Air Release Points

Please define your Release Points for Releases to Air

Are there any Air emissions? Yes

Number	Description	Location or Grid Reference	Activity or Activities	Effective Height (metres)	Efflux Velocity (m/s)	Total Flow (m3/hr)
1	Exhaust Flue	Boiler House (external)	Mean exhaust flow	18	6.1	4128

Comments

Air Emissions Inventory

Please list all Substances released to Air for each Release Point identified in the previous page.

Number	Substance	Meas'ment Method	Operating Mode (% of	Data relating to Long Term effects			Data relating to Short Term effects			Annual Rate	ELV Conc.
				Conc. mg/m3	Release Rate g/s	Meas'ment Basis	Conc. mg/m3	Release Rate g/s	Meas'ment Basis	tonne/yr	mg/m3
1	Nitrogen Dioxide	Periodic*	90.0%	165.9	0.190232	test average	165.9	0.190232	test average	5.3992	282.50
2	Carbon monoxide	Estimated*	90.0%	250.0	0.286667	factory data	250.0	0.286667	factory data	8.1363	300.00
3	Particulates (PM10) (Annual Mean)	Periodic*	90.0%	13.9	0.015939	test average	13.9	0.015939	test average	0.4524	56.50

Measurement method: * provide detail in comments box

Comments:

Air Impacts

Calculate Process Contributions of Emissions to Air

This table estimates the Process Contribution (PC), calculated as the maximum ground level concentration for each emission listed in the inventory, according to the release point parameters input earlier. If you have more accurate data obtained through dispersion modelling, this may be entered as indicated and will be used instead of the estimated PC.

		Long Term			Short Term		
Number	Substance	EAL µg/m3	PC µg/m3	* Modelled PC µg/m3	EAL µg/m3	PC µg/m3	Modelled PC µg/m3
1	Nitrogen Dioxide	40	1.73		200	46.6	20.07
2	Carbon monoxide		2.61		10000	70.2	
3	Particulates (PM10) (Annual Mean)	40	0.145			3.91	

Note that the Process Contribution shown for each substance is the sum of the individual process contributions of each point from which the substance is emitted. Process Contributions obtained from modelling data should incorporate all relevant release points and flow conditions.

* State the location of any detailed air dispersion modelling and also the main assumptions: Comments: See additional information - Air Dispersion Model

Air Impact Screening Stage

Screen out Insignificant Emissions to Air

This page displays the Process Contribution as a proportion of the EAL or EQS. Emissions with PCs that are less than the criteria indicated may be screened from further assessment as they are likely to have an insignificant impact.

Number	Substance	Long Term EAL	Short Term EAL	Long Term			Short Term		
				PC	% PC of EAL	> 1% of EAL?	PC	% PC of EAL	> 10% of EAL?
		µg/m3	µg/m3	µg/m3	%		µg/m3	%	
1	Nitrogen Dioxide	40.0	200	1.73	4.32	**Yes**	20.1	10.0	**Yes**
2	Carbon monoxide	-	10,000	2.61	-		70.2	0.702	**No**
3	Particulates (PM10) (Annual Mean)	40.0	-	0.145	0.362	**No**	3.91	-	

Air Impact Modelling Stage Two Screening

Identify need for Detailed Modelling of Emissions to Air

This page displays the Process Contributions in relation to the backgound pollutant levels and the EAL or EQS. You should use this information to decide whether to conduct detailed modelling. Note that releases that are insignificant are not shown as they are screened from further assessment. Also complete this page if you have already done detailed modelling.

			Long Term					Short Term		
Number	Substance	Air Bkgrnd Conc. µg/m3	PC µg/m3	% PC of headroom (EAL -	PEC mg/m3	% PEC of EAL %	% PEC of EAL >=70?	PC µg/m3	% PC of headroom (EAL - Bkgrnd)	% PC of headroom >=20?
1	Nitrogen Dioxide	4.598032	1.73	4.88	6.33	15.9	**No**	20.1	10.6	**No**

Air Impact Modelling Assessment

See guidelines in H1 Annex F section entitled "Decide if you need detailed air modelling.

Describe here the justification for whether detailed modelling is, or is not required for any of the releases. Refer to the quidelines in H1 Annex F	Air dispersion model - Lakes Environmental Screen View v4.0.1
Describe source of background information:	Average wind speed data - Met Office / BRE Emissions data - Envirocare report dated 8th May 2015
Document Reference of detailed modelling work:	HLC (Wood Products) Upwood - Air Dispersion Model

Deposition to Land from Air

With reference to H1 Guidance, describe assessment of deposition below:

Number	Substance	% PC of EAL %	Insignificant?	Decision whether to screen as insignificant: Reason (See section "Deposition of air emissions onto land/Screen out insignificant emissions" of Annex F in H1).
1	Nitrogen Dioxide	4.32	Yes	The short-term PC is less than 20% of the short-term environmental standards minus twice the long-term background concentration The long-term PEC is less than 70% of the long-term environmental standards
2	Carbon monoxide	-	Yes	
3	Particulates (PM10) (Annual Mean)	0.362	Yes	The short-term PC is less than 20% of the short-term environmental standards minus twice the long-term background concentration The long-term PEC is less than 70% of the long-term environmental standards

For those emissions not screened as insignificant, describe the location of any further assessment here:

Visual Impacts

Assess the visual impacts of plumes generated from the release points

Can ANY of the Options generate a visible plume?	No
Can any of the release points generate a Visible Plume?:	Yes
For what % of daylight hours per year does the Plume extend beyond the facility boundary?:	<5%
Refer to the guidance in Annex A and assign a level of significance:	Insignificant

Provide any supporting evidence below

There is no visble plume during normal operation. A plume may be visible in the event of a failure of the emissions abatement equipment - see operating documents and risk assessment.

Summary of Environmental Assessment

You have now completed all of the steps in this software for the environmental assessment. This will provide you with:

- an inventory of all emissions sources and substances emitted from your activities
- an information trail of how the impacts of these emissions have been assessed
- a summary of the impacts

You now need to use this information to confirm whether the emissions are acceptable, i.e. that they do not cause significant pollution to occur, by responding below:

Do any of the emissions exceed any of the folllowing:

Statutory Emission limit values:	No	If yes, identify the substances concerned and improvements that are needed to at least meet the statutory requirement
Environmental Quality Standards (air and water):	No	If yes, identify the substances concerned, the contribution from the activities and investigate whether further detailed fate and effect modelling and/or pollution controls are needed. Ensure that the relevant EQS reference conditions are applied.
Environmental Assessment Levels:	No	If yes, identify the substances concerned, the contribution from the activities and investigate whether further detailed fate and effect modelling and/or pollution controls are needed.

Use the box below to provide further information on any of the above to which you have responded 'Yes':

Finally, print all of the information and submit with your application. Remember to include any supplementary information and reports that you have had made reference to during the assessment procedure.