South Portal	7470	7600	40%	676	0.0273	87.1	460	0.0286	62.2	317	0.0303	45.4	241	0.0316	36.0	280	0.034	45.0	515	0.0343	83.5	1169	0.0359	198.2	2399	0.0343	388.7				
						<i>Emission of first 50m (g/hr)</i>						22.8			16.3			11.9			9.4			11.8			21.9			52.0			101.9
						<i>Emission of second 50m (g/hr)</i>						11.4			8.2			6.0			4.7			5.9			10.9			26.0			50.9

Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 09			Hr 10			Hr 11			Hr 12			Hr 13			Hr 14			Hr 15			Hr 16			
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)
NO	5009	TMB - North Portal	7453	7532	40%	1896	0.1780	1580.3	1831	0.2013	1725.2	1761	0.2119	1747.1	1668	0.2083	1626.1	2129	0.2060	2052.7	2187	0.2105	2155.1	2441	0.2079	2375.2	2406	0.2101	2366.5	
						<i>Emission of first 50m (g/hr)</i>						417.0			455.2			461.0			541.6			568.6			626.7			624.4
						<i>Emission of second 50m (g/hr)</i>						208.5			227.6			230.5			270.8			284.3			313.4			312.2
NO2	5009	TMB - North Portal	7453	7532	40%	1896	0.0406	360.3	1831	0.0498	427.2	1761	0.0531	437.5	1668	0.0499	389.4	2129	0.0547	545.2	2187	0.0536	548.3	2441	0.0546	624.2	2406	0.0536	603.2	
						<i>Emission of first 50m (g/hr)</i>						95.1			112.7			115.4			143.8			144.7			164.7			159.1
						<i>Emission of second 50m (g/hr)</i>						47.5			56.4			57.7			71.9			72.3			82.4			79.6
NO	5015	TMB - South Portal	7470	7600	40%	2440	0.167	1922.7	2212	0.191	1998.4	2088	0.205	2016.6	2008	0.200	1893.6	1431	0.212	1472.1	1468	0.212	1472.1	1639	0.208	1612.0	1613	0.212	1613.9	
						<i>Emission of first 50m (g/hr)</i>						503.9			523.8			528.5			496.3			368.3			385.8			422.5
						<i>Emission of second 50m (g/hr)</i>						252.0			261.9			264.3			248.2			184.2			192.9			211.3
NO2	5015	TMB - South Portal	7470	7600	40%	2440	0.035	399.8	2212	0.044	456.4	2088	0.047	464.9	2008	0.044	412.4	1431	0.056	376.2	1468	0.055	378.3	1639	0.055	428.3	1613	0.055	415.5	
						<i>Emission of first 50m (g/hr)</i>						104.8			119.6			121.9			108.1			98.6			99.1			112.3
						<i>Emission of second 50m (g/hr)</i>						52.4			59.8			60.9			54.0			49.3			49.6			56.1

Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 17			Hr 18			Hr 19			Hr 20			Hr 21			Hr 22			Hr 23			Hr 24			
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)
NO	5009	TMB - North Portal	7453	7532	40%	2500	0.2046	2394.1	2639	0.1917	2367.9	2396	0.1615	1811.7	1786	0.1623	1357.0	1452	0.1733	1178.3	1353	0.1772	1122.5	1312	0.1735	1065.6	1026	0.1764	847.0	
						<i>Emission of first 50m (g/hr)</i>						631.7			624.8			478.0			358.1			310.9			296.2			281.2
						<i>Emission of second 50m (g/hr)</i>						315.8			312.4			239.0			179.0			155.5			148.1			140.6
NO2	5009	TMB - North Portal	7453	7532	40%	2500	0.0504	590.1	2639	0.0444	548.2	2396	0.0337	378.3	1786	0.0343	286.9	1452	0.0343	233.0	1353	0.0328	207.6	1312	0.0313	192.3	1026	0.0328	157.7	
						<i>Emission of first 50m (g/hr)</i>						155.7			144.6			99.8			75.7			61.5			54.8			41.6
						<i>Emission of second 50m (g/hr)</i>						77.8			72.3			49.9			37.8			30.7			27.4			20.8
NO	5015	TMB - South Portal	7470	7600	40%	1678	0.205	1624.2	1764	0.193	1603.6	1590	0.164	1229.1	1186	0.165	924.1	964	0.176	801.1	898	0.180	764.1	869	0.176	723.9	680	0.178	573.0	
						<i>Emission of first 50m (g/hr)</i>						425.7			420.3			322.2			242.2			210.0			200.3			189.7
						<i>Emission of second 50m (g/hr)</i>						212.9			210.2			161.1			121.1			105.0			100.1			94.9
NO2	5015	TMB - South Portal	7470	7600	40%	1678	0.051	405.9	1764	0.045	377.2	1590	0.035	260.3	1186	0.036	198.6	964	0.036	161.8	898	0.034	145.5	869	0.033	134.8	680	0.034	109.2	
						<i>Emission of first 50m (g/hr)</i>						106.4			98.9			68.2			52.1			42.4			38.1			28.6
						<i>Emission of second 50m (g/hr)</i>						53.2			49.4			34.1			26.0			21.2			19.1			17.7

Hourly Emission of Tuen Mun Chek Lap Kok Link Portal (1st Jan, Short Term, Year 2048)

Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 01			Hr 02			Hr 03			Hr 04			Hr 05			Hr 06			Hr 07			Hr 08						
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	
NO	3097	TMCLKL - Underpass Portal	236	248	100%	121	0.2334	4.3	88	0.2476	3.4	64	0.2402	2.4	51	0.2607	2.0	53	0.2578	2.1	74	0.2706	3.1	201	0.2882	8.9	433	0.3008	20.0				
						<i>Emission of first 50m (g/hr)</i>						2.8	2.1			1.5			1.3			1.3			2.0			5.7			12.7		
						<i>Emission of second 50m (g/hr)</i>						1.4	1.1			0.8			0.7			0.7			1.0			2.8			6.4		
NO2	3097	TMCLKL - Underpass Portal	236	248	100%	121	0.0467	0.9	88	0.0518	0.7	64	0.0479	0.5	51	0.0528	0.4	53	0.054	0.4	74	0.0587	0.7	201	0.0634	2.0	433	0.0631	4.2				
						<i>Emission of first 50m (g/hr)</i>						0.6	0.4			0.3			0.3			0.4			1.2			2.7					
						<i>Emission of second 50m (g/hr)</i>						0.3	0.2			0.1			0.1			0.2			0.6			1.3					
NO	3580	TMCLKL - Tuen Mun Portal	5400	2430	10%	467	0.1506	106.2	334	0.157	79.2	246	0.159	59.1	197	0.1638	48.7	207	0.1701	53.2	275	0.1713	71.1	761	0.1775	204.0	1649	0.1765	439.6				
						<i>Emission of first 50m (g/hr)</i>						15.7	11.7			8.7			7.2			7.9			10.5			30.2					
						<i>Emission of second 50m (g/hr)</i>						7.9	5.9			4.4			3.6			3.9			5.3			15.1					
NO2	3580	TMCLKL - Tuen Mun Portal	5400	2430	10%	467	0.0204	14.4	334	0.0225	11.4	246	0.0232	8.6	197	0.0244	7.3	207	0.0276	8.6	275	0.0281	11.7	761	0.0303	34.8	1649	0.03	74.7				
						<i>Emission of first 50m (g/hr)</i>						2.1	1.7			1.3			1.1			1.3			1.7			5.2					
						<i>Emission of second 50m (g/hr)</i>						1.1	0.8			0.6			0.5			0.6			0.9			2.6					
Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 09			Hr 10			Hr 11			Hr 12			Hr 13			Hr 14			Hr 15			Hr 16						
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	
NO	3097	TMCLKL - Underpass Portal	236	248	100%	458	0.2718	19.2	395	0.3019	18.3	359	0.3250	18.0	351	0.3133	16.9	461	0.4438	31.5	464	0.4430	31.6	505	0.4647	36.1	520	0.4441	35.5				
						<i>Emission of first 50m (g/hr)</i>						12.2	11.7			11.4			10.7			20.0			20.1			22.9			22.6		
						<i>Emission of second 50m (g/hr)</i>						6.1	5.8			5.7			5.4			10.0			10.0			11.5			11.3		
NO2	3097	TMCLKL - Underpass Portal	236	248	100%	458	0.0606	4.3	395	0.0650	4.0	359	0.0743	4.1	351	0.0676	3.7	461	0.1124	8.0	464	0.0999	7.1	505	0.1172	9.1	520	0.0940	7.5				
						<i>Emission of first 50m (g/hr)</i>						2.7	2.5			2.6			2.3			5.1			4.5			5.8					
						<i>Emission of second 50m (g/hr)</i>						1.4	1.3			1.3			1.2			2.5			2.3			2.9			2.4		
NO	3580	TMCLKL - Tuen Mun Portal	5400	2430	10%	1748	0.145	383.2	1475	0.159	353.7	1338	0.181	365.7	1313	0.171	339.3	1893	0.214	612.0	1949	0.214	630.2	2104	0.224	711.2	2193	0.225	744.9				
						<i>Emission of first 50m (g/hr)</i>						56.8	52.4			54.2			50.3			90.7			93.4			105.4					
						<i>Emission of second 50m (g/hr)</i>						28.4	26.2			27.1			25.1			45.3			46.7			52.7			55.2		
NO2	3580	TMCLKL - Tuen Mun Portal	5400	2430	10%	1748	0.026	67.4	1475	0.028	61.7	1338	0.034	69.1	1313	0.030	59.1	1893	0.050	142.8	1949	0.043	126.9	2104	0.051	162.0	2193	0.042	138.8				
						<i>Emission of first 50m (g/hr)</i>						10.0	9.1			10.2			8.8			21.2			18.8			24.0					
						<i>Emission of second 50m (g/hr)</i>						5.0	4.6			5.1			4.4			10.6			9.4			12.0			10.3		
Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 17			Hr 18			Hr 19			Hr 20			Hr 21			Hr 22			Hr 23			Hr 24						
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	
NO	3097	TMCLKL - Underpass Portal	236	248	100%	523	0.4402	35.4	546	0.4320	36.3	458	0.3483	24.5	350	0.3221	17.3	262	0.3179	12.8	244	0.3122	11.7	228	0.3160	11.1	174	0.3191	8.5				
						<i>Emission of first 50m (g/hr)</i>						22.5	23.0			15.6			11.0			8.1			7.4			7.0					
						<i>Emission of second 50m (g/hr)</i>						11.2	11.5			7.8			5.5			4.1			3.7			3.5			2.7		
NO2	3097	TMCLKL - Underpass Portal	236	248	100%	523	0.0972	7.8	546	0.0929	7.8	458	0.0743	5.2	350	0.0787	4.2	262	0.0805	3.2	244	0.0865	3.2	228	0.0761	2.7	174	0.0765	2.0				
						<i>Emission of first 50m (g/hr)</i>						5.0	5.0			3.3			2.7			2.1			2.1			1.7					
						<i>Emission of second 50m (g/hr)</i>						2.5	2.5			1.7			1.3			1.0			1.0			0.8			0.7		
NO	3580	TMCLKL - Tuen Mun Portal	5400	2430	10%	2211	0.222	741.5	2300	0.209	727.2	2029	0.168	515.6	1527	0.157	362.7	1164	0.165	290.6	1061	0.164	262.7	993	0.169	252.8	756	0.173	197.4				
						<i>Emission of first 50m (g/hr)</i>						109.9	107.7			76.4			53.7			43.0			38.9			37.5					
						<i>Emission of second 50m (g/hr)</i>						54.9	53.9			38.2			26.9			21.5			19.5			18.7			14.6		
NO2	3580	TMCLKL - Tuen Mun Portal	5400	2430	10%	2211	0.043	143.3	2300	0.039	134.6	2029	0.030	92.9	1527	0.032	73.4	1164	0.032	56.6	1061	0.036	58.0	993	0.030	44.4	756	0.031	35.3				
						<i>Emission of first 50m (g/hr)</i>						21.2	19.9			13.8			10.9			8.4			8.6			6.6					
						<i>Emission of second 50m (g/hr)</i>						10.6	10.0			6.9			5.4			4.2			4.3			3.3			2.6		

Note:

1. The discharge split between portals and ventilation buildings for TMCLKL is based on "Final Report on Management, Operation and Maintenance of Tunnels, Including the Tunnel Operation and Control System and Recurrent Consequence Requirement, Tuen Mun - Chek Lap Kok Link - Design and Construction" as provided by HyD.

Hourly Emission of Tuen Mun Road Full Enclosure (1st Jan, Short Term, Year 2048)

Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 01			Hr 02			Hr 03			Hr 04			Hr 05			Hr 06			Hr 07			Hr 08		
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
NO	3503	TMR - North Full Enclosure	41	266	100%	845	0.1894	26.5	574	0.1933	18.3	392	0.1946	12.6	299	0.1986	9.8	344	0.2003	11.4	628	0.2009	20.9	1422	0.2086	49.1	2851	0.2682	126.5
	3517	TMR - North Full Enclosure	69	69	100%	1305	0.1966	11.0	885	0.2006	7.6	606	0.2026	5.2	458	0.2057	4.0	530	0.2074	4.7	970	0.2085	8.6	2192	0.2118	19.8	4359	0.2030	37.8
	3520	TMR - North Full Enclosure	41	41	100%	417	0.2369	2.5	298	0.2422	1.9	224	0.2478	1.4	180	0.2500	1.2	189	0.2583	1.3	251	0.2687	1.7	702	0.3133	5.6	1516	0.3648	14.2
	<i>Emission of first 50m (g/hr)</i>						11.7			8.2			5.7			4.5			5.1			9.1			22.0			47.6	
<i>Emission of second 50m (g/hr)</i>						5.9			4.1			2.9			2.2			2.6			4.5			11.0			23.8		
NO2	3503	TMR - North Full Enclosure	41	266	100%	845	0.0331	4.6	574	0.0345	3.3	392	0.0359	2.3	299	0.0371	1.8	344	0.0383	2.2	628	0.0392	4.1	1422	0.0411	9.7	2851	0.0543	25.6
	3517	TMR - North Full Enclosure	69	69	100%	1305	0.0374	2.1	885	0.0386	1.5	606	0.0401	1.0	458	0.0407	0.8	530	0.0423	1.0	970	0.0435	1.8	2192	0.0447	4.2	4359	0.0383	7.1
	3520	TMR - North Full Enclosure	41	41	100%	417	0.0418	0.4	298	0.0428	0.3	224	0.0462	0.3	180	0.0468	0.2	189	0.0502	0.2	251	0.0527	0.3	702	0.0634	1.1	1516	0.0737	2.9
	<i>Emission of first 50m (g/hr)</i>						2.2			1.5			1.1			0.9			1.0			1.8			4.5			9.3	
<i>Emission of second 50m (g/hr)</i>						1.1			0.8			0.6			0.4			0.5			0.9			2.3			4.6		
NO	3539	TMR - South Full Enclosure	143	143	100%	95	0.2448	2.1	65	0.2563	1.5	42	0.2420	0.9	32	0.2391	0.7	38	0.2649	0.9	71	0.2673	1.7	160	0.2848	4.1	316	0.2958	8.3
	3540	TMR - South Full Enclosure	146	146	100%	1305	0.1912	22.6	885	0.1950	15.6	606	0.1968	10.8	458	0.1996	8.3	530	0.2010	9.6	970	0.2019	17.7	2192	0.2048	40.6	4359	0.1917	75.6
	3542	TMR - South Full Enclosure	32	561	100%	1399	0.1904	92.8	949	0.1945	64.3	651	0.1964	44.6	494	0.1995	34.3	568	0.2008	39.7	1039	0.2012	72.8	2350	0.2044	167.4	4673	0.1933	314.9
	<i>Emission of first 50m (g/hr)</i>						23.0			16.0			11.0			8.4			9.9			18.1			41.9			80.5	
<i>Emission of second 50m (g/hr)</i>						11.5			8.0			5.5			4.2			4.9			9.0			21.0			40.2		
NO2	3539	TMR - South Full Enclosure	143	143	100%	95	0.0468	0.4	65	0.0493	0.3	42	0.0451	0.2	32	0.0459	0.1	38	0.0542	0.2	71	0.0582	0.4	160	0.0621	0.9	316	0.0617	1.7
	3540	TMR - South Full Enclosure	146	146	100%	1305	0.0370	4.4	885	0.0381	3.1	606	0.0396	2.2	458	0.0403	1.7	530	0.0418	2.0	970	0.0429	3.8	2192	0.0442	8.8	4359	0.0363	14.3
	3542	TMR - South Full Enclosure	32	561	100%	1399	0.0367	17.9	949	0.0380	12.6	651	0.0393	8.9	494	0.0405	7.0	568	0.0416	8.2	1039	0.0427	15.5	2350	0.0439	36.0	4673	0.0363	59.1
	<i>Emission of first 50m (g/hr)</i>						4.4			3.1			2.2			1.7			2.0			3.8			9.0			15.4	
<i>Emission of second 50m (g/hr)</i>						2.2			1.6			1.1			0.8			1.0			1.9			4.5			7.7		

Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 09			Hr 10			Hr 11			Hr 12			Hr 13			Hr 14			Hr 15			Hr 16		
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
NO	3503	TMR - North Full Enclosure	41	266	100%	2896	0.2590	124.1	2546	0.2998	126.2	2363	0.3063	119.7	2291	0.2772	105.0	726	0.2041	24.5	745	0.2119	26.1	787	0.2039	26.5	818	0.2120	28.7
	3517	TMR - North Full Enclosure	69	69	100%	4441	0.1939	36.8	3931	0.2304	38.7	3642	0.2406	37.4	3533	0.2309	34.8	1657	0.2254	15.9	1697	0.2309	16.7	1836	0.2240	17.6	1858	0.2289	18.2
	3520	TMR - North Full Enclosure	41	41	100%	1609	0.3257	13.4	1398	0.3715	13.3	1278	0.3984	13.1	1253	0.3815	12.3	1009	0.4535	11.7	1025	0.4488	11.8	1090	0.4781	13.4	1144	0.4700	13.8
	<i>Emission of first 50m (g/hr)</i>						46.2			47.6			45.9			42.2			21.0			21.7			23.3			24.3	
<i>Emission of second 50m (g/hr)</i>						23.1			23.8			23.0			21.1			10.5			10.9			11.7			12.1		
NO2	3503	TMR - North Full Enclosure	41	266	100%	2896	0.0580	27.8	2546	0.0727	30.6	2363	0.0735	28.7	2291	0.0624	23.6	726	0.0460	5.5	745	0.0435	5.4	787	0.0454	5.9	818	0.0437	5.9
	3517	TMR - North Full Enclosure	69	69	100%	4441	0.0414	7.8	3931	0.0547	9.2	3642	0.0563	8.8	3533	0.0512	7.7	1657	0.0581	4.1	1697	0.0560	4.1	1836	0.0570	4.5	1858	0.0554	4.4
	3520	TMR - North Full Enclosure	41	41	100%	1609	0.0685	2.8	1398	0.0741	2.7	1278	0.0882	2.9	1253	0.0784	2.5	1009	0.1141	3.0	1025	0.0987	2.6	1090	0.1185	3.3	1144	0.0976	2.9
	<i>Emission of first 50m (g/hr)</i>						10.0			11.0			10.7			9.3			5.3			5.0			5.8			5.4	
<i>Emission of second 50m (g/hr)</i>						5.0			5.5			5.4			4.6			2.6			2.5			2.9			2.7		
NO	3539	TMR - South Full Enclosure	143	143	100%	322	0.2789	8.0	281	0.3290	8.2	261	0.3552	8.3	255	0.3418	7.8	80	0.2743	2.0	82	0.2836	2.1	86	0.2842	2.2	91	0.2911	2.4
	3540	TMR - South Full Enclosure	146	146	100%	4441	0.1808	72.7	3931	0.2160	76.8	3642	0.2278	75.1	3533	0.2197	70.2	1657	0.2146	32.2	1697	0.2200	33.8	1836	0.2121	35.2	1858	0.2178	36.6
	3542	TMR - South Full Enclosure	32	561	100%	4765	0.1845	306.4	4214	0.2176	319.6	3906	0.2285	311.1	3784	0.2213	291.9	1735	0.2136	129.1	1781	0.2191	136.0	1923	0.2110	141.4	1949	0.2172	147.5
	<i>Emission of first 50m (g/hr)</i>						77.6			81.4			79.5			74.2			33.2			34.8			36.5			38.0	
<i>Emission of second 50m (g/hr)</i>						38.8			40.7			39.7			37.1			16.6			17.4			18.2			19.0		
NO2	3539	TMR - South Full Enclosure	143	143	100%	322	0.0638	1.8	281	0.0808	2.0	261	0.0880	2.0	255	0.0802	1.8	80	0.0660	0.5	82	0.0604	0.4	86	0.0687	0.5	91	0.0646	0.5
	3540	TMR - South Full Enclosure	146	146	100%	4441	0.0386	15.5	3931	0.0519	18.5	3642	0.0543	17.9	3533	0.0502	16.0	1657	0.0570	8.6	1697	0.0549	8.4	1836	0.0557	9.3	1858	0.0543	9.1
	3542	TMR - South Full Enclosure	32	561	100%	4765	0.0388	64.4	4214	0.0518	76.1	3906	0.0542	73.7	3784	0.0500	66.0	1735	0.0565	34.1	1781	0.0544	33.7	1923	0.0551	36.9	1949	0.0538	36.5
	<i>Emission of first 50m (g/hr)</i>						16.6			19.4			18.9			16.9			8.7			8.5			9.5			9.3	
<i>Emission of second 50m (g/hr)</i>						8.3			9.7			9.5			8.4			4.4			4.3			4.7			4.6		

Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 17			Hr 18			Hr 19			Hr 20			Hr 21			Hr 22			Hr 23			Hr 24		
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
NO	3503	TMR - North Full Enclosure	41	266	100%	874	0.2035	29.4	1022	0.1876	31.7	1113	0.1552	28.6	861	0.1601	22.8	723	0.1773	21.2	685	0.1836	20.8	675	0.1784	19.9	516	0.1803	15.4
	3517	TMR - North Full Enclosure	69	69	100%	1969	0.2234	18.8	2205	0.2100	19.8	2218	0.1770	16.8	1703	0.1821	13.2	1413	0.1984	12.0	1334	0.2046	11.7	1309	0.1990	11.1	1009	0.2016	8.7
	3520	TMR - North Full Enclosure	41	41	100%	1176	0.4601	13.9	1259	0.4282	13.8	1167	0.3334	10.0	917	0.3116	7.3	716	0.2922	5.4	654	0.2897	4.9	616	0.2876	4.5	465	0.2920	3.5
	<i>Emission of first 50m (g/hr)</i>						24.8			25.7			20.8			16.1			13.7			13.1			12.5			9.7	
<i>Emission of second 50m (g/hr)</i>						12.4			12.8			10.4			8.0			6.9			6.6			6.2			4.8		

Hourly Emission of Route 11 Lam Tei Tunnel Portal (1st Jan, Short Term, Year 2048)

Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 01			Hr 02			Hr 03			Hr 04			Hr 05			Hr 06			Hr 07			Hr 08						
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	
RSP	1010	LTT - North Portal	4223	4850	40%	971	0.0071	20.8	663	0.0075	15.0	455	0.008	10.9	347	0.0083	8.6	400	0.0087	10.4	738	0.0091	20.2	1678	0.0095	48.0	3434	0.0097	100.7				
						<i>Emission of first 50m (g/hr)</i>						4.8	3.5			2.5			2.0			2.4			4.7			11.2			23.4		
						<i>Emission of second 50m (g/hr)</i>						2.4	1.7			1.3			1.0			1.2			2.3			5.6			11.7		
FSP	1010	LTT - North Portal	4223	4850	40%	971	0.0066	19.2	663	0.0069	13.9	455	0.0074	10.1	347	0.0076	8.0	400	0.008	9.6	738	0.0084	18.6	1678	0.0088	44.3	3434	0.009	92.9				
						<i>Emission of first 50m (g/hr)</i>						4.5	3.2			2.3			1.9			2.2			4.3			10.3			21.6		
						<i>Emission of second 50m (g/hr)</i>						2.2	1.6			1.2			0.9			1.1			2.2			5.1			10.8		
Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 09			Hr 10			Hr 11			Hr 12			Hr 13			Hr 14			Hr 15			Hr 16						
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	
RSP	1010	LTT - North Portal	4223	4850	40%	3493	0.0098	103.0	3162	0.0116	110.8	2983	0.0124	111.3	2865	0.0114	98.6	2998	0.0106	95.3	3095	0.0099	92.0	3294	0.0106	105.3	3400	0.0101	103.4				
						<i>Emission of first 50m (g/hr)</i>						23.9	25.7			25.9			22.9			22.1			21.4			24.5			24.0		
						<i>Emission of second 50m (g/hr)</i>						12.0	12.9			12.9			11.4			11.1			10.7			12.2			12.0		
FSP	1010	LTT - North Portal	4223	4850	40%	3493	0.0090	95.0	3162	0.0107	102.1	2983	0.0114	102.6	2865	0.0105	90.8	2998	0.0097	87.8	3095	0.0091	84.9	3294	0.0098	97.1	3400	0.0093	95.4				
						<i>Emission of first 50m (g/hr)</i>						22.1	23.7			23.8			21.1			20.4			19.7			22.6			22.1		
						<i>Emission of second 50m (g/hr)</i>						11.0	11.9			11.9			10.5			10.2			9.9			11.3			11.1		
Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 17			Hr 18			Hr 19			Hr 20			Hr 21			Hr 22			Hr 23			Hr 24						
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	
RSP	1010	LTT - North Portal	4223	4850	40%	3613	0.0100	109.2	4163	0.0089	111.1	4449	0.0071	94.9	3411	0.0068	70.3	2844	0.0065	55.9	2681	0.0056	45.3	2655	0.0051	41.0	2038	0.0055	33.6				
						<i>Emission of first 50m (g/hr)</i>						25.4	25.8			22.0			16.3			13.0			10.5			9.5			7.8		
						<i>Emission of second 50m (g/hr)</i>						12.7	12.9			11.0			8.2			6.5			5.3			4.8			3.9		
FSP	1010	LTT - North Portal	4223	4850	40%	3613	0.0093	100.7	4163	0.0081	101.5	4449	0.0064	86.4	3411	0.0063	64.9	2844	0.0060	51.7	2681	0.0052	41.8	2655	0.0047	37.9	2038	0.0051	31.1				
						<i>Emission of first 50m (g/hr)</i>						23.4	23.6			20.1			15.1			12.0			9.7			8.8			7.2		
						<i>Emission of second 50m (g/hr)</i>						11.7	11.8			10.0			7.5			6.0			4.9			4.4			3.6		

Hourly Emission of Tuen Mun Bypass Tunnel Portal (1st Jan, Short Term, Year 2048)

Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 01			Hr 02			Hr 03			Hr 04			Hr 05			Hr 06			Hr 07			Hr 08						
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	
RSP	5009	TMB - North Portal	7453	7532	40%	496	0.0085	19.8	339	0.0088	14.0	234	0.0092	10.1	181	0.0097	8.2	213	0.0102	10.2	392	0.0104	19.2	894	0.0109	45.7	1852	0.0112	96.8				
						<i>Emission of first 50m (g/hr)</i>						5.2	3.7			2.7			2.2			2.7			5.1			12.0			25.5		
						<i>Emission of second 50m (g/hr)</i>						2.6	1.8			1.3			1.1			1.3			2.5			6.0			12.8		
FSP	5009	TMB - North Portal	7453	7532	40%	496	0.0079	18.3	339	0.0081	12.9	234	0.0085	9.3	181	0.009	7.6	213	0.0094	9.4	392	0.0096	17.7	894	0.0101	42.1	1852	0.0103	89.3				
						<i>Emission of first 50m (g/hr)</i>						4.8	3.4			2.5			2.0			2.5			4.7			11.1			23.6		
						<i>Emission of second 50m (g/hr)</i>						2.4	1.7			1.2			1.0			1.2			2.3			5.6			11.8		
RSP	5015	TMB - South Portal	7470	7600	40%	676	0.0071	22.5	460	0.0074	16.2	317	0.0078	11.7	241	0.0082	9.4	280	0.0089	11.7	515	0.009	22.0	1169	0.0095	52.3	2399	0.0097	110.3				
						<i>Emission of first 50m (g/hr)</i>						5.9	4.2			3.1			2.5			3.1			5.8			13.7			28.9		
						<i>Emission of second 50m (g/hr)</i>						3.0	2.1			1.5			1.2			1.5			2.9			6.9			14.5		
FSP	5015	TMB - South Portal	7470	7600	40%	676	0.0065	20.8	460	0.0069	14.9	317	0.0072	10.8	241	0.0076	8.6	280	0.0082	10.8	515	0.0083	20.3	1169	0.0087	48.3	2399	0.009	101.7				
						<i>Emission of first 50m (g/hr)</i>						5.5	3.9			2.8			2.3			2.8			5.3			12.7			26.7		
						<i>Emission of second 50m (g/hr)</i>						2.7	2.0			1.4			1.1			1.4			2.7			6.3			13.3		
Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 09			Hr 10			Hr 11			Hr 12			Hr 13			Hr 14			Hr 15			Hr 16						
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	
RSP	5009	TMB - North Portal	7453	7532	40%	1896	0.0113	100.4	1831	0.0133	113.9	1761	0.0141	116.1	1668	0.0132	102.9	2129	0.0148	147.7	2187	0.0144	147.6	2441	0.0149	169.8	2406	0.0145	163.2				
						<i>Emission of first 50m (g/hr)</i>						26.5	30.1			30.6			27.1			39.0			38.9			44.8			43.1		
						<i>Emission of second 50m (g/hr)</i>						13.2	15.0			15.3			13.6			19.5			19.5			22.4			21.5		
FSP	5009	TMB - North Portal	7453	7532	40%	1896	0.0104	92.6	1831	0.0122	105.0	1761	0.0130	107.0	1668	0.0121	94.8	2129	0.0137	136.1	2187	0.0133	136.0	2441	0.0137	156.3	2406	0.0134	150.4				
						<i>Emission of first 50m (g/hr)</i>						24.4	27.7			28.2			25.0			35.9			35.9			41.2			39.7		
						<i>Emission of second 50m (g/hr)</i>						12.2	13.8			14.1			12.5			18.0			17.9			20.6			19.8		
RSP	5015	TMB - South Portal	7470	7600	40%	2440	0.010	112.7	2212	0.012	121.3	2088	0.012	122.7	2008	0.011	108.4	1431	0.015	101.1	1468	0.015	101.1	1639	0.015	116.1	1613	0.015	111.6				
						<i>Emission of first 50m (g/hr)</i>						29.5	31.8			32.1			28.4			26.5			26.5			30.4			29.2		
						<i>Emission of second 50m (g/hr)</i>						14.8	15.9			16.1			14.2			13.3			13.2			15.2			14.6		
FSP	5015	TMB - South Portal	7470	7600	40%	2440	0.009	103.9	2212	0.011	111.8	2088	0.012	113.1	2008	0.011	99.9	1431	0.014	93.2	1468	0.013	93.1	1639	0.014	107.0	1613	0.014	102.8				
						<i>Emission of first 50m (g/hr)</i>						27.2	29.3			29.6			26.2			24.4			24.4			28.0			26.9		
						<i>Emission of second 50m (g/hr)</i>						13.6	14.7			14.8			13.1			12.2			12.2			14.0			13.5		
Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 17			Hr 18			Hr 19			Hr 20			Hr 21			Hr 22			Hr 23			Hr 24						
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	
RSP	5009	TMB - North Portal	7453	7532	40%	2500	0.0139	162.1	2639	0.0123	152.1	2396	0.0098	109.7	1786	0.0098	81.6	1452	0.0094	64.1	1353	0.0088	55.6	1312	0.0084	51.3	1026	0.0088	42.2				
						<i>Emission of first 50m (g/hr)</i>						42.8	40.1			28.9			21.5			16.9			14.7			13.5			11.1		
						<i>Emission of second 50m (g/hr)</i>						21.4	20.1			14.5			10.8			8.5			7.3			6.8			5.6		
FSP	5009	TMB - North Portal	7453	7532	40%	2500	0.0128	149.2	2639	0.0113	140.0	2396	0.0090	101.2	1786	0.0090	75.2	1452	0.0087	59.1	1353	0.0081	51.3	1312	0.0077	47.3	1026	0.0081	38.9				
						<i>Emission of first 50m (g/hr)</i>						39.4	36.9			26.7			19.8			15.6			13.5			12.5			10.3		
						<i>Emission of second 50m (g/hr)</i>						19.7	18.5			13.3			9.9			7.8			6.8			6.2			5.1		
RSP	5015	TMB - South Portal	7470	7600	40%	1678	0.014	111.0	1764	0.013	103.9	1590	0.010	74.5	1186	0.010	55.5	964	0.010	43.7	898	0.009	38.0	869	0.009	35.2	680	0.009	28.8				
						<i>Emission of first 50m (g/hr)</i>						29.1	27.2			19.5			14.6			11.5			10.0			9.2			7.5		
						<i>Emission of second 50m (g/hr)</i>						14.5	13.6			9.8			7.3			5.7			5.0			4.6			3.8		
FSP	5015	TMB - South Portal	7470	7600	40%	1678	0.013	102.3	1764	0.012	95.8	1590	0.009	68.7	1186	0.009	51.2	964	0.009	40.3	898	0.008	35.1	869	0.008	32.5	680	0.008	26.5				
						<i>Emission of first 50m (g/hr)</i>						26.8	25.1			18.0			13.4			10.6			9.2			8.5			7.0		
						<i>Emission of second 50m (g/hr)</i>						13.4	12.6			9.0			6.7			5.3			4.6			4.3			3.5		

Hourly Emission of Tuen Mun Chek Lap Kok Link Portal (1st Jan, Short Term, Year 2048)

Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 01			Hr 02			Hr 03			Hr 04			Hr 05			Hr 06			Hr 07			Hr 08									
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)				
RSP	3097	TMCLKL - Underpass Portal	236	248	100%	121	0.0095	0.2	88	0.0101	0.1	64	0.0101	0.1	51	0.0107	0.1	53	0.0111	0.1	74	0.0119	0.1	201	0.0125	0.4	433	0.013	0.9							
						<i>Emission of first 50m (g/hr)</i>						0.1	0.1						0.1			0.1			0.1			0.2			0.6					
						<i>Emission of second 50m (g/hr)</i>						0.1	0.0						0.0			0.0			0.0			0.1			0.3					
FSP	3097	TMCLKL - Underpass Portal	236	248	100%	121	0.0089	0.2	88	0.0094	0.1	64	0.0093	0.1	51	0.0098	0.1	53	0.0102	0.1	74	0.0109	0.1	201	0.0115	0.4	433	0.012	0.8							
						<i>Emission of first 50m (g/hr)</i>						0.1	0.1						0.0			0.1			0.1			0.2			0.5					
						<i>Emission of second 50m (g/hr)</i>						0.1	0.0						0.0			0.0			0.0			0.1			0.3					
RSP	3580	TMCLKL - Tuen Mun Portal	5400	2430	10%	467	0.0057	4.0	334	0.0062	3.1	246	0.0065	2.4	197	0.0068	2.0	207	0.0075	2.3	275	0.0077	3.2	761	0.0083	9.5	1649	0.0087	21.6							
						<i>Emission of first 50m (g/hr)</i>						0.6	0.5						0.4			0.3			0.5			1.4			3.2					
						<i>Emission of second 50m (g/hr)</i>						0.3	0.2						0.2			0.2			0.2			0.7			1.6					
FSP	3580	TMCLKL - Tuen Mun Portal	5400	2430	10%	467	0.0052	3.7	334	0.0057	2.9	246	0.006	2.2	197	0.0063	1.9	207	0.0069	2.2	275	0.0071	3.0	761	0.0076	8.8	1649	0.008	19.9							
						<i>Emission of first 50m (g/hr)</i>						0.5	0.4						0.3			0.3			0.4			1.3			3.0					
						<i>Emission of second 50m (g/hr)</i>						0.3	0.2						0.2			0.1			0.2			0.7			1.5					
Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 09			Hr 10			Hr 11			Hr 12			Hr 13			Hr 14			Hr 15			Hr 16									
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)				
RSP	3097	TMCLKL - Underpass Portal	236	248	100%	458	0.0116	0.8	395	0.0125	0.8	359	0.0134	0.7	351	0.0125	0.7	461	0.0194	1.4	464	0.0171	1.2	505	0.0195	1.5	520	0.0165	1.3							
						<i>Emission of first 50m (g/hr)</i>						0.5	0.5						0.4			0.9			0.8			1.0			0.8					
						<i>Emission of second 50m (g/hr)</i>						0.3	0.2						0.2			0.4			0.4			0.5			0.4					
FSP	3097	TMCLKL - Underpass Portal	236	248	100%	458	0.0107	0.8	395	0.0115	0.7	359	0.0123	0.7	351	0.0115	0.6	461	0.0179	1.3	464	0.0158	1.1	505	0.0180	1.4	520	0.0152	1.2							
						<i>Emission of first 50m (g/hr)</i>						0.5	0.4						0.4			0.8			0.7			0.9			0.8					
						<i>Emission of second 50m (g/hr)</i>						0.2	0.2						0.2			0.4			0.4			0.4			0.4					
RSP	3580	TMCLKL - Tuen Mun Portal	5400	2430	10%	1748	0.007	19.5	1475	0.008	17.9	1338	0.009	18.7	1313	0.008	16.4	1893	0.014	39.1	1949	0.012	35.1	2104	0.014	43.9	2193	0.012	38.6							
						<i>Emission of first 50m (g/hr)</i>						2.9	2.6						2.8			5.8			5.2			6.5			5.7					
						<i>Emission of second 50m (g/hr)</i>						1.4	1.3						1.4			2.9			2.6			3.3			2.9					
FSP	3580	TMCLKL - Tuen Mun Portal	5400	2430	10%	1748	0.007	18.0	1475	0.007	16.5	1338	0.009	17.2	1313	0.008	15.1	1893	0.013	36.1	1949	0.011	32.4	2104	0.013	40.3	2193	0.011	35.4							
						<i>Emission of first 50m (g/hr)</i>						2.7	2.4						2.6			5.3			4.8			6.0			5.2					
						<i>Emission of second 50m (g/hr)</i>						1.3	1.2						1.3			1.1			2.7			2.4			3.0			2.6		
Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 17			Hr 18			Hr 19			Hr 20			Hr 21			Hr 22			Hr 23			Hr 24									
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)				
RSP	3097	TMCLKL - Underpass Portal	236	248	100%	523	0.0168	1.4	546	0.0164	1.4	458	0.0142	1.0	350	0.0150	0.8	262	0.0142	0.6	244	0.0161	0.6	228	0.0140	0.5	174	0.0142	0.4							
						<i>Emission of first 50m (g/hr)</i>						0.9	0.9						0.6			0.4			0.4			0.3			0.2					
						<i>Emission of second 50m (g/hr)</i>						0.4	0.4						0.3			0.2			0.2			0.2			0.1					
FSP	3097	TMCLKL - Underpass Portal	236	248	100%	523	0.0155	1.2	546	0.0151	1.3	458	0.0131	0.9	350	0.0138	0.7	262	0.0131	0.5	244	0.0148	0.6	228	0.0129	0.5	174	0.0130	0.3							
						<i>Emission of first 50m (g/hr)</i>						0.8	0.8						0.6			0.3			0.4			0.3			0.2					
						<i>Emission of second 50m (g/hr)</i>						0.4	0.4						0.3			0.2			0.2			0.1			0.1					
RSP	3580	TMCLKL - Tuen Mun Portal	5400	2430	10%	2211	0.012	39.3	2300	0.011	37.5	2029	0.009	27.4	1527	0.009	21.3	1164	0.009	15.3	1061	0.010	15.7	993	0.008	12.0	756	0.008	9.6							
						<i>Emission of first 50m (g/hr)</i>						5.8	5.6						4.1			3.2			2.3			2.3			1.8			1.4		
						<i>Emission of second 50m (g/hr)</i>						2.9	2.8						2.0			1.6			1.1			1.2			0.9			0.7		
FSP	3580	TMCLKL - Tuen Mun Portal	5400	2430	10%	2211	0.011	36.1	2300	0.010	34.4	2029	0.008	25.2	1527	0.009	19.7	1164	0.008	14.1	1061	0.009	14.5	993	0.007	11.1	756	0.008	8.9							
						<i>Emission of first 50m (g/hr)</i>						5.3	5.1						3.7			2.9			2.1			2.2			1.6			1.3		
						<i>Emission of second 50m (g/hr)</i>						2.7	2.6						1.9			1.5			1.0			1.1			0.8			0.7		

Note:

1. The discharge split between portals and ventilation buildings for TMCLKL is based on "Final Report on Management, Operation and Maintenance of Tunnels, Including the Tunnel Operation and Control System and Recurrent Consequence Requirement, Tuen Mun - Chek Lap Kok Link - Design and Construction" as provided by HyD.

Hourly Emission of Tuen Mun Road Full Enclosure (1st Jan, Short Term, Year 2048)

Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 01			Hr 02			Hr 03			Hr 04			Hr 05			Hr 06			Hr 07			Hr 08		
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
RSP	3503	TMR - North Full Enclosure	41	266	100%	845	0.0070	1.0	574	0.0074	0.7	392	0.0078	0.5	299	0.0082	0.4	344	0.0085	0.5	628	0.0088	0.9	1422	0.0093	2.2	2851	0.0110	5.2
	3517	TMR - North Full Enclosure	69	69	100%	1305	0.0073	0.4	885	0.0077	0.3	606	0.0081	0.2	458	0.0084	0.2	530	0.0088	0.2	970	0.0091	0.4	2192	0.0095	0.9	4359	0.0096	1.8
	3520	TMR - North Full Enclosure	41	41	100%	417	0.0088	0.1	298	0.0090	0.1	224	0.0097	0.1	180	0.0099	0.0	189	0.0105	0.1	251	0.0109	0.1	702	0.0123	0.2	1516	0.0139	0.5
	<i>Emission of first 50m (g/hr)</i>						0.4			0.3			0.2			0.2			0.2			0.4			1.0			2.1	
<i>Emission of second 50m (g/hr)</i>						0.2			0.2			0.1			0.1			0.1			0.2			0.5			1.0		
FSP	3503	TMR - North Full Enclosure	41	266	100%	845	0.0065	0.9	574	0.0068	0.6	392	0.0071	0.5	299	0.0075	0.4	344	0.0078	0.4	628	0.0082	0.8	1422	0.0085	2.0	2851	0.0102	4.8
	3517	TMR - North Full Enclosure	69	69	100%	1305	0.0067	0.4	885	0.0070	0.3	606	0.0074	0.2	458	0.0076	0.1	530	0.0081	0.2	970	0.0083	0.3	2192	0.0087	0.8	4359	0.0088	1.6
	3520	TMR - North Full Enclosure	41	41	100%	417	0.0081	0.1	298	0.0083	0.1	224	0.0089	0.1	180	0.0092	0.0	189	0.0097	0.0	251	0.0100	0.1	702	0.0113	0.2	1516	0.0128	0.5
	<i>Emission of first 50m (g/hr)</i>						0.4			0.3			0.2			0.2			0.2			0.4			0.9			1.9	
<i>Emission of second 50m (g/hr)</i>						0.2			0.1			0.1			0.1			0.1			0.2			0.4			1.0		
RSP	3539	TMR - South Full Enclosure	143	143	100%	95	0.0086	0.1	65	0.0089	0.1	42	0.0082	0.0	32	0.0090	0.0	38	0.0098	0.0	71	0.0109	0.1	160	0.0113	0.2	316	0.0117	0.3
	3540	TMR - South Full Enclosure	146	146	100%	1305	0.0072	0.9	885	0.0076	0.6	606	0.0080	0.4	458	0.0083	0.3	530	0.0087	0.4	970	0.0090	0.8	2192	0.0094	1.9	4359	0.0093	3.7
	3542	TMR - South Full Enclosure	32	561	100%	1399	0.0072	3.5	949	0.0076	2.5	651	0.0080	1.8	494	0.0083	1.4	568	0.0087	1.7	1039	0.0091	3.3	2350	0.0094	7.7	4673	0.0094	15.3
	<i>Emission of first 50m (g/hr)</i>						0.9			0.6			0.4			0.4			0.8			1.9			3.8				
<i>Emission of second 50m (g/hr)</i>						0.4			0.3			0.2			0.2			0.2			0.4			1.0			1.9		
FSP	3539	TMR - South Full Enclosure	143	143	100%	95	0.0079	0.1	65	0.0083	0.0	42	0.0075	0.0	32	0.0082	0.0	38	0.0090	0.0	71	0.0101	0.1	160	0.0104	0.1	316	0.0108	0.3
	3540	TMR - South Full Enclosure	146	146	100%	1305	0.0067	0.8	885	0.0070	0.6	606	0.0074	0.4	458	0.0076	0.3	530	0.0081	0.4	970	0.0083	0.7	2192	0.0087	1.7	4359	0.0086	3.4
	3542	TMR - South Full Enclosure	32	561	100%	1399	0.0067	3.3	949	0.0070	2.3	651	0.0074	1.7	494	0.0077	1.3	568	0.0080	1.6	1039	0.0084	3.0	2350	0.0087	7.1	4673	0.0086	14.0
	<i>Emission of first 50m (g/hr)</i>						0.8			0.6			0.4			0.3			0.4			0.7			1.8			3.5	
<i>Emission of second 50m (g/hr)</i>						0.4			0.3			0.2			0.2			0.2			0.4			0.9			1.7		
Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 09			Hr 10			Hr 11			Hr 12			Hr 13			Hr 14			Hr 15			Hr 16		
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
RSP	3503	TMR - North Full Enclosure	41	266	100%	2896	0.0113	5.4	2546	0.0130	5.5	2363	0.0135	5.3	2291	0.0119	4.5	726	0.0106	1.3	745	0.0098	1.2	787	0.0105	1.4	818	0.0100	1.4
	3517	TMR - North Full Enclosure	69	69	100%	4441	0.0098	1.9	3931	0.0116	1.9	3642	0.0121	1.9	3533	0.0110	1.7	1657	0.0131	0.9	1697	0.0125	0.9	1836	0.0131	1.0	1858	0.0126	1.0
	3520	TMR - North Full Enclosure	41	41	100%	1609	0.0126	0.5	1398	0.0134	0.5	1278	0.0147	0.5	1253	0.0135	0.4	1009	0.0188	0.5	1025	0.0162	0.4	1090	0.0186	0.5	1144	0.0160	0.5
	<i>Emission of first 50m (g/hr)</i>						2.1			2.2			2.1			1.9			1.1			1.0			1.2			1.1	
<i>Emission of second 50m (g/hr)</i>						1.1			1.1			1.1			0.9			0.5			0.5			0.6			0.6		
FSP	3503	TMR - North Full Enclosure	41	266	100%	2896	0.0104	5.0	2546	0.0120	5.0	2363	0.0124	4.8	2291	0.0110	4.2	726	0.0097	1.2	745	0.0090	1.1	787	0.0097	1.3	818	0.0092	1.2
	3517	TMR - North Full Enclosure	69	69	100%	4441	0.0090	1.7	3931	0.0106	1.8	3642	0.0111	1.7	3533	0.0101	1.5	1657	0.0120	0.9	1697	0.0114	0.8	1836	0.0120	0.9	1858	0.0115	0.9
	3520	TMR - North Full Enclosure	41	41	100%	1609	0.0116	0.5	1398	0.0123	0.4	1278	0.0135	0.4	1253	0.0125	0.4	1009	0.0172	0.4	1025	0.0149	0.4	1090	0.0172	0.5	1144	0.0148	0.4
	<i>Emission of first 50m (g/hr)</i>						2.0			2.0			1.9			1.7			1.0			0.9			1.1			1.0	
<i>Emission of second 50m (g/hr)</i>						1.0			1.0			1.0			0.9			0.5			0.5			0.5			0.5		
RSP	3539	TMR - South Full Enclosure	143	143	100%	322	0.0118	0.3	281	0.0137	0.3	261	0.0146	0.3	255	0.0133	0.3	80	0.0124	0.1	82	0.0112	0.1	86	0.0128	0.1	91	0.0120	0.1
	3540	TMR - South Full Enclosure	146	146	100%	4441	0.0095	3.8	3931	0.0113	4.0	3642	0.0119	3.9	3533	0.0109	3.5	1657	0.0130	2.0	1697	0.0124	1.9	1836	0.0130	2.2	1858	0.0125	2.1
	3542	TMR - South Full Enclosure	32	561	100%	4765	0.0095	15.8	4214	0.0113	16.6	3906	0.0119	16.2	3784	0.0109	14.3	1735	0.0129	7.8	1781	0.0123	7.6	1923	0.0129	8.6	1949	0.0124	8.4
	<i>Emission of first 50m (g/hr)</i>						3.9			4.1			4.0			3.6			1.9			1.9			2.1			2.1	
<i>Emission of second 50m (g/hr)</i>						2.0			2.1			2.0			1.8			1.0			1.0			1.1			1.0		
FSP	3539	TMR - South Full Enclosure	143	143	100%	322	0.0109	0.3	281	0.0126	0.3	261	0.0134	0.3	255	0.0123	0.3	80	0.0115	0.1	82	0.0104	0.1	86	0.0117	0.1	91	0.0110	0.1
	3540	TMR - South Full Enclosure	146	146	100%	4441	0.0087	3.5	3931	0.0104	3.7	3642	0.0110	3.6	3533	0.0100	3.2	1657	0.0120	1.8	1697	0.0114	1.8	1836	0.0120	2.0	1858	0.0115	1.9
	3542	TMR - South Full Enclosure	32	561	100%	4765	0.0088	14.5	4214	0.0104	15.2	3906	0.0110	14.9	3784	0.0100	13.2	1735	0.0119	7.2	1781	0.0113	7.0	1923	0.0119	8.0	1949	0.0114	7.7
	<i>Emission of first 50m (g/hr)</i>						3.6			3.8			3.7			3.3			1.8			1.7			2.0			1.9	
<i>Emission of second 50m (g/hr)</i>						1.8			1.9			1.8			1.6			0.9			0.9			1.0			1.0		
Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emitted at Portal	Hr 17			Hr 18			Hr 19			Hr 20			Hr 21			Hr 22			Hr 23			Hr 24		
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
RSP	3503	TMR - North Full Enclosure	41	266	100%	874	0.0101	1.5	1022	0.0090	1.5	1113	0.0073	1.4	861	0.0074	1.0	723	0.0071	0.8	685	0.0062	0.7	675	0.0057	0.6	516	0.0060	0.5
	3517	TMR - North Full Enclosure	69	69	100%	1969	0.0124	1.0	2205	0.0111	1.0	2218	0.0090	0.8	1703	0.0090	0.7	1413	0.0087	0.5	1334	0.0080	0.5	1309	0.0075	0.4	1009	0.0079	0.3
	3520	TMR - North Full Enclosure	41	41	100%	1176	0.0163	0.5	1259	0.0156	0.5	1167	0.0131	0.4	917	0.0138	0.3	716	0.0124	0.2	654	0.0137	0.2	616	0.0116	0.2	465	0.0119	0.1
	<i>Emission of first 50m (g/hr)</i>						1.2			1.2			1.0			0.8			0.6			0.5			0.5			0.4	
<i>Emission of second 50m (g/hr)</i>						0.6			0.6			0.5			0.4			0.3			0.3			0.2			0.2		
FSP	3503	TMR - North Full Enclosure	41	266	100%	874	0.0093	1.3	1022	0.0083	1.4	1113	0.0068	1.3	861	0.0068	1.0	723	0.0065	0.8	685	0.0058	0.7	675	0.0052				

Annex - 3

Emission Calculation for Ventilation Buildings

Emission Inventory for Ventilation Building

Location	Description	Source ID	Type	X	Y	Base Elevation ^[1]	Exhaust Louver Area ^[1]	Internal Diameter ^[2]	Louver Bottom Level ^[1]	Release Height ^[1]	Exit Temperature ^[1]	Exit Velocity ^[1]
				(m)	(m)	(mPD)	(sq. m)	(m)	(mAG)	(mAG)	(K)	(m/s)
Lam Tei	Tuen Mun Bypass Tunnel North Ventilation Building (TMB-NVB)	TMBN_VB	POINTHOR	817181.0	830414.1	35	120	12.4	21	27.2	Ambient	3
	Route 11 Lam Tei Tunnel North Ventilation Building (LTT-NVB)	LTN_VB	POINT	817322.7	830391.9	44	360	21.4	24	34.7	Ambient	6
Pillar Point	Tuen Mun Bypass Tunnel South Ventilation Building (TMB-SVB)	TMBS_VB	POINTHOR	813170.9	826004.9	35	120	12.4	15.5	21.7	Ambient	3
Sam Shing	Tuen Mun Bypass Tunnel Middle Ventilation Building (TMB-MVB)	MVB	POINTHOR	816330.5	827165.5	23	117	12.2	9.5	15.6	Ambient	4

Note:

- The modelling parameters including base elevation (= preliminary site formation level + preliminary tunnel height (when applicable)), exhaust louver area, louver bottom level, release height, exit temperature and exit velocity are based on the preliminary information provided by project engineer.
- Internal diameter is derived from the exhaust louver area provided by project engineer.

Hourly Emission of Tuen Mun Bypass North, South and Middle Ventilation Buildings (1st Jan, Long Term, Year 2048)

Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emittted at Ventilation Building	Hr 01			Hr 02			Hr 03			Hr 04			Hr 05			Hr 06			Hr 07			Hr 08			
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)
NO	5009	TMB Tunnel (NB)	7453	7532	60%	496	0.156	362.4	339	0.160	254.3	234	0.161	176.9	181	0.164	139.2	213	0.168	167.4	392	0.171	312.9	894	0.175	732.0	1852	0.170	1476.1	
	5015	TMB Tunnel (SB)	7470	7600	60%	676	0.147	468.0	460	0.151	327.1	317	0.153	229.4	241	0.156	177.0	280	0.159	210.2	515	0.161	392.1	1169	0.166	915.0	2399	0.161	1822.4	
	<i>Emission at North VB (33% of total emission g/hr)</i>						163.7			114.6			80.1			62.3			74.4			139.0			324.7			650.3		
	<i>Emission at South VB (33% of total emission g/hr)</i>						163.7			114.6			80.1			62.3			74.4			139.0			324.7			650.3		
<i>Emission at Middle VB (33% of total emission g/hr)</i>						163.7			114.6			80.1			62.3			74.4			139.0			324.7			650.3			
NO2	5009	TMB Tunnel (NB)	7453	7532	60%	496	0.031	71.3	339	0.032	50.5	234	0.033	35.6	181	0.034	28.8	213	0.036	36.1	392	0.037	67.9	894	0.039	161.4	1852	0.037	322.3	
	5015	TMB Tunnel (SB)	7470	7600	60%	676	0.025	80.1	460	0.026	57.2	317	0.028	41.8	241	0.029	33.0	280	0.031	41.4	515	0.032	77.4	1169	0.033	184.4	2399	0.032	362.1	
	<i>Emission at North VB (33% of total emission g/hr)</i>						29.8			21.2			15.3			12.2			15.3			28.7			68.2			135.0		
	<i>Emission at South VB (33% of total emission g/hr)</i>						29.8			21.2			15.3			12.2			15.3			28.7			68.2			135.0		
<i>Emission at Middle VB (33% of total emission g/hr)</i>						29.8			21.2			15.3			12.2			15.3			28.7			68.2			135.0			
Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emittted at Ventilation Building	Hr 09			Hr 10			Hr 11			Hr 12			Hr 13			Hr 14			Hr 15			Hr 16			
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)
NO	5009	TMB Tunnel (NB)	7453	7532	60%	1896	0.160	1420.9	1831	0.183	1570.3	1761	0.191	1576.0	1668	0.185	1441.4	2129	0.187	1859.6	2187	0.188	1920.6	2441	0.186	2121.8	2406	0.188	2111.9	
	5015	TMB Tunnel (SB)	7470	7600	60%	2440	0.148	1707.2	2212	0.172	1797.8	2088	0.182	1793.3	2008	0.174	1650.0	1431	0.189	1274.5	1468	0.190	1313.9	1639	0.186	1441.3	1613	0.189	1442.4	
	<i>Emission at North VB (33% of total emission g/hr)</i>						616.8			664.2			664.4			609.6			618.5			638.3			703.2			701.5		
	<i>Emission at South VB (33% of total emission g/hr)</i>						616.8			664.2			664.4			609.6			618.5			638.3			703.2			701.5		
<i>Emission at Middle VB (33% of total emission g/hr)</i>						616.8			664.2			664.4			609.6			618.5			638.3			703.2			701.5			
NO2	5009	TMB Tunnel (NB)	7453	7532	60%	1896	0.038	336.7	1831	0.047	400.7	1761	0.050	409.2	1668	0.046	361.3	2129	0.051	508.9	2187	0.050	507.8	2441	0.050	575.2	2406	0.050	558.5	
	5015	TMB Tunnel (SB)	7470	7600	60%	2440	0.032	372.8	2212	0.041	427.2	2088	0.044	434.0	2008	0.040	381.6	1431	0.052	351.3	1468	0.051	350.4	1639	0.051	395.4	1613	0.051	384.9	
	<i>Emission at North VB (33% of total emission g/hr)</i>						139.9			163.3			166.3			146.5			169.8			169.4			191.5			186.2		
	<i>Emission at South VB (33% of total emission g/hr)</i>						139.9			163.3			166.3			146.5			169.8			169.4			191.5			186.2		
<i>Emission at Middle VB (33% of total emission g/hr)</i>						139.9			163.3			166.3			146.5			169.8			169.4			191.5			186.2			
Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emittted at Ventilation Building	Hr 17			Hr 18			Hr 19			Hr 20			Hr 21			Hr 22			Hr 23			Hr 24			
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)
NO	5009	TMB Tunnel (NB)	7453	7532	60%	2500	0.184	2153.0	2639	0.171	2114.0	2396	0.143	1606.8	1786	0.143	1195.9	1452	0.151	1026.0	1353	0.152	965.5	1312	0.152	932.6	1026	0.154	741.1	
	5015	TMB Tunnel (SB)	7470	7600	60%	1678	0.185	1462.5	1764	0.172	1433.3	1590	0.145	1091.7	1186	0.146	815.8	964	0.154	698.8	898	0.155	658.9	869	0.155	635.0	680	0.156	502.3	
	<i>Emission at North VB (33% of total emission g/hr)</i>						713.6			700.1			532.6			397.0			340.4			320.6			309.4			245.4		
	<i>Emission at South VB (33% of total emission g/hr)</i>						713.6			700.1			532.6			397.0			340.4			320.6			309.4			245.4		
<i>Emission at Middle VB (33% of total emission g/hr)</i>						713.6			700.1			532.6			397.0			340.4			320.6			309.4			245.4			
NO2	5009	TMB Tunnel (NB)	7453	7532	60%	2500	0.047	547.8	2639	0.041	505.8	2396	0.031	349.6	1786	0.032	264.8	1452	0.032	214.4	1353	0.030	190.1	1312	0.029	178.2	1026	0.030	145.9	
	5015	TMB Tunnel (SB)	7470	7600	60%	1678	0.048	376.8	1764	0.042	348.3	1590	0.032	240.7	1186	0.033	183.4	964	0.033	149.0	898	0.031	133.4	869	0.030	124.9	680	0.032	101.1	
	<i>Emission at North VB (33% of total emission g/hr)</i>						182.5			168.6			116.5			88.4			71.7			63.8			59.8			48.7		
	<i>Emission at South VB (33% of total emission g/hr)</i>						182.5			168.6			116.5			88.4			71.7			63.8			59.8			48.7		
<i>Emission at Middle VB (33% of total emission g/hr)</i>						182.5			168.6			116.5			88.4			71.7			63.8			59.8			48.7			

Hourly Emission of Route 11 Lam Tei Tunnel North Ventilation Building (1st Jan. Long Term, Year 2048)

Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emittted at Ventilation Building	Hr 01			Hr 02			Hr 03			Hr 04			Hr 05			Hr 06			Hr 07			Hr 08		
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
NO	1010	LT Tunnel (NB)	4223	4850	60%	971	0.149	435.0	663	0.153	305.9	455	0.155	213.1	347	0.157	163.6	400	0.159	192.0	738	0.163	362.1	1678	0.168	847.7	3434	0.167	1725.7
	1009	LT Tunnel (SB)	4226	4869	60%	1217	0.141	518.7	827	0.145	363.7	566	0.148	253.2	429	0.149	193.7	495	0.152	227.7	908	0.155	425.6	2056	0.160	995.8	4205	0.164	2081.6
	<i>Emission at North VB (50% of total emission g/hr)</i>						248.7			174.6			121.6			93.2			109.4			205.4			480.7			992.7	
NO2	1010	LT Tunnel (NB)	4223	4850	60%	971	0.026	76.4	663	0.028	55.2	455	0.029	39.8	347	0.030	31.1	400	0.031	37.3	738	0.033	72.5	1678	0.034	173.1	3434	0.033	339.2
	1009	LT Tunnel (SB)	4226	4869	60%	1217	0.022	81.0	827	0.023	58.5	566	0.025	42.7	429	0.026	33.4	495	0.027	40.6	908	0.029	78.2	2056	0.030	187.6	4205	0.030	378.1
	<i>Emission at North VB (50% of total emission g/hr)</i>						41.0			29.7			21.5			16.8			20.3			39.3			94.1			187.0	
Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emittted at Ventilation Building	Hr 09			Hr 10			Hr 11			Hr 12			Hr 13			Hr 14			Hr 15			Hr 16		
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
NO	1010	LT Tunnel (NB)	4223	4850	60%	3493	0.154	1624.4	3162	0.181	1720.0	2983	0.189	1701.0	2865	0.179	1546.2	2998	0.161	1452.1	3095	0.164	1534.1	3294	0.160	1590.2	3400	0.167	1709.0
	1009	LT Tunnel (SB)	4226	4869	60%	4256	0.151	1944.4	3716	0.174	1952.6	3468	0.184	1926.0	3365	0.173	1759.2	2793	0.181	1533.5	2875	0.183	1593.1	3145	0.183	1743.3	3161	0.187	1787.9
	<i>Emission at North VB (50% of total emission g/hr)</i>						930.6			957.7			945.8			861.9			778.6			815.5			869.3			911.9	
NO2	1010	LT Tunnel (NB)	4223	4850	60%	3493	0.033	349.9	3162	0.042	402.5	2983	0.045	405.4	2865	0.041	355.1	2998	0.036	328.2	3095	0.034	319.5	3294	0.036	358.0	3400	0.035	357.9
	1009	LT Tunnel (SB)	4226	4869	60%	4256	0.030	384.6	3716	0.038	424.4	3468	0.041	428.0	3365	0.037	373.1	2793	0.046	389.3	2875	0.044	385.5	3145	0.046	436.6	3161	0.045	429.2
	<i>Emission at North VB (50% of total emission g/hr)</i>						191.5			215.6			217.3			189.9			187.1			183.8			207.2			205.2	
Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emittted at Ventilation Building	Hr 17			Hr 18			Hr 19			Hr 20			Hr 21			Hr 22			Hr 23			Hr 24		
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
NO	1010	LT Tunnel (NB)	4223	4850	60%	3613	0.162	1763.8	4163	0.150	1877.4	4449	0.122	1637.0	3411	0.119	1221.6	2844	0.130	1109.9	2681	0.132	1067.2	2655	0.132	1058.8	2038	0.134	823.9
	1009	LT Tunnel (SB)	4226	4869	60%	3314	0.183	1839.6	3631	0.170	1867.7	3550	0.137	1473.7	2682	0.132	1073.5	2208	0.142	951.3	2072	0.145	906.6	2027	0.144	883.8	1573	0.146	696.6
	<i>Emission at North VB (50% of total emission g/hr)</i>						939.7			976.7			811.3			598.6			537.6			514.8			506.7			396.6	
NO2	1010	LT Tunnel (NB)	4223	4850	60%	3613	0.034	373.1	4163	0.030	371.0	4449	0.022	292.6	3411	0.021	219.6	2844	0.021	181.7	2681	0.019	152.0	2655	0.017	138.9	2038	0.019	113.7
	1009	LT Tunnel (SB)	4226	4869	60%	3314	0.043	431.0	3631	0.037	411.1	3550	0.028	297.9	2682	0.027	222.8	2208	0.027	182.9	2072	0.026	159.9	2027	0.024	147.9	1573	0.026	121.6
	<i>Emission at North VB (50% of total emission g/hr)</i>						209.7			203.9			154.0			115.4			95.1			81.3			74.8			61.3	

Hourly Emission of Tuen Mun Bypass North, South and Middle Ventilation Buildings (1st Jan, Short Term, Year 2048)

Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emittted at Ventilation Building	Hr 01			Hr 02			Hr 03			Hr 04			Hr 05			Hr 06			Hr 07			Hr 08		
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
NO	5009	TMB Tunnel (NB)	7453	7532	60%	496	0.179	416.0	339	0.183	290.9	234	0.184	201.9	181	0.188	159.4	213	0.191	190.2	392	0.192	351.7	894	0.195	815.5	1852	0.190	1647.9
	5015	TMB Tunnel (SB)	7470	7600	60%	676	0.171	544.2	460	0.174	378.9	317	0.177	264.8	241	0.180	205.3	280	0.183	242.0	515	0.183	445.6	1169	0.187	1030.5	2399	0.182	2058.4
	<i>Emission at North VB (33% of total emission g/hr)</i>					189.3			132.1			92.0			71.9			85.2			157.2			363.9			730.7		
	<i>Emission at South VB (33% of total emission g/hr)</i>					189.3			132.1			92.0			71.9			85.2			157.2			363.9			730.7		
<i>Emission at Middle VB (33% of total emission g/hr)</i>					189.3			132.1			92.0			71.9			85.2			157.2			363.9			730.7			
NO2	5009	TMB Tunnel (NB)	7453	7532	60%	496	0.033	77.3	339	0.035	54.7	234	0.035	38.5	181	0.037	31.3	213	0.039	39.1	392	0.040	73.0	894	0.041	173.0	1852	0.040	345.2
	5015	TMB Tunnel (SB)	7470	7600	60%	676	0.027	87.1	460	0.029	62.2	317	0.030	45.4	241	0.032	36.0	280	0.034	45.0	515	0.034	83.5	1169	0.036	198.2	2399	0.034	388.7
	<i>Emission at North VB (33% of total emission g/hr)</i>					32.4			23.1			16.5			13.3			16.6			30.8			73.2			144.7		
	<i>Emission at South VB (33% of total emission g/hr)</i>					32.4			23.1			16.5			13.3			16.6			30.8			73.2			144.7		
<i>Emission at Middle VB (33% of total emission g/hr)</i>					32.4			23.1			16.5			13.3			16.6			30.8			73.2			144.7			
Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emittted at Ventilation Building	Hr 09			Hr 10			Hr 11			Hr 12			Hr 13			Hr 14			Hr 15			Hr 16		
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
NO	5009	TMB Tunnel (NB)	7453	7532	60%	1896	0.178	1580.3	1831	0.201	1725.2	1761	0.212	1747.1	1668	0.208	1626.1	2129	0.206	2052.7	2187	0.211	2155.1	2441	0.208	2375.2	2406	0.210	2366.5
	5015	TMB Tunnel (SB)	7470	7600	60%	2440	0.167	1922.7	2212	0.191	1998.4	2088	0.205	2016.6	2008	0.200	1893.6	1431	0.208	1405.2	1468	0.212	1472.1	1639	0.208	1612.0	1613	0.212	1613.9
	<i>Emission at North VB (33% of total emission g/hr)</i>					690.7			734.2			742.1			694.0			682.4			715.9			786.9			785.6		
	<i>Emission at South VB (33% of total emission g/hr)</i>					690.7			734.2			742.1			694.0			682.4			715.9			786.9			785.6		
<i>Emission at Middle VB (33% of total emission g/hr)</i>					690.7			734.2			742.1			694.0			682.4			715.9			786.9			785.6			
NO2	5009	TMB Tunnel (NB)	7453	7532	60%	1896	0.041	360.3	1831	0.050	427.2	1761	0.053	437.5	1668	0.050	389.4	2129	0.055	545.2	2187	0.054	548.3	2441	0.055	624.2	2406	0.054	603.2
	5015	TMB Tunnel (SB)	7470	7600	60%	2440	0.035	399.8	2212	0.044	456.4	2088	0.047	464.9	2008	0.044	412.4	1431	0.056	376.2	1468	0.055	378.3	1639	0.055	428.3	1613	0.055	415.5
	<i>Emission at North VB (33% of total emission g/hr)</i>					149.9			174.3			178.0			158.1			181.8			182.9			207.7			201.0		
	<i>Emission at South VB (33% of total emission g/hr)</i>					149.9			174.3			178.0			158.1			181.8			182.9			207.7			201.0		
<i>Emission at Middle VB (33% of total emission g/hr)</i>					149.9			174.3			178.0			158.1			181.8			182.9			207.7			201.0			
Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emittted at Ventilation Building	Hr 17			Hr 18			Hr 19			Hr 20			Hr 21			Hr 22			Hr 23			Hr 24		
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
NO	5009	TMB Tunnel (NB)	7453	7532	60%	2500	0.205	2394.1	2639	0.192	2367.9	2396	0.162	1811.7	1786	0.162	1357.0	1452	0.173	1178.3	1353	0.177	1122.5	1312	0.174	1065.6	1026	0.176	847.0
	5015	TMB Tunnel (SB)	7470	7600	60%	1678	0.205	1624.2	1764	0.193	1603.6	1590	0.164	1229.1	1186	0.165	924.1	964	0.176	801.1	898	0.180	764.1	869	0.176	723.9	680	0.178	573.0
	<i>Emission at North VB (33% of total emission g/hr)</i>					793.0			783.8			600.1			450.2			390.7			372.3			353.2			280.3		
	<i>Emission at South VB (33% of total emission g/hr)</i>					793.0			783.8			600.1			450.2			390.7			372.3			353.2			280.3		
<i>Emission at Middle VB (33% of total emission g/hr)</i>					793.0			783.8			600.1			450.2			390.7			372.3			353.2			280.3			
NO2	5009	TMB Tunnel (NB)	7453	7532	60%	2500	0.050	590.1	2639	0.044	548.2	2396	0.034	378.3	1786	0.034	286.9	1452	0.034	233.0	1353	0.033	207.6	1312	0.031	192.3	1026	0.033	157.7
	5015	TMB Tunnel (SB)	7470	7600	60%	1678	0.051	405.9	1764	0.045	377.2	1590	0.035	260.3	1186	0.036	198.6	964	0.036	161.8	898	0.034	145.5	869	0.033	134.8	680	0.034	109.2
	<i>Emission at North VB (33% of total emission g/hr)</i>					196.6			182.6			126.0			95.8			77.9			69.7			64.6			52.7		
	<i>Emission at South VB (33% of total emission g/hr)</i>					196.6			182.6			126.0			95.8			77.9			69.7			64.6			52.7		
<i>Emission at Middle VB (33% of total emission g/hr)</i>					196.6			182.6			126.0			95.8			77.9			69.7			64.6			52.7			

Hourly Emission of Route 11 Lam Tei Tunnel North Ventilation Building (1st Jan. Short Term, Year 2048)

Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emittted at Ventilation Building	Hr 01			Hr 02			Hr 03			Hr 04			Hr 05			Hr 06			Hr 07			Hr 08		
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
NO	1010	LT Tunnel (NB)	4223	4850	60%	971	0.173	505.3	663	0.177	353.6	455	0.179	245.7	347	0.181	189.6	400	0.183	221.1	738	0.185	411.5	1678	0.189	954.1	3434	0.188	1947.0
	1009	LT Tunnel (SB)	4226	4869	60%	1217	0.165	607.9	827	0.170	424.2	566	0.172	294.4	429	0.175	226.6	495	0.177	264.6	908	0.177	487.4	2056	0.182	1129.2	4205	0.186	2364.5
	<i>Emission at North VB (50% of total emission g/hr)</i>						290.3			202.8			140.9			108.5			126.7			234.4			543.2			1124.2	
NO2	1010	LT Tunnel (NB)	4223	4850	60%	971	0.028	83.1	663	0.030	60.0	455	0.032	43.2	347	0.032	33.9	400	0.034	40.6	738	0.035	78.1	1678	0.037	186.0	3434	0.035	364.2
	1009	LT Tunnel (SB)	4226	4869	60%	1217	0.024	88.4	827	0.026	63.8	566	0.027	46.5	429	0.028	36.5	495	0.030	44.3	908	0.031	84.5	2056	0.033	202.1	4205	0.032	406.7
	<i>Emission at North VB (50% of total emission g/hr)</i>						44.7			32.3			23.4			18.4			22.1			42.4			101.2			201.0	
Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emittted at Ventilation Building	Hr 09			Hr 10			Hr 11			Hr 12			Hr 13			Hr 14			Hr 15			Hr 16		
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
NO	1010	LT Tunnel (NB)	4223	4850	60%	3493	0.174	1827.1	3162	0.200	1909.6	2983	0.213	1910.3	2865	0.205	1772.5	2998	0.184	1660.8	3095	0.193	1798.7	3294	0.187	1854.9	3400	0.195	1997.7
	1009	LT Tunnel (SB)	4226	4869	60%	4256	0.171	2202.4	3716	0.194	2185.0	3468	0.208	2185.0	3365	0.200	2039.1	2793	0.203	1712.8	2875	0.209	1815.0	3145	0.208	1977.6	3161	0.213	2032.4
	<i>Emission at North VB (50% of total emission g/hr)</i>						1050.7			1067.7			1067.9			993.9			879.8			942.4			999.4			1051.0	
NO2	1010	LT Tunnel (NB)	4223	4850	60%	3493	0.036	375.2	3162	0.045	430.0	2983	0.048	434.7	2865	0.045	384.4	2998	0.039	354.3	3095	0.037	347.9	3294	0.039	391.1	3400	0.038	390.0
	1009	LT Tunnel (SB)	4226	4869	60%	4256	0.032	413.9	3716	0.040	453.7	3468	0.044	459.2	3365	0.040	405.0	2793	0.050	418.3	2875	0.048	417.4	3145	0.050	474.4	3161	0.049	464.8
	<i>Emission at North VB (50% of total emission g/hr)</i>						205.8			230.4			233.1			205.9			201.5			199.5			225.7			222.9	
Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emittted at Ventilation Building	Hr 17			Hr 18			Hr 19			Hr 20			Hr 21			Hr 22			Hr 23			Hr 24		
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
NO	1010	LT Tunnel (NB)	4223	4850	60%	3613	0.187	2033.1	4163	0.173	2173.4	4449	0.142	1904.5	3411	0.139	1430.9	2844	0.154	1316.5	2681	0.159	1284.0	2655	0.156	1245.6	2038	0.158	970.4
	1009	LT Tunnel (SB)	4226	4869	60%	3314	0.207	2070.9	3631	0.193	2116.0	3550	0.157	1681.4	2682	0.152	1234.1	2208	0.166	1107.3	2072	0.171	1069.0	2027	0.167	1022.3	1573	0.169	806.1
	<i>Emission at North VB (50% of total emission g/hr)</i>						1070.3			1118.7			935.3			695.1			632.2			613.7			591.5			463.4	
NO2	1010	LT Tunnel (NB)	4223	4850	60%	3613	0.037	404.3	4163	0.032	404.5	4449	0.024	318.7	3411	0.023	240.8	2844	0.023	199.2	2681	0.021	167.9	2655	0.019	151.8	2038	0.020	124.3
	1009	LT Tunnel (SB)	4226	4869	60%	3314	0.046	464.8	3631	0.041	445.8	3550	0.030	323.0	2682	0.030	242.0	2208	0.030	199.4	2072	0.028	175.3	2027	0.026	160.3	1573	0.028	131.9
	<i>Emission at North VB (50% of total emission g/hr)</i>						226.6			221.7			167.4			125.9			103.9			89.5			81.4			66.8	

Hourly Emission of Tuen Mun Bypass North, South and Middle Ventilation Buildings (1st Jan, Short Term, Year 2048)

Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emittted at Ventilation Building	Hr 01			Hr 02			Hr 03			Hr 04			Hr 05			Hr 06			Hr 07			Hr 08		
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
RSP	5009	TMB Tunnel (NB)	7453	7532	60%	496	0.009	19.8	339	0.009	14.0	234	0.009	10.1	181	0.010	8.2	213	0.010	10.2	392	0.010	19.2	894	0.011	45.7	1852	0.011	96.8
	5015	TMB Tunnel (SB)	7470	7600	60%	676	0.007	22.5	460	0.007	16.2	317	0.008	11.7	241	0.008	9.4	280	0.009	11.7	515	0.009	22.0	1169	0.010	52.3	2399	0.010	110.3
	<i>Emission at North VB (33% of total emission g/hr)</i>					8.4			5.9			4.3			3.5			4.3			8.1			19.3			40.8		
	<i>Emission at South VB (33% of total emission g/hr)</i>					8.4			5.9			4.3			3.5			4.3			8.1			19.3			40.8		
<i>Emission at Middle VB (33% of total emission g/hr)</i>					8.4			5.9			4.3			3.5			4.3			8.1			19.3			40.8			
FSP	5009	TMB Tunnel (NB)	7453	7532	60%	496	0.008	18.3	339	0.008	12.9	234	0.009	9.3	181	0.009	7.6	213	0.009	9.4	392	0.010	17.7	894	0.010	42.1	1852	0.010	89.3
	5015	TMB Tunnel (SB)	7470	7600	60%	676	0.007	20.8	460	0.007	14.9	317	0.007	10.8	241	0.008	8.6	280	0.008	10.8	515	0.008	20.3	1169	0.009	48.3	2399	0.009	101.7
	<i>Emission at North VB (33% of total emission g/hr)</i>					7.7			5.5			4.0			3.2			4.0			7.5			17.8			37.7		
	<i>Emission at South VB (33% of total emission g/hr)</i>					7.7			5.5			4.0			3.2			4.0			7.5			17.8			37.7		
<i>Emission at Middle VB (33% of total emission g/hr)</i>					7.7			5.5			4.0			3.2			4.0			7.5			17.8			37.7			
Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emittted at Ventilation Building	Hr 09			Hr 10			Hr 11			Hr 12			Hr 13			Hr 14			Hr 15			Hr 16		
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
RSP	5009	TMB Tunnel (NB)	7453	7532	60%	1896	0.011	100.4	1831	0.013	113.9	1761	0.014	116.1	1668	0.013	102.9	2129	0.015	147.7	2187	0.014	147.6	2441	0.015	169.8	2406	0.015	163.2
	5015	TMB Tunnel (SB)	7470	7600	60%	2440	0.010	112.7	2212	0.012	121.3	2088	0.012	122.7	2008	0.011	108.4	1431	0.015	101.1	1468	0.015	101.1	1639	0.015	116.1	1613	0.015	111.6
	<i>Emission at North VB (33% of total emission g/hr)</i>					42.0			46.4			47.1			41.7			49.1			49.1			56.4			54.2		
	<i>Emission at South VB (33% of total emission g/hr)</i>					42.0			46.4			47.1			41.7			49.1			49.1			56.4			54.2		
<i>Emission at Middle VB (33% of total emission g/hr)</i>					42.0			46.4			47.1			41.7			49.1			49.1			56.4			54.2			
FSP	5009	TMB Tunnel (NB)	7453	7532	60%	1896	0.010	92.6	1831	0.012	105.0	1761	0.013	107.0	1668	0.012	94.8	2129	0.014	136.1	2187	0.013	136.0	2441	0.014	156.3	2406	0.013	150.4
	5015	TMB Tunnel (SB)	7470	7600	60%	2440	0.009	103.9	2212	0.011	111.8	2088	0.012	113.1	2008	0.011	99.9	1431	0.014	93.2	1468	0.013	93.1	1639	0.014	107.0	1613	0.014	102.8
	<i>Emission at North VB (33% of total emission g/hr)</i>					38.7			42.8			43.4			38.4			45.3			45.2			52.0			50.0		
	<i>Emission at South VB (33% of total emission g/hr)</i>					38.7			42.8			43.4			38.4			45.3			45.2			52.0			50.0		
<i>Emission at Middle VB (33% of total emission g/hr)</i>					38.7			42.8			43.4			38.4			45.3			45.2			52.0			50.0			
Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emittted at Ventilation Building	Hr 17			Hr 18			Hr 19			Hr 20			Hr 21			Hr 22			Hr 23			Hr 24		
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
RSP	5009	TMB Tunnel (NB)	7453	7532	60%	2500	0.014	162.1	2639	0.012	152.1	2396	0.010	109.7	1786	0.010	81.6	1452	0.009	64.1	1353	0.009	55.6	1312	0.008	51.3	1026	0.009	42.2
	5015	TMB Tunnel (SB)	7470	7600	60%	1678	0.014	111.0	1764	0.013	103.9	1590	0.010	74.5	1186	0.010	55.5	964	0.010	43.7	898	0.009	38.0	869	0.009	35.2	680	0.009	28.8
	<i>Emission at North VB (33% of total emission g/hr)</i>					53.9			50.5			36.3			27.1			21.3			18.5			17.1			14.0		
	<i>Emission at South VB (33% of total emission g/hr)</i>					53.9			50.5			36.3			27.1			21.3			18.5			17.1			14.0		
<i>Emission at Middle VB (33% of total emission g/hr)</i>					53.9			50.5			36.3			27.1			21.3			18.5			17.1			14.0			
FSP	5009	TMB Tunnel (NB)	7453	7532	60%	2500	0.013	149.2	2639	0.011	140.0	2396	0.009	101.2	1786	0.009	75.2	1452	0.009	59.1	1353	0.008	51.3	1312	0.008	47.3	1026	0.008	38.9
	5015	TMB Tunnel (SB)	7470	7600	60%	1678	0.013	102.3	1764	0.012	95.8	1590	0.009	68.7	1186	0.009	51.2	964	0.009	40.3	898	0.008	35.1	869	0.008	32.5	680	0.008	26.5
	<i>Emission at North VB (33% of total emission g/hr)</i>					49.6			46.5			33.5			25.0			19.6			17.0			15.7			12.9		
	<i>Emission at South VB (33% of total emission g/hr)</i>					49.6			46.5			33.5			25.0			19.6			17.0			15.7			12.9		
<i>Emission at Middle VB (33% of total emission g/hr)</i>					49.6			46.5			33.5			25.0			19.6			17.0			15.7			12.9			

Hourly Emission of Route 11 Lam Tei Tunnel North Ventilation Building (1st Jan. Short Term, Year 2048)

Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emittted at Ventilation Building	Hr 01			Hr 02			Hr 03			Hr 04			Hr 05			Hr 06			Hr 07			Hr 08		
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
RSP	1010	LT Tunnel (NB)	4223	4850	60%	971	0.007	20.8	663	0.008	15.0	455	0.008	10.9	347	0.008	8.6	400	0.009	10.4	738	0.009	20.2	1678	0.010	48.0	3434	0.010	100.7
	1009	LT Tunnel (SB)	4226	4869	60%	1217	0.006	23.2	827	0.007	16.7	566	0.007	12.2	429	0.008	9.7	495	0.008	11.8	908	0.008	22.7	2056	0.009	53.9	4205	0.009	114.5
	<i>Emission at North VB (50% of total emission g/hr)</i>						11.5			8.3			6.0			4.8			5.8			11.2			26.6			56.1	
FSP	1010	LT Tunnel (NB)	4223	4850	60%	971	0.007	19.2	663	0.007	13.9	455	0.007	10.1	347	0.008	8.0	400	0.008	9.6	738	0.008	18.6	1678	0.009	44.3	3434	0.009	92.9
	1009	LT Tunnel (SB)	4226	4869	60%	1217	0.006	21.5	827	0.006	15.5	566	0.007	11.3	429	0.007	8.9	495	0.007	10.9	908	0.008	20.9	2056	0.008	49.7	4205	0.008	104.7
	<i>Emission at North VB (50% of total emission g/hr)</i>						10.6			7.6			5.6			4.4			5.4			10.3			24.5			51.5	
Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emittted at Ventilation Building	Hr 09			Hr 10			Hr 11			Hr 12			Hr 13			Hr 14			Hr 15			Hr 16		
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
RSP	1010	LT Tunnel (NB)	4223	4850	60%	3493	0.010	103.0	3162	0.012	110.8	2983	0.012	111.3	2865	0.011	98.6	2998	0.011	95.3	3095	0.010	92.0	3294	0.011	105.3	3400	0.010	103.4
	1009	LT Tunnel (SB)	4226	4869	60%	4256	0.009	116.0	3716	0.011	119.8	3468	0.011	119.4	3365	0.010	105.1	2793	0.013	110.9	2875	0.013	109.6	3145	0.013	125.7	3161	0.013	121.9
	<i>Emission at North VB (50% of total emission g/hr)</i>						57.1			60.1			60.2			53.1			53.8			52.6			60.3			58.7	
FSP	1010	LT Tunnel (NB)	4223	4850	60%	3493	0.009	95.0	3162	0.011	102.1	2983	0.011	102.6	2865	0.011	90.8	2998	0.010	87.8	3095	0.009	84.9	3294	0.010	97.1	3400	0.009	95.4
	1009	LT Tunnel (SB)	4226	4869	60%	4256	0.008	107.2	3716	0.010	109.7	3468	0.011	109.8	3365	0.010	97.0	2793	0.012	102.2	2875	0.012	101.0	3145	0.012	115.9	3161	0.012	112.4
	<i>Emission at North VB (50% of total emission g/hr)</i>						52.7			55.2			55.4			49.0			49.6			48.5			55.6			54.2	
Pollutant	Flow ID	Road link	Tunnel Length (m)	Full Length (m)	Percentage Emittted at Ventilation Building	Hr 17			Hr 18			Hr 19			Hr 20			Hr 21			Hr 22			Hr 23			Hr 24		
						Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)	Flow (veh/hr)	EmF (g/veh/mi)	Emission (g/hr)
RSP	1010	LT Tunnel (NB)	4223	4850	60%	3613	0.010	109.2	4163	0.009	111.1	4449	0.007	94.9	3411	0.007	70.3	2844	0.007	55.9	2681	0.006	45.3	2655	0.005	41.0	2038	0.006	33.6
	1009	LT Tunnel (SB)	4226	4869	60%	3314	0.012	123.8	3631	0.011	120.0	3550	0.009	91.5	2682	0.008	68.3	2208	0.008	54.0	2072	0.007	45.8	2027	0.007	41.8	1573	0.007	34.6
	<i>Emission at North VB (50% of total emission g/hr)</i>						60.8			60.3			48.6			36.2			28.7			23.7			21.6			17.8	
FSP	1010	LT Tunnel (NB)	4223	4850	60%	3613	0.009	100.7	4163	0.008	101.5	4449	0.006	86.4	3411	0.006	64.9	2844	0.006	51.7	2681	0.005	41.8	2655	0.005	37.9	2038	0.005	31.1
	1009	LT Tunnel (SB)	4226	4869	60%	3314	0.011	113.8	3631	0.010	109.9	3550	0.008	84.5	2682	0.008	63.1	2208	0.008	49.8	2072	0.007	42.3	2027	0.006	38.6	1573	0.007	31.9
	<i>Emission at North VB (50% of total emission g/hr)</i>						55.9			55.1			44.6			33.4			26.5			21.9			19.9			16.4	