Natural Resources Wales permitting decisions

Substantial Variation and Consolidation – Eni UK Limited.

We have decided to issue the variation for the Point of Ayr Gas Terminal operated by Eni UK Limited.

The permit number is EPR/DP3934EW/V003

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

Purpose of this document

This decision document:

- Explains how the application has been determined
- Provides a record of the decision-making process
- Shows how all relevant factors have been taken into account
- Justifies the specific conditions in the permit other than those in our generic permit template.

Unless the decision document specifies otherwise we have accepted the applicant's proposals.

Structure of this document

- Assessment of Eni UK Limited against the published BAT conclusions for the Refining of Mineral Oil and Gas
- Annex 1 – Decision Checklist regarding relevant BAT Conclusions

Assessment of Eni UK Limited against the published BAT conclusions for the Refining of Mineral Oil and Gas.

1. Our decision

We have issued a variation, which will allow the operator to operate the installation, subject to the conditions in the varied permit.

The variation does three things:

- it consolidates the original permit to reflect changes made through earlier variations;
- it brings the permit into line with our modern regulatory template; and
- it varies the permit where appropriate to reflect the outcome of our statutory review and incorporate Best Available Techniques (BAT) and associated Emission Limit Values (ELV's).

We consider that, in reaching this decision, we have taken into account all relevant considerations and legal requirements and that the permit will continue to ensure that a high level of protection is provided for the environment and human health.

The original permit, issued on the 20th March 2007, ensured that the installation, employed Best Available Techniques (BAT) and ensured a high level of protection for human health and the environment. We have altered the permit as a result of the statutory review, and we are confident that the new requirements will deliver a superior level of protection to that which was previously achieved.

2. The legal framework

The consolidated variation notice will be issued under Regulation 20 of the EPR. The environmental permitting regime is a legal vehicle which delivers most of the relevant legal requirements for activities falling within its scope. In particular, the regulated facility is:

- an *installation* as described by the IED;
- subject to aspects of other relevant legislation which also have to be addressed.

We consider that, in issuing the consolidated variation notice, it will ensure that the operation of the installation complies with all relevant legal requirements and that a high level of protection will be delivered for the environment and human health.

We explain how we have addressed specific statutory requirements more fully in the rest of this document.

3. How we reached our decision

Requesting information to demonstrate compliance with BAT Conclusion techniques

We issued a Notice under Regulation 60(1) of the Environmental Permitting (England and Wales) Regulations 2016 on 16th March 2016 requiring the operator to provide information to demonstrate how the operation of their installation currently meets, or will subsequently meet, the revised standards described in the relevant BAT Conclusions document.

- Describes the techniques that will be implemented before 28/10/2018, which will then ensure that operations meet the revised standard, or

- Justifies why standards will not be met by 28/10/2018, and confirmation of the date when the operation of those processes will cease within the installation or an explanation of why the revised BAT standard is not applicable to those processes, or
- Justifies why an alternative technique will achieve the same level of environmental protection equivalent to the revised standard described in the BAT Conclusions.
- Where their permitted activity involves the use, production or release of a hazardous substance, as defined in Article 3(18) of the Industrial Emissions Directive, Eni UK Limited were required to carry out a risk assessment considering the possibility of soil and groundwater contamination at the permitted installation with such substances. Where risk of such contamination is established prepare a baseline report containing information necessary to determine the state of soil and groundwater contamination so as to make a quantified comparison with the state

upon definite cessation of the activity. Eni UK Limited have a copy of a consequent baseline report.

- Where their permitted activity involves the use, production, storage or release of a priority hazardous substances, as defined by the Water Framework Directive, Eni UK Limited were required to carry out a risk screening assessment considering the presence of priority hazardous substances at the permitted installation. Where a risk of these substances is established the operator is to sample the effluent and screen for the priority hazardous substances. If these substances are found to be present in the effluent stream, then assessment using the H1 tool and potential detailed dispersion modelling will be required to demonstrate that the effluent discharge will not have a significant impact to the receiving water.
- Where the compliance with the BAT conclusions leads to the substantial refurbishment or installation of new combustion plant with an aggregate thermal input of greater than 20MWth, which generates more than 100kWth of heat, Eni UK Limited must provide sufficient technical and commercial evidence to demonstrate compliance with Article 14, Paragraph 5 of Directive 2012/27/EU on Energy Efficiency. This must include an assessment of the technical feasibility and costs of installing a combined heat and power (CHP) system or providing district heating and, where this assessment shows that the costs are not disproportionate to the benefits, proposals to incorporate these measures into your plant.

Where the operator proposed that they were not intending to meet a BAT standard that also included a BAT Associated Emission Level (BAT-AEL) described in the BAT Conclusions Document, the Regulation 60 Notice requested that the operator make a formal request for derogation from compliance with that AEL (as provisioned by Article 15(4) of IED). In this circumstance, the Notice identified that any such request for derogation must be supported and justified by sufficient technical and commercial information that would enable us to determine acceptability of the derogation request.

The Regulation 60 Notice response from the operator was received on the 30th June 2016.

We considered that the response contained sufficient information for us to commence determination of the permit review. The operator made no claim for commercial confidentiality. We have not received any information in relation to the Regulation 60 Notice response that appears to be confidential in relation to any part.

4. Key issues/Regulation 60 response

BAT Conclusions for the Refining and Mineral Oil and Gas were published as a Commission Implementing Decision (2010/75/EU) in the Official Journal of the EU on 28th October 2014. There are 58 BAT Conclusions. This annex provides a record of decisions made in relation to each relevant BAT Conclusion applicable to the installation. This should be read in conjunction with the permit/variation notice issued.

A detailed response was received from Eni UK Limited. Where the operator has concluded that they have achieved BAT, and we are in agreement, no further information/justification has been sought by Natural Resources Wales.

5. Changes we have made

Improvement Conditions

Based on the information provided in the Regulation 60 response, we consider that we need to set improvement conditions. These conditions are set out below. We are using these conditions to require the operator to provide Natural Resources Wales with details that need to be established or confirmed during operations.

The company have outlined they follow the techniques outlined within the BREF. This improvement condition is required to provide further detail on the response outline under BAT 41.

BAT Conclusion 41.

BAT 41: In order to reduce sulphur dioxide emissions to air from the natural gas plant, BAT is to apply BAT 54.

BAT 54: In order to reduce sulphur emissions to air from off-gases containing hydrogen sulphides (H2S),

BAT is to use all of the following techniques:

I. Acid gas removal e.g. by amine treating

II. Sulphur recovery units (SRU) e.g. by Claus process

III. Tail gas treatment unit (TGTU) (For retrofitting existing SRU, the applicability may be limited by the SRU size and configuration of the units and the type of sulphur recovery process already in place.

The company have outlined in their submission of BAT 41 compliance that their equipment achieves 99% efficiency on sulphur recovery and the improvement condition has been included to clarify the methodology used for compliance of the BAT Conclusion.

IC7

The operator shall review and produce a report detailing how the efficiency of the Sulphur Recovery Unit (SRU) is calculated to show that the abatement is operating at or over the 98.5 % efficiency requirement as detailed in BAT 41 of the Refinery BREF. The report is to be submitted to NRW.

Operational Changes

The permit review has identified that the company operate combustion activities at the permitted installation with a net Thermal input of over 50 MW. The company are operating a maximum of 78 MWTh which will require an additional listed activity included in Schedule 1 of the EPR Permit. (as follows)

S1.1 A1 (a)	Burning any fuel in an appliance with a rated thermal input of 50 or more megawatts.	Appliances with an aggregate rated thermal input of 50 megawatts or more. (i) Gas Turbine 37.63 MWth (ii) Hot Oil Heater A 15.33 MWth (iii) Hot Oil Heater B 15.33 MWth (iv) Steam Boiler 2.06 MWth (v) Generator 1.86MWth

The review will require additional monitoring requirements of the combustion activities in line with BAT 4, 5, 34 and 37. These are outlined in the emissions to air section of this document.

Emissions to Water

BAT 10 covers aspects of water emissions and details the monitoring requirements. The Point of Ayr Gas Terminal does not treat or store any process effluent as the material is sent back offshore via the pipeline. Any waste from process maintenance

is tankered off site to authorised disposal facilities. The company however do have surface water drains to a water course and interceptors prior to discharge.
The discharge point is mainly used for rain water run off from the site and not for processed effluent, therefore in this specific case the BAT 10 monitoring requirements are not included in the permit review. NRW will however require the company to test their surface water discharge in line with their current limit to ensure that the discharge is not having any affect on the watercourse.

The company will continue to monitor Biochemical oxygen demand and pH prior to each discharge.

Emissions to Air

There were changes to the ELV's for emissions to air taking into account BAT Conclusions from the Refining of Mineral Oil and Gas BREF.
The tables below outline the parameters taking into account BAT 4, 5, 34 and 37.
Schedule 4 of the permit require additional monitoring for release points A1, A2, A3 and A4 to incorporate the requirements detailed in BAT 4 for combustion activities.

Table S4.1 Point source emissions to air – emission limits and monitoring requirements

Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1[Point A1 on-site plan in Schedule 2]	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	Thermal oxidiser	120 mg/m^3	Hourly average	6-monthly	BS EN 14792
A1[Point A1 on-site plan in Schedule 2]	Sulphur dioxide	Thermal oxidiser	98.5% efficiency	Monthly average	Continuous	BS EN 14181
A1[Point A1 on-site plan in Schedule 2]	Sulphur dioxide	Thermal oxidiser	190 mg/m^3	Hourly average	Continuous	BS EN 14181
A2 [Point A2 on site plan in Schedule 2]	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	Turbine Generator	100 mg/m^3	Hourly average	6-monthly	BS EN 14792
A2 [Point A2 on site plan in Schedule 2]	Carbon Monoxide	Turbine Generator	100 mg/m^3	Hourly average	6-monthly	BS EN 15058
A3 [Point A3 on site plan in Schedule 2]	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	Hot oil heater A	100 mg/m^3	Hourly average	6-monthly	BS EN 14792
A3 [Point A3 on site plan in Schedule 2]	Carbon Monoxide	Hot oil heater A	100 mg/m^3	Hourly average	6-monthly	BS EN 15058
A4 [Point A4 on site plan in Schedule 2]	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	Hot oil heater B	100 mg/m^3	Hourly average	6-monthly	BS EN 14792
A4 [Point A4 on site plan in Schedule 2]	Carbon Monoxide	Hot oil heater B	100 mg/m^3	Hourly average	6-monthly	BS EN 15058

The combustion activities will require 6 monthly emission monitoring for oxides of Nitrogen and Carbon Monoxide as detailed in BAT 4.

There is an additional requirement for release point A1 requiring the operator to show a monthly efficiency of the Sulphur Recovery Plant (SRU) over 98.5%. The company have detailed the operational detail of the SRU including the Tail Gas Unit and have outlined an operational efficiency of 99%. The company have not detailed the efficiency calculation/method as part of the review information, however based on the technology outlined the company should be achieving efficiencies of greater than 98.5%.

NRW have also included an improvement condition (IC7) to require the operator to detail the method used to calculate the efficiency of the SRU.

6. Conclusion

We consider that the installation already employed what used to be BAT, and that the operator has demonstrated a consistent performance since the permit was originally granted. The revised BREF and its BAT-AELs provide the opportunity to consider further environmental improvements.

Coupled with the consolidation and modernisation of the permit, we believe this variation provides a sound basis for ongoing regulation of the installation. The Sector Review provides the opportunity to consolidate and modernise the permit.

We believe this variation provides a sound basis for ongoing regulation of the installation and we are satisfied that the operator is currently achieving all relevant BAT.

We believe that we have ensured compliance with all relevant legal requirements in carrying out this review and making our determination on the variation.

Annex 1: Decision checklist regarding relevant BAT Conclusions

BAT Conclusions for the Refining of Mineral Oil and Gas, were published as a Commission Implementing Decision (2010/75/EU) in the Official Journal of the EU on 9th October 2016. There are 58 BAT Conclusions. This checklist provides a record of decisions made in relation to each relevant BAT Conclusion applicable to the installation. This annex should be read in conjunction with the consolidated variation notice.

All BAT Conclusions arising are listed by number in order below;

BAT Conclusion No	**Summary of BAT Conclusion requirement**	**Status** **One of the following:** Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
General BAT conclusions The BAT mentioned in this section apply to all installations covered by these BAT conclusions (Crude oil Refineries)		
1.	BAT is to implement and adhere to an environmental management system (EMS).	Operator uses a combination of the listed techniques and is compliant with the BAT conclusion. Regulation 60 response contains sufficient detail.
2.	BAT is to use energy efficiently on-site.	Operator uses a combination of the listed techniques and is compliant with the BAT conclusion. Regulation 60 response contains sufficient detail.
3.	BAT is to prevent or reduce dust emissions from the storage and handling of dusty materials using one or a combination of methods.	Not Applicable
4.	BAT is to monitor emissions to air with a specific frequency and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.	Operator compliant. Regulation 60 response is sufficient.

BAT Conclusion No	Summary of BAT Conclusion requirement	Status One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
5.	BAT is to monitor the relevant process parameters linked to pollutant emissions, at catalytic cracking and combustion units by using appropriate techniques.	Operator compliant. Regulation 60 response is sufficient.
6.	BAT is to monitor diffuse VOC emissions to air from the entire site by using a range of techniques.	Not Applicable
7.	BAT is to operate the acid gas removal units, sulphur recovery units and other waste gas treatment systems with a high availability and at optimal capacity.	Operator compliant. Regulation 60 response is sufficient.
8.	BAT is to reduce ammonia emissions to air when applying selective catalytic reduction (SCR) or selective non-catalytic reduction (SCNR) techniques.	Not Applicable
9.	In order to prevent and reduce emissions to air when using a sour water steam stripping unit, BAT is to route the acid off-gases from this unit to an SRU or any equivalent gas treatment system.	Operator compliant. Regulation 60 response is sufficient.
10.	BAT is to monitor emissions to water by using the monitoring techniques and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.	Not Applicable. No process water treated on site
11.	In order to reduce water consumption and the volume of contaminated water, BAT is to use all the techniques outlined.	Operator compliant. Regulation 60 response is sufficient.
12.	In order to reduce the emission load of pollutants in the waste water discharge to the receiving water body. BAT is to remove insoluble and soluble polluting substances by using all of the techniques given below.	Not Applicable. No process water treated on site

BAT Conclusion No	Summary of BAT Conclusion requirement	Status One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
13.	When further removal of organic substances or nitrogen is needed, BAT is to use an additional treatment step as described in Section 1.21.2	Not Applicable
14.	In order to prevent or, where that is not practicable, to reduce waste generation, BAT is to adopt and implement a waste management plan that, in order of priority, ensures that waste is prepared for reuse, recycling, recovery or disposal.	Operator compliant. Regulation 60 response is sufficient.
15.	In order to reduce the amount of sludge to be treated or disposed of, BAT is to use one or a combination of the techniques.	Not Applicable
16.	In order to reduce the generation of spent catalyst waste, BAT is to use one or a combination of the techniques given below. Spent solid catalyst management. Removal of catalyst from slurry decant oil.	The operator uses a combination of techniques listed and is therefore fully compliant with the BAT conclusion. Regulation 60 response is sufficient.
17.	BAT is to reduce noise emissions by using one or a combination of the following techniques: - (i) Make an environmental noise assessment and formulate a noise management plan as appropriate to the local environment. (ii) Enclose noisy equipment/operation in separate structure/unit. (iii) Use embankments to screen the source of noise. (iv) Use noise protection walls	The operator uses a combination of techniques listed and is therefore fully compliant with the BAT conclusion. Regulation 60 response is sufficient.
18.	In order to prevent or reduce VOC emissions, BAT is to apply the techniques given below; (i) Techniques related to Plant Design (ii) Techniques related to plant installation and commissioning (iii) Techniques related to plant operation	Not Applicable
19.	In order to prevent hydrofluoric acid (HF) emissions to air from the hydrofluoric acid alkylation process, BAT is to use wet	Not Applicable. No process on site.

BAT Conclusion No	Summary of BAT Conclusion requirement	Status One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	scrubbing with alkaline solution to treat incondensable gas streams prior to venting to flare.	
20.	In order to reduce emissions to water from the hydrofluoric acid alkylation process, BAT is to use a combination of techniques given below; (i) Precipitation/Neutralisation step (ii) Separation step	Not Applicable
21.	In order to reduce the emissions to water from the sulphuric acid alkylation process, BAT is to reduce the use of sulphuric acid by regenerating the spent acid and to neutralise waste water generated by this process before routing to waste water treatment.	BAT not applicable to the Refinery
22.	In order to prevent and reduce the emissions of hazardous substances to air and water from base oil production processes, BAT is to use one or a combination of the techniques	BAT not applicable to the Refinery
23.	In order to prevent and reduce emissions to air from the bitumen production process, BAT is to treat the gaseous overhead by using one of the techniques specified.	BAT not applicable to the Refinery
24.	In order to prevent or reduce NOX emissions to air from the catalytic cracking process (regenerator), BAT is to use one or a combination of the techniques given below. (i) Process optimisation (ii) Low-NOx CO oxidation promoters (iii) Specific additives for NOx reduction.	Not Applicable
25.	In order to reduce dust and metals emissions to air from the catalytic cracking process (regenerator), BAT is to use one or a combination of the techniques given below.	Not Applicable
26.	In order to reduce SOx emissions to air from the catalytic cracking process (regenerator), BAT is to use one or a combination of the techniques given below	Not Applicable

BAT Conclusion No	Summary of BAT Conclusion requirement	Status One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
27.	In order to reduce CO emissions to air from the catalytic cracking process (regenerator), BAT is to use one or a combination of the techniques given below	Not Applicable
28.	In order to reduce emissions of polychlorinated dibenzodioxins/furans (PCDD/F) to air from the catalytic cracking process (regenerator), BAT is to use one or a combination of the techniques given below	Not Applicable
29.	In order to reduce emissions to air from the coking production process, BAT is to use one or a combination of the techniques given below	BAT not applicable to the Refinery
30.	In order to reduce NOx emissions to air from the calcining of green coke process, BAT is to use selective non-catalytic reduction (SNCR)	BAT not applicable to the Refinery
31.	In order to reduce SOx emissions to air from the calcining of green coke process, BAT is to use one or a combination of the techniques given below	BAT not applicable to the Refinery
32.	In order to reduce dust emissions to air from the calcining of green coke process, BAT is to use one or a combination of the techniques given below	BAT not applicable to the Refinery
33.	In order to reduce water consumption and water from the desalting process, BAT is to use one or a combination of the techniques given below	Not Applicable
34.	In order to prevent or reduce NOx emissions to air from the combustion units, BAT is to use one or a combination of the techniques given below	The operator uses a combination of techniques listed and is therefore fully compliant with the BAT conclusion. Regulation 60 response is sufficient.
35.	In order to reduce dust emissions to air from the combustion units, BAT is to use one or a combination of the techniques given below	Not Applicable

BAT Conclusion No	Summary of BAT Conclusion requirement	Status One of the following: Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
36.	In order to reduce SOx emissions to air from the combustion units, BAT is to use one or a combination of the techniques given below	Not Applicable
37.	In order to reduce carbon monoxide (CO) emissions to air from the combustion units, BAT is to use a combustion operation control	The operator uses techniques listed and is therefore fully compliant with the BAT conclusion. Regulation 60 response is sufficient.
38.	In order to reduce emissions to air from the etherification process, BAT is to ensure the appropriate treatment of process off-gases by routing them to the refinery fuel gas system.	BAT not applicable to the Refinery
39.	In order to prevent upset of the biotreatment, BAT is to use a storage tank and an appropriate unit production plan management to control the toxic components dissolved content. (e.g. methanol, formic acid, ethers) of the waste water stream prior to final treatment.	BAT not applicable to the Refinery
40.	In order to reduce emissions to air of chlorinated compounds, Bat is to optimise the use of chlorinated organic compounds used to maintain catalyst activity when such a process is in place or to use non-chlorinated catalytic systems.	BAT not applicable to the Refinery
41.	In order to reduce sulphur dioxide emissions to air from the natural gas plant, BAT is to apply BAT 54	The operator uses a combination of techniques listed and is therefore fully compliant with the BAT conclusion. Regulation 60 response is sufficient.
42.	In order to reduce nitrogen oxides (NOx) emissions to air from the natural gas plant, BAT is to apply BAT 34	The operator uses a combination of techniques listed and is therefore fully compliant with the BAT conclusion. Regulation 60 response is sufficient.
43.	In order to prevent emissions of mercury when present in raw natural gas, BAT is to remove the mercury and recover the mercury-containing sludge for waste disposal.	BAT not applicable to the Refinery
44.	In order to prevent or reduce waste water flow generation from the distillation process, BAT	BAT not applicable to the Refinery

BAT Conclusion No	Summary of BAT Conclusion requirement	Status **One of the following:** Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
	is to use liquid ring vacuum pumps or surface condensers.	
45.	In order to prevent or reduce water pollution from the distillation process, BAT is to route sour water to the stripping unit.	BAT not applicable to the Refinery
46.	In order to prevent or reduce emissions to air from distillation units, BAT is to ensure the appropriate treatment of process off-gases, especially incondensable off-gases, by acid gas removal prior to further use.	BAT not applicable to the Refinery
47.	In order to reduce emissions to air from the products treatment process, BAT is to ensure the appropriate disposal of off-gases, especially odorous spent air from sweetening units, by routing them to destruction, e.g. by incineration.	The operator uses a combination of techniques listed and is therefore fully compliant with the BAT conclusion. Regulation 60 response is sufficient.
48.	In order to reduce waste and waste water generation when a products treatment process using caustic is in place, BAT is to use cascading caustic solution and a global management of spent caustic, including recycling after appropriate treatment, e.g. by stripping.	BAT not applicable to the Refinery
49.	In order to reduce VOC emissions to air from the storage of volatile liquid hydrocarbon compounds, BAT is to use floating roof storage tanks equipped with high efficiency seals or a fixed roof tank connected to a vapour recovery system.	The operator uses a combination of techniques listed and is therefore fully compliant with the BAT conclusion. Regulation 60 response is sufficient.
50.	In order to reduce VOC emissions to air from the storage of volatile liquid hydrocarbon compounds, BAT is to use one or a combination of the techniques given below.	BAT not applicable to the Refinery.
51.	In order to prevent or reduce emissions to soil and groundwater from the storage of liquid hydrocarbon compounds, BAT is to use one or a combination of the techniques given below.	The operator uses a combination of techniques listed and is therefore fully compliant with the BAT conclusion. Regulation 60 response is sufficient.

BAT Conclusion No	Summary of BAT Conclusion requirement	Status **One of the following:** Not Applicable, Currently Compliant, Compliant in the future (within 4 years of publication of BAT conclusions), Not Compliant
52.	In order to prevent or reduce VOC emissions to air from loading and unloading operations of volatile liquid hydrocarbon compounds, BAT is to use one or a combination of the techniques given below to achieve a recovery rate of at least 95%.	BAT not applicable to the Refinery
53.	In order to reduce emissions to water from visbreaking and other thermal processes, BAT is to ensure the appropriate treatment of waste water streams by applying the techniques of BAT 11.	BAT not applicable to the Refinery
54.	In order to reduce sulphur emissions to air from off-gases containing hydrogen sulphides (H2S), BAT is to use all of the techniques given below.	The operator uses a combination of techniques listed and is therefore fully compliant with the BAT conclusion. Regulation 60 response is sufficient.
55.	In order to prevent emissions to air from flares, BAT is to use flaring only for safety reasons or for non-routine operational conditions (e.g. start-ups, shutdown).	The operator uses a combination of techniques listed and is therefore fully compliant with the BAT conclusion. Regulation 60 response is sufficient.
56.	In order to reduce emissions to air from flares when flaring is unavoidable, BAT is to use the techniques given below.	The operator uses a combination of techniques listed and is therefore fully compliant with the BAT conclusion. Regulation 60 response is sufficient.
57.	In order to achieve an overall reduction of NOx emissions to air from combustion units and fluid catalytic cracking (FCC) units, BAT is to use an integrated emission management technique as an alternative to applying BAT 24 and BAT 34.	BAT not applicable to the Refinery
58.	In order to achieve an overall reduction of SO2 emissions to air from combustion units, fluid catalytic cracking (FCC) units and waste gas sulphur recovery units, BAT is to use an integrated emission management technique as an alternative to applying BAT 26, BAT 36 and BAT 54.	BAT not applicable to the Refinery