

MEPA comments 30 May 2016 with EGM responses June 2016

Section 2.2.4

Annex I: Comparison of the processes at the Installation with the BREF for Emissions from storage (published July 2006).

Although the comparison with the BAT conclusions has been limited to the storage of the LNG, the operator is to ensure that all service tanks containing liquid fuels shall be in line with the BAT requirements applicable in this BREF. Conditions in this regard shall be included as part of the permit.

Part 1: Storage of liquids and liquefied gases

1.1 Tanks		1.2
General principles to prevent and reduce emissions		
Aspect of BAT	MEPA comment	EGM response June 2016
Tank design	<ol style="list-style-type: none"> 1. Noted. 2. Noted. 3. Noted <p>The use of the flexible arms for the BOG is subject to the feedback of the COMAH on the risk studies currently under review.</p>	Agreed, any feedback from the COMAH Authorities will be taken into consideration.
Inspection and maintenance	Maintenance plans and procedures are to be submitted prior to operation (once the FSU O&M team are set up).	Agreed
Location and layout	Noted	
Tank Colour	Noted.	
Emissions minimization principle in tank storage	Noted	
Monitoring of VOC	Noted	
Dedicated systems	Noted	
Tank Specific Considerations		
Open top tanks	Noted	
External floating roof tank	Noted	

Fixed roof tanks	Noted	
Atmospheric horizontal tanks	<ol style="list-style-type: none"> 1. Noted 2. Noted. 	
Pressurised storage	Noted.	
Lifter roof tanks	Noted	
Refrigerated tanks	Noted.	
Underground and mounded tanks	Noted	
Preventing incidents and (major) accidents		
Safety and risk management	Noted	
Operational procedures and training	Noted. A list of identified training schedule is to be submitted prior to operation.	Agreed. Refer to section B2.9 for additional details
Leakages due to corrosion and/or erosion	<p>Kindly provide more details on how the specific corrosion prevention techniques mentioned in the BAT review with regards to each point below:</p> <ol style="list-style-type: none"> 1. Noted. 2. Kindly ensure that this chemical is included in the Chemical Section of the application and the MSDS is included in this section. <p>Noted.</p>	<ol style="list-style-type: none"> 2. This chemical is included in section B2.3 Raw Materials, table 2.3.1 and the MSDS included the Appendix A
Operational procedures and instrumentation to prevent overfill	Noted	
Instrumentation and automation to detect leakage	<ol style="list-style-type: none"> 1. Noted. 2. Noted. 	
Risk-based approach to emissions to soil below tanks	Noted.	
Soil protection around tanks - containment	Regarding bunding capacity (calculations) please include reference to table in the application document which is as yet	The maximum stored volumes and associated bundled volumes are included in section

	incomplete. Kindly amend as necessary.	B2.3 tables: 2.3.2, 2.3.3 & 2.3.5
Flammable areas and ignition sources	Kindly note that all issues related to ATEX rating are to be forwarded to the OHSA.	Noted
Fire Protection	Noted.	
Fire-fighting equipment	Noted.	
Containment of contaminated extinguishant	Kindly specify which bunded areas will be used for containing the contaminated fire-fighting water and foam. Volume details are to be provided.	The bunds around all the transformers will contain the potentially oil contaminated firefighting water and the firefighting foam will be contained in the LNG suction drum and pipeline bund, further details are in section B2.3 tables 2.3.3 and 2.3.5
1.2 Storage of packaged dangerous substances 1. In view that this section has now been compiled, kindly clarify whether there will be storage of packaged dangerous substances on site? This section applies to other stored materials on site (land based)? 2. Kindly provide information if such materials are stored by other operators.		1.3
1.3 Basins and Lagoons Noted.		
1.4 Atmospheric mined cavern It is noted that this section is not applicable to this project.		
1.5 Pressurised mined caverns It is noted that this section is not applicable to this project		
1.6 Salt leached caverns It is noted that this section is not applicable to this project		
1.7 Floating Storage		
Floating storage	When referring to Section 4.3 of the EIS kindly include the relevant EIA extracts as an addendum to the BAT comparison. Noted. Kindly update document with the outcome of the safety studies once these are concluded.	The safety studies are being concluded, please note that they are based on this original which conclude that are based on this original QRS which assesses the various options for the LNG storage and which concludes that an FSU/FRSU

		is the preferred solution.
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Part 2: Transfer and handling of liquids and liquefied gases

2.1 General principles to prevent and reduce emissions.

Aspect of BAT	MEPA comment
Inspection and maintenance	Noted.
Leak detection and repair programme	Noted.
Emissions minimisation principle in tank storage	Noted.
Safety and risk management	Noted.
Operational procedures and training	Noted.

2.2 Considerations on transfer and handling techniques.

Aspect of BAT	MEPA comment
Piping	Noted.
Vapour treatment	Noted.
Valves	Noted.
Pumps and compressors <i>Installation and maintenance of pumps and compressors.</i>	Noted.
Pumps and compressors <i>Sealing system in pumps.</i>	Noted.
Pumps and compressors <i>Sealing systems in compressors.</i>	Noted.
Sampling connections	Noted.

Part 3: Storage of solids

Noted.

Part 4: Transfer and handling of solids

Noted.