

# Frequently Asked Questions updated 1<sup>st</sup> February 2022

## FDM sector permit review

Introduction: This FAQ document is intended to supplement the sector permit review guidance documents and it will be revised regularly in light of queries received as the review progresses.

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## Permit review process

Q: Why are the EA including other elements in this BRef review eg site condition baseline reporting, climate change adaptation and Medium Combustion Plant Directive?

The main purpose of the permit review is to implement the revised Food Drink and Milk Industries (FDM) BAT conclusions as well any relevant BAT conclusions published in other BRefs eg the Large Combustion Plant.

We have a statutory duty to periodically review environmental permits. We therefore take a wider view than simply the implementation of BAT conclusions. We consider other obligations under the IED and other relevant legislation e.g. Water Framework Directive and Medium Combustion Plant Directive. We also take account of objectives set out in Defra’s 25 year plan and EA corporate objectives.

Q: My permitted site will soon be sold to another company and a permit transfer will be required. How will this affect timescales for the permit review?

A: If a site is going to need a permit transfer within 6 months of being scheduled to receive their Information Notice then we will consider rescheduling issue of the Notice.

If you think this situation may arise then we would advise that you contact us at [FDMPermitReview@environment-agency.gov.uk](mailto:FDMPermitReview@environment-agency.gov.uk) to discuss further.

Q: How much will the permit review variation cost?

A: The underlying principle is that our charges reflect the amount of technical assessment and permitting effort required to complete the review.

The standard fee for the permit review variation is a normal variation fee, currently £6,992.

For Operators where there are additional activities which need to be reviewed eg to implement the Large Combustion Plant BAT conclusions or undertake a detailed Water Framework Directive assessment then there will be additional charges.

If a derogation is requested, the fee will be a substantial variation fee, currently £12,585.

You will receive an invoice once the variation has been issued.

**Q: We are currently making changes to our installation which will require a permit variation. Can this be combined with the permit review variation?**

**A:** This will depend on the extent of the proposed changes.

We are happy to include administrative changes in the permit review variation such as deleting redundant emission points, updating site plans or the Non-Technical Description in the Introductory Note.

We cannot include in the review permit variation anything that would require additional technical assessment such as new plant or a change in emissions as this would require a separate chargeable variation.

Where you are preparing a variation application for planned changes, then you should prepare, submit and pay for that application irrespective of the permit review. If the permit review is due to coincide with your variation application then we would do our best to align the variations where possible.

If you are installing new plant solely to comply with the BAT Conclusions, eg a new bag filter to meet a lower dust emission limit to air or an effluent treatment plant to achieve the BAT-AELs to water, then please get in touch to discuss.

**Q: How will the EA review permits which are part of a multi operator installation?**

**A:** A multi operator installation is one where there are two or more separately permitted operators. For example a third party may operate, and be issued with a permit for, an effluent treatment plant or boiler plant on behalf of the main food and drink company. In such cases all the permits will be reviewed at the same time so that we can assess BAT for the whole installation. Each operator should consider those BAT conclusions which are relevant to their part of the installation.

**Q: What file size can you accept by email for my Regulation 61 response?**

**A:** We are limited to receiving a maximum file size of around 10 MB for personal inboxes and 20MB for shared inboxes, via email. When providing your submission, please ensure you only include supporting information that we need to see in evidence of your response. You should compress files where available, and consider sending multiple split emails if your submission is still too big. Alternatively, you should consider using a secure web based file sharing portal, such as Dropbox, and provide us with the link. Access should be made available to [PSC@environment-agency.gov.uk](mailto:PSC@environment-agency.gov.uk) and [FDMPermitReview@environment-agency.gov.uk](mailto:FDMPermitReview@environment-agency.gov.uk). Avoid having to password protect access if possible, and give as long as possible for retrieval (before the link expires).

## General queries on BAT conclusions

**Q: The BAT conclusion states that “BAT is to use one or a combination of the following techniques...” How many of these techniques do I need to consider?**

**A:** There are a number of General and Sector Specific BAT conclusions (BATcs) which include this wording and the number of techniques to be considered will depend upon the

stated objective of each BAT conclusion. This is typically phrased as “*In order to achieve XYZ, BAT is to use one or a combination of...*”

The objective of the BATc will be to do one of the following:

1. To achieve a particular BAT-AEL for emissions to air or water. Examples include BAT 12 for direct emissions to water and BAT 23 for emissions of dust to air in the dairy sector.

The stated objective to meet the BAT-AEL is mandatory and you should consider as many of the listed techniques as required in order to do this. You may use alternative techniques not listed (as descriptive BAT techniques are neither prescriptive nor exhaustive) provided they also achieve the same objective.

2. To comply with a BAT-AEPL (indicative performance level) for specific energy/ water consumption.

Examples include energy efficiency BAT-AEPLs for the brewing sector (BAT 18) and the dairy sector (BAT 21). There is a clear expectation that you will achieve the BAT-AEPL and you should consider as many of the listed techniques in the General BAT conclusion BAT 6 and the associated sector specific BAT conclusion as required in order to do this.

3. To address a general aspect such as resource efficiency or cleaning which is not associated with a BAT-AEL or BAT-AEPL.

One example is BAT 8 Cleaning where the stated objective is “**In order to prevent or reduce the use of harmful substances, e.g. in cleaning and disinfection**”. In this case you should consider all techniques which are relevant to your activity and either confirm they are used or where there is a relevant technique which you don't use, you will need to justify why that isn't in place. There may also be additional techniques not listed in the BATc which you use on site, in which case, these should be detailed in the response.

Q: There are no sector specific BAT conclusions for my activity. Which BAT conclusions will apply to me?

A: The general BAT conclusions 1-15 apply to all FDM activities and you should assess how you comply against each of these. If you operate an Anaerobic Digestion plant you should also assess compliance against the relevant BAT conclusions in the Waste Treatment BRef as explained in the guidance on preparing your Regulation 61 Notice response.

## Environmental Management Systems

Q: BAT 1 EMS: we have an EMS which is externally certified to the ISO14001 standard. Do we still need to provide details of how we comply against each element of BAT 1?

A: If your EMS is externally certified (eg ISO14001 or EMAS) you need only to state that this is the case in the Reg 61 response tool, where the EMS standard covers the individual element of the BAT conclusion, and then include a copy of your EMS certificate with your response submission. This should be given a Document Reference in the response tool.

## Emissions to water

Q: How does BAT 12 apply to direct discharges to watercourses, sewer and soakaway/groundwater?

A: The BAT conclusion applies in full for direct discharges to watercourses. You should describe how the treatment techniques used enable you to achieve the BAT-AELs.

The BAT-AELs do not apply for discharges to sewer however you still need to demonstrate that whatever treatment you have on site prior to release to sewer, plus the treatment by the sewerage undertaker, is BAT for your effluent.

If your effluent is discharged to soakaway or groundwater you will need to provide a site specific groundwater discharge assessment. Please contact us to discuss in more detail.

If you dispose of your effluent in another way eg by tankering off-site then you need to demonstrate how this is BAT for your effluent.

In your response to the Reg 61 notice you should provide monitoring results in all cases where prompted.

Q: How do I know which BAT-AELs in BAT 12 will apply and which substances I will need to monitor for in my effluent?

A: The number of relevant substances/parameters which require BAT-AELs and monitoring will vary depending on the characteristics of the effluent produced.

BAT 2 requires the operator to characterise the composition of their effluent and thus identify relevant substances/parameters which will require BAT-AELs and monitoring. This means that operators should consider what substances are inherently in the effluent eg phosphorus is naturally present in milk and which substances may be added during the manufacturing process eg brining of fish/shellfish or cheese or as part of ancillary operations such as effluent treatment.

BAT 4 sets out the monitoring requirements for emissions to water for the relevant substances/parameters covered by the FDM BRef i.e. Chemical Oxygen Demand, Total nitrogen, Total phosphorus, Total suspended solids, Biochemical Oxygen Demand (BOD) and chlorides.

Additional explanation is provided in the footnotes to the table in BAT 4. For example with the exception of chlorides, the above substances need only be monitored in direct discharges of waste water to a water body.

BAT 12 includes the relevant BAT-AELs for emissions to water. These will only be applied if the substance/parameter is likely to be present eg an effluent which does not contain any phosphorus will not have the BAT-AEL for Total P applied.

Depending upon your activity, we may set additional emission limit values and/or monitoring requirements in your permit for other substances eg BOD, pesticide residues or other hazardous chemicals.

Q: I operate a dry process with no emissions to water except for ancillary effluent streams such as boiler blowdown and vehicle wash and surface water. Do the BAT-AELs in BAT 12 apply to these discharges?

A: The BAT-AELs are intended to apply to waste water generated from the main FDM activity and therefore do not apply to incidental effluents such as boiler blowdown or vehicle wash or to surface water discharge. We still want to know about these types of discharges in case we need to impose additional requirements in your permit to protect the environment.

Q: Will I get a limit for Chemical Oxygen Demand (COD) or Total Organic Carbon (TOC) for my effluent discharge?

A: The BAT-AELs in BAT 12 only apply to direct discharges to a water body. BAT 12 sets out a BAT-AEL for COD with a footnote that this may be replaced by a BAT-AEL for TOC and BAT 4 on emission monitoring makes clear that COD and TOC are alternatives.

Our approach is that the COD BAT-AEL will normally be used unless an operator requests otherwise. If so, they will be required to produce a site specific assessment to satisfactorily demonstrate the relationship between COD and TOC for that particular effluent.

Low toxicity COD test kits should be used where possible to eliminate the presence of toxic reagents in the standard COD test eg dichromate and mercury.

## Emissions to air

Q: Do BAT-AELs for emissions to air apply when the discharge occurs inside my factory?

A: The BAT-AELs only apply to direct (external) emissions to air. Where an emission source eg a grinder in the animal feed sector is vented internally then the BAT-AEL will not apply and we will not require any monitoring. Any necessary controls will be determined by health & safety legislation not environmental.

Q: Which emission points to air should I include on the emissions plan?

A: In your response to the Reg 61 notice you will list all your emission points to air in the relevant section of the Response Tool. However you need only identify the principal emission points on your plan. These will include emission sources which are associated with a BAT-AEL, boiler stack, tank vents and vacuum pumps.

Q: The FDM BREF does not have any BAT-AELs for emissions to air for my activity. Will any other emission limits be applied during the permit review?

A: The BREF review process intentionally did not establish BAT-AELs for every food and drink sub-sector. This was in part due to the sheer size and number of sectors covered by the FDM BREF and limitations of data collection.

This means there are some sectors e.g. malt manufacture and pet food which have point source emissions to air, typically of dust, without any corresponding BAT-AELs.

Where these emissions require control, we will set Emission Limit Values (ELVs) and associated monitoring requirements as part of the permit review process. In many cases, there will already be ELVs set for these substances in existing permits.

When setting ELVs during the permit review, we will take account of any existing permit limits and current performance against these limits, the characteristics of the substances to be abated and

typical abatement types used in these sectors. We will aim to apply ELVs on a consistent basis across a sector to ensure a level playing field unless a site specific approach is needed due to local factors.

## BAT for refrigeration systems

**Q: Will I need to replace my refrigeration system in order to comply with BAT 9 on low GWP refrigerants?**

**A:** A detailed answer is provided in the FDM sector Specific Interpretation guidance document. In summary you are not expected to replace refrigeration systems in good working condition for the sole purpose of complying with this BATc.

You should consider immediate opportunities for replacement of high GWP refrigerants with “retrofillable” alternatives with a lower GWP. For example R448A and R449A (GWP ~ 1400) are suitable alternatives to R404A (GWP 3922). Such non-capital improvements may be achieved within relatively short timescales.

For end of life system replacement you should provide proposals on how you will move to refrigerants with the lowest practical GWP. Wherever possible ultra low GWP refrigerants eg ammonia, carbon dioxide, pure Hydrofluoroolefins (HFOs) etc should be selected upon replacement of existing systems.

**Q: How will BAT 9 apply to rented refrigeration systems?**

**A:** Most temporary systems use HFCs and these systems will be required to comply with F-Gas obligations. This will be the main mechanism for reducing GWP as there will be a shift away from higher GWP refrigerants as the HFC phasedown progresses. Owners of rental equipment ought to opt for very low GWP refrigerants when purchasing new equipment.

Retrofilling of lower GWP refrigerants is unlikely to be a practical option for temporary rented systems and so the focus of BAT 9 will be to consider opportunities at the end of lease. We would expect operators to demonstrate how they will move towards the lowest practical GWP refrigerant at end of lease. The available options will depend upon the particular application and lower GWP refrigerants such as HFO or HFO/HFC blends should be considered in addition to the list of refrigerants in BAT 9 (water, ammonia and carbon dioxide).

In your Reg 61 information notice response, you should provide details of refrigerants used in rental equipment and the nature of the rental agreement i.e. short term/emergency or longer term. You should also describe how you aim to move towards use of lower GWP refrigerants.

## Site Condition Baseline Report

Q: As part of the original PPC application, we submitted a Site Condition Report which included the results of intrusive investigations of soil and ground water condition to “benchmark” the site condition. Is it ok to use this SCR as the Site Baseline Report or do I need to do more work?

A: If you have already carried out intrusive work to establish soil and ground water conditions at the site, it is likely that this work will be sufficient however you still need to complete the Stage 1 – 3 assessments, if not previously completed, to establish whether a baseline report is required. If the outcome of the assessment is that you do need to produce a baseline report ie there are Relevant Hazardous Substances (RHS), then you should refer to your previous intrusive work to see if this is sufficient to provide a baseline for the identified RHS. If it does, then submit a summary report demonstrating how the existing soil and/or ground water measurements enable a baseline to be defined for the RHS in the areas where pollution may occur.

The EU guidance [EC Commission Guidance \(2014/C 136/03\)](#) very clearly explains how to prepare a baseline report.

## Medium Combustion Plant

Q: What information do I need to provide on start-up and shutdown periods for Medium Combustion Plant (MCP)?

A: As part of the FDM review we will incorporate the emission limit values (ELVs) set out in the MCP Directive. These ELVs only apply to operation during stable combustion conditions and not during Start Up or Shut Down.

We are looking for confirmation that the duration of these non-stable periods are minimised and there is a clearly defined point at which the ELVs will apply. This may be expressed in terms of a % minimum operating load or description of the operational status of the plant. Your boiler maintenance contractor may be able to advise further.

Refer to the section on How to calculate your operating hours at the following link:

<https://www.gov.uk/guidance/medium-combustion-plant-mcp-comply-with-emission-limit-values>