Year of Interest: 2019
Distance from Flare to Nearest Boundary: 68
Distance from Flare to Nearest Receptor: 90
Distance from Gas Engine to Nearest Boundary: 68
Distance from Gas Engine to Nearest Receptor: 90
Distance from Operational Area to Nearest Boundary: 45
Distance from Operational Area to Nearest Receptor: 60

		Short Term EQS or EAL µg/m3	Long Term EQS or EAL µg/m3	Background Concentration µg/m3
Acetalehyde (ethanal) - surface	2019	9200	370	0
Acetone - surface	2019	362000	18100	0
Acrylonitrile - surface	2019	264	8.8	0
Arsenic - surface	2019	0	0.003	0
Benzene - surface	2019	0	5	0
Benzo(a)pyrene - engine	2019	0	0.00025	0
Benzo(a)pyrene - flare	2019	0	0.00025	0
Butadiene (modelled as 1,3-Butadiene) - surface	2019	0	2.25	0
Butane - surface	2019	181000	14500	0
Carbon disulphide - surface	2019	100	64	0
Carbon monoxide - engine	2019	10000	0	0
Carbon monoxide - flare	2019	10000	0	0
Carbon monoxide - surface	2019	10000	0	0
Carbon tetrachloride (tetrachloromethane) - surface	2019	3900	130	0
Chloroform (trichloromethane) - surface	2019	2970	99	0
Dichloromethane (methylene chloride) - surface	2019	3000	700	0
Ethylbenzene - surface	2019	55200	4410	0
Ethylene dichloride - surface	2019	700	42	0
Formaldehyde (methanal) - surface	2019	100	5	0
Hexane - surface	2019	21600	720	0
Hydrogen chloride, or (Total chloride (reported as HCl)) - engine	2019	750	0	0
Hydrogen chloride, or (Total chloride (reported as HCl)) - flare	2019	750	0	0
Hydrogen fluoride, or (Total fluoride (reported as HF)) - engine	2019	160	16	0
Hydrogen fluoride, or (Total fluoride (reported as HF)) - flare	2019	160	16	0
Hydrogen sulphide - surface	2019	150	140	0
Mercury - surface	2019	7.5	0.25	0

		Short Term EQS or EAL µg/m3	Long Term EQS or EAL µg/m3	Background Concentration µg/m3
Methyl chloride (chloromethane) - surface	2019	21000	1050	0
Methyl chloroform (1,1,1-Trichloroethane) - surface	2019	222000	11100	0
Methyl ethyl ketone (2-butanone) - surface	2019	89900	6000	0
Nitric acid - surface	2019	1000	52	0
Nitrogen oxides (NOx) - engine	2019	200	40	17.1
Nitrogen oxides (NOx) - flare	2019	200	40	17.1
PAH (reported as Naphthalene) - surface	2019	8000	530	0
para-Dichlorobenzene (modelled as 1,4-Dichlorobenzene) - surface	2019	30600	1530	0
Phenol - surface	2019	3900	200	0
PM10s - engine	2019	0	40	11.15
PM10s 24 hour - engine	2019	50		11.15
PM10s - flare	2019	0	40	11.15
PM10s 24 hour - flare	2019	50		11.15
Sulphur dioxide - engine	2019	350	0	0
Sulphur dioxide 15 min - engine	2019	266		0
Sulphur dioxide 24 hour - engine	2019	125		0
Sulphur dioxide - flare	2019	350	0	0
Sulphur dioxide 15 min - flare	2019	266		0
Sulphur dioxide 24 hour - flare	2019	125		0
Tetrachloroethylene (Tetrachloroethene) - surface	2019	8000	3450	0
Toluene - surface	2019	8000	1910	0
Trichlorobenzene (all isomers) - surface	2019	2280	76	0
Trichloroethylene (trichloroethene) - surface	2019	1000	1100	0
Trimethylbenzene (all isomers) - surface	2019	37500	1250	0
Vinyl chloride (chloroethene, chloroethylene) - surface	2019	1851	159	0
Xylene (all isomers) - surface	2019	66200	4410	0

	Short Term				Long term			
	Predicted Boundary Concentration µg/m3	Predicted Nearest Receptor Concentration µg/m3	Is the emission rate Insignificant?	Is detailed modelling required?	Predicted Boundary Concentration µg/m3	Predicted Nearest Receptor Concentration µg/m3	Is the emission rate Insignificant?	Is detailed modelling required?
Acetalehyde (ethanal) - surface - 2019	1.00427(45m)	0.954057(60m)	Yes	No	0.0207131(45m)	0.018579(60m)	Yes	No
Acetone - surface - 2019	5.43769(45m)	5.1658(60m)	Yes	No	0.112152(45m)	0.100597(60m)	Yes	No
Acrylonitrile - surface - 2019	4.40849(45m)	4.18806(60m)	Yes	No	0.090925(45m)	0.081557(60m)	Yes (at receptor)	No
Arsenic - surface - 2019	0.0309006(45m)	0.0293556(60m)	No EAL	No EAL	0.000637325(45m)	0.000571661(60m)	No	No
Benzene - surface - 2019	1.0738(45m)	1.02011(60m)	No EAL	No EAL	0.0221471(45m)	0.0198652(60m)	Yes	No
Benzo(a)pyrene - engine - 2019	0(68m)	0(90m)	No EAL	No EAL	0(68m)	0(90m)	Yes	No
Benzo(a)pyrene - flare - 2019	0(68m)	0(90m)	No EAL	No EAL	0(68m)	0(90m)	Yes	No
Butadiene (modelled as 1,3-Butadiene) - surface - 2019	0.0849767(45m)	0.0807279(60m)	No EAL	No EAL	0.00175264(45m)	0.00157207(60m)	Yes	No
Butane - surface - 2019	73.8949(45m)	70.2002(60m)	Yes	No	1.52408(45m)	1.36706(60m)	Yes	No
Carbon disulphide - surface - 2019	0.49441(45m)	0.469689(60m)	Yes	No	0.0101972(45m)	0.00914658(60m)	Yes	No
Carbon monoxide - engine - 2019	0(68m)	0(90m)	Yes	No	0(68m)	0(90m)	No EAL	No EAL
Carbon monoxide - flare - 2019	0(68m)	0(90m)	Yes	No	0(68m)	0(90m)	No EAL	No EAL
Carbon monoxide - surface - 2019	376.237(45m)	357.425(60m)	Yes	No	7.75988(45m)	6.96038(60m)	No EAL	No EAL
Carbon tetrachloride (tetrachloromethane) - surface - 2019	0.00386258(45m)	0.00366945(60m)	Yes	No	7.96657e-005(45m)	7.14577e-005(60m)	Yes	No
Chloroform (trichloromethane) - surface - 2019	5.23974(45m)	4.97775(60m)	Yes	No	0.10807(45m)	0.0969351(60m)	Yes	No
Dichloromethane (methylene chloride) - surface - 2019	57.682(45m)	54.7979(60m)	Yes	No	1.18969(45m)	1.06712(60m)	Yes	No
Ethylbenzene - surface - 2019	33.7695(45m)	32.081(60m)	Yes	No	0.696495(45m)	0.624735(60m)	Yes	No
Ethylene dichloride - surface - 2019	80.3808(45m)	76.3618(60m)	No	No	1.65785(45m)	1.48704(60m)	No	No
Formaldehyde (methanal) - surface - 2019	0.146778(45m)	0.139439(60m)	Yes	No	0.0030273(45m)	0.00271539(60m)	Yes	No
Hexane - surface - 2019	8.1463(45m)	7.73899(60m)	Yes	No	0.168017(45m)	0.150707(60m)	Yes	No
Hydrogen chloride, or (Total chloride (reported as HCl)) - engine - 2019	0(68m)	0(90m)	Yes	No	0(68m)	0(90m)	No EAL	No EAL
Hydrogen chloride, or (Total chloride (reported as HCl)) - flare - 2019	0(68m)	0(90m)	Yes	No	0(68m)	0(90m)	No EAL	No EAL
Hydrogen fluoride, or (Total fluoride (reported as HF)) - engine - 2019	0(68m)	0(90m)	Yes	No	0(68m)	0(90m)	Yes	No
Hydrogen fluoride, or (Total fluoride (reported as HF)) - flare - 2019	0(68m)	0(90m)	Yes	No	0(68m)	0(90m)	Yes	No
Hydrogen sulphide - surface - 2019	330.701(45m)	314.165(60m)	No	Yes	6.8207(45m)	6.11796(60m)	No	No
Mercury - surface - 2019	0.000612669(45m)	0.000582035(60m)	Yes	No	1.26363e-005(45m)	1.13344e-005(60m)	Yes	No
Methyl chloride (chloromethane) - surface - 2019	1.27889(45m)	1.21495(60m)	Yes	No	0.0263772(45m)	0.0236595(60m)	Yes	No
Methyl chloroform (1,1,1-Trichloroethane) - surface - 2019	190.22(45m)	180.709(60m)	Yes	No	3.92329(45m)	3.51907(60m)	Yes	No
Methyl ethyl ketone (2-butanone) - surface - 2019	4.65307(45m)	4.42042(60m)	Yes	No	0.0959696(45m)	0.0860818(60m)	Yes	No
Nitric acid - surface - 2019	0(45m)	0(60m)	Yes	No	0(45m)	0(60m)	Yes	No
Nitrogen oxides (NOx) - engine - 2019	0(68m)	0(90m)	Yes	No	0(68m)	0(90m)	Yes	No
Nitrogen oxides (NOx) - flare - 2019	0(68m)	0(90m)	Yes	No	0(68m)	0(90m)	Yes	No

	Short Term				Long term			
	Predicted Boundary Concentration µg/m3	Predicted Nearest Receptor Concentration µg/m3	Is the emission rate Insignificant?	Is detailed modelling required?	Predicted Boundary Concentration µg/m3	Predicted Nearest Receptor Concentration µg/m3	Is the emission rate Insignificant?	Is detailed modelling required?
PAH (reported as Naphthalene) - surface - 2019	1.62202(45m)	1.54092(60m)	Yes	No	0.0334541(45m)	0.0300073(60m)	Yes	No
para-Dichlorobenzene (modelled as 1,4-Dichlorobenzene) - surface - 2019	0.340343(45m)	0.323326(60m)	Yes	No	0.00701958(45m)	0.00629635(60m)	Yes	No
Phenol - surface - 2019	0(45m)	0(60m)	Yes	No	0(45m)	0(60m)	Yes	No
PM10s - engine - 2019	0(68m)	0(90m)	No EAL	No EAL	0(68m)	0(90m)	Yes	No
PM10s 24 hour - engine - 2019	0(68m)	0(90m)	Yes	No				
PM10s - flare - 2019	0(68m)	0(90m)	No EAL	No EAL	0(68m)	0(90m)	Yes	No
PM10s 24 hour - flare - 2019	0(68m)	0(90m)	Yes	No				
Sulphur dioxide - engine - 2019	0(68m)	0(90m)	Yes	No	0(68m)	0(90m)	No EAL	No EAL
Sulphur dioxide 15 min - engine - 2019	0(68m)	0(90m)	Yes	No				
Sulphur dioxide 24 hour - engine - 2019	0(68m)	0(90m)	Yes	No				
Sulphur dioxide - flare - 2019	0(68m)	0(90m)	Yes	No	0(68m)	0(90m)	No EAL	No EAL
Sulphur dioxide 15 min - flare - 2019	0(68m)	0(90m)	Yes	No				
Sulphur dioxide 24 hour - flare - 2019	0(68m)	0(90m)	Yes	No				
Tetrachloroethylene (Tetrachloroethene) - surface - 2019	138.499(45m)	131.574(60m)	Yes	No	2.85655(45m)	2.56224(60m)	Yes	No
Toluene - surface - 2019	65.3661(45m)	62.0978(60m)	Yes	No	1.34818(45m)	1.20927(60m)	Yes	No
Trichlorobenzene (all isomers) - surface - 2019	0.0295601(45m)	0.0280821(60m)	Yes	No	0.000609677(45m)	0.000546862(60m)	Yes	No
Trichloroethylene (trichloroethene) - surface - 2019	1.25148(45m)	1.1889(60m)	Yes	No	0.0258117(45m)	0.0231523(60m)	Yes	No
Trimethylbenzene (all isomers) - surface - 2019	14.4629(45m)	13.7398(60m)	Yes	No	0.298298(45m)	0.267564(60m)	Yes	No
Vinyl chloride (chloroethene, chloroethylene) - surface - 2019	0.409433(45m)	0.388962(60m)	Yes	No	0.00844456(45m)	0.00757451(60m)	Yes	No
Xylene (all isomers) - surface - 2019	1248.01(45m)	1185.6(60m)	Yes	No	25.7401(45m)	23.0881(60m)	Yes	No

Not Modelled:

1,1,1,2-Tetrafluorochloroethane
1,1,1-Trichlorotrifluoroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,1-Dichlorotetrafluoroethane
1,2-Dichloropropane
1,2-Dichlorotetrafluoroethane
1-butanethiol
1-Chloro-1,1-difluoroethane
2-butoxy ethanol
2-Chloro-1,1,1-trifluoroethane
2-Propanol
Bromodichloromethane
Butene isomers
Butyric acid
Carbonyl sulphide
Chlorobenzene
Chlorodifluoromethane
Chloroethane
Chlorofluorocarbons (CFCs) (Total)
Chlorofluoromethane
Chlorotrifluoromethane
Dichlorodifluoromethane
Dichlorofluoromethane
Diethyl disulphide
Dimethyl disulphide
Dimethyl sulphide
Dioxins and furans (modelled as 2,3,7,8-TCDD)
Ethane
Ethanethiol (ethyl mercaptan)
Ethanol
Ethyl butyrate
Ethyl toluene (all isomers)
Ethylene
Ethylene dibromide
Fluorotrichloromethane
Freon 113
Furan
Halons
Hexachlorocyclohexane (all isomers)
Hydrochlorofluorocarbons (HCFCs) (Total)

Not Modelled:

Hydrofluorocarbons (HFCs) (Total)
Limonene
Methanethiol (methyl mercaptan)
Methyl isobutyl ketone
Nitrogen dioxide (NO2)
Nitrogen monoxide (NO)
Odour Units (Predicted)
Pentane
Pentene (all isomers)
Perfluorocarbons (PFCs) (Total)
Propane
Propanethiol
Sulphide, total simulations with H2S
Sulphide, total simulations without H2S
t-1,2-Dichloroethene
Tetrachloroethane (modelled as 1,1,2,2-Tetrachloroethane)
Total non-methane volatile organic compounds (NMVOCs)
Total volatile organic compounds (VOCs)
Trichlorofluoromethane
Trichlorotrifluoroethane