

Appendix F

Health Risk Calculations for the Hay
Road Landfill Project (August 2019)

Results Summary

C:\Users\Brenda.Hom\Desktop\Hay Road Landfill HRA\HayRoadLandfill\Ha

PM10 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	320.68097	ug/m^3	593354.70	4243736.55	25.91	1.80	25.91	1/14/2012, 22
PERIOD		13.54084	ug/m^3	593155.90	4247364.75	24.38	1.80	24.38	

Results Summary

C:\Users\Brenda.Hom\Desktop\Hay Road Landfill HRA\HayRoadLandfill\Ha

PM10 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	122.81745	ug/m^3	598396.94	4252675.28	19.41	1.80	19.41	1/31/2010, 4
PERIOD		6.90272	ug/m^3	602820.16	4248911.57	12.19	1.80	12.19	

Results Summary

C:\Users\Brenda.Hom\Desktop\Hay Road Landfill HRA\HayRoadLandfill\Ha

PM10 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	326.50535	ug/m^3	596374.12	4245887.07	18.59	1.80	18.59	2/26/2012, 1
PERIOD		13.58071	ug/m^3	596374.12	4248837.07	19.81	1.80	19.81	

Results Summary

C:\Users\Brenda.Hom\Desktop\Hay Road Landfill HRA\HayRoadLandfill\Ha

PM10 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	300.00257	ug/m^3	597156.12	4241393.32	15.24	1.80	15.24	1/31/2010, 4
PERIOD		16.01224	ug/m^3	596424.12	4242287.07	17.68	1.80	17.68	
PERIOD		7.84234		596796.94	4252675.28	-99.00	-99.00	-99.00	

Results Summary

C:\Users\Brenda.Hom\Desktop\Hay Road Landfill HRA\HayRoadLandfill\Ha

PM10 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		15.15689	ug/m^3	593233.10	4240445.50	27.75	1.80	27.75	
PERIOD		7.84234		596796.94	4252675.28	-99.00	-99.00	-99.00	
PERIOD		7.84000		596796.94	4252675.28	-99.00	-99.00	-99.00	
PERIOD		13.40000		596796.94	4252675.28	-99.00	-99.00	-99.00	

Results Summary

C:\Users\Brenda.Hom\Desktop\Hay Road Landfill HRA\HayRoadLandfill\Ha

PM10 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	198.35032	ug/m^3	604521.25	4231412.96	15.25	1.80	15.25	12/25/2013, 3
PERIOD		7.94533	ug/m^3	604541.93	4231923.96	11.02	1.80	11.02	
PERIOD		7.84234		596796.94	4252675.28	-99.00	-99.00	-99.00	
PERIOD		13.40000		596796.94	4252675.28	-99.00	-99.00	-99.00	

Results Summary

C:\Users\Brenda.Hom\Desktop\Hay Road Landfill HRA\HayRoadLandfill\Ha

PM10 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	1666.56552	ug/m^3	594951.74	4241381.93	19.81	1.80	19.81	2/15/2013, 7
PERIOD		69.93693	ug/m^3	595264.74	4241393.32	18.34	1.80	18.34	

Trip Distribution

<u>Haul Route Listed in Traffic Impact Analysis</u>	<u>Percent of Total Trips</u>				<u>Trucks</u>
	<u>a.m.</u>	<u>p.m.</u>	<u>Saturday</u>	<u>Daily Average</u>	
To / From I-80 west of Midway Road	62%	46%	48%	52%	101.4
West on Hay Road	20%	30%	30%	27%	52.0
To / From SR 12 east of SR 113	9%	8%	10%	9%	17.6
To / From SR 12 west of SR 113	0%	8%	6%	5%	9.1
North on SR 113	9%	8%	6%	8%	15.0
Total	100%	100%	100%	100%	195

Source: Table 9 from Traffic Impact Analysis by KD Anderson, 2018

Source: average calculation
Source: prorated based on Fleet Mix

Haul Truck Fleet Mix

<u>Type</u>	<u>Trucks/Day</u>	<u>Percent</u>	<u>Vehicle Class in EMFAC2014</u>
Self Haul	81	42%	MDV
Packer Trucks	23	12%	T7 tractor
Transfer Trucks	91	47%	T7 tractor
Pacer and Transfer Trucks Combined	114	58%	T7 tractor summation
Total New Vehicles	195	100%	mixed

Source: Traffic Impact Analysis by KD Anderson, 2018, p.13 AQIA by SCS Engineers, 2019, p.40