Permitting Decisions- Environment Agency Initiated Variation

We have decided to issue an Environment Agency initiated variation for Indaver Solvents operated by Indaver Solvents Limited following a review of the permit in accordance with Environmental Permitting (England and Wales) Regulations 2016, regulation 34(1).

The variation number is EPR/BS3859IF/V006.

The permit variation was issued on 28/04/2025.

In addition to implementing the permit review, this variation also makes changes to the permit that were applied for by the operator under permit application EPR/BS3859IF/C008. This includes the consolidation of part of permit EPR/RP3531LP which has been transferred to Indaver Solvents Limited following the determination of permit application EPR/RP3531LP/T015. The decisions made regarding the partial transfer of the permit EPR/RP3531LP are explained in a separate decision document.

We consider in reaching this 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.

Permit Review

This Environment Agency has a duty, under the Environmental Permitting (England and Wales) Regulations 2016 (EPR), regulation 34(1), to periodically review permits. Article 21(3) of the Industrial Emissions Directive (IED) also requires the Environment Agency to review conditions in permits to ensure that they deliver compliance with relevant standards, within four years of the publication of updated decisions on Best Available Techniques (BAT) Conclusions.

We have reviewed the permit for this regulated facility and varied the permit to make a number of changes to reflect relevant standards and best practice. These changes principally relate to the implementation of our technical guidance https://www.gov.uk/guidance/chemical-waste-appropriate-measures-for-permitted-facilities and the relevant requirements of the BAT Conclusions for Waste Treatment which have been incorporated into our guidance. We have also assessed the chemical production activities against the BAT Conclusions for common waste water and waste gas treatment/management systems in the chemical sector published in 2016.

In this decision document, we set out the reasoning for the variation notice that we have issued.

It explains how we have reviewed and considered the techniques used by the operator in the operation and control of the plant and activities of the installation (operating techniques) against our technical guidance.

As well as considering the review of the operating techniques used by the Operator for the operation of the plant and activities of the installation, the consolidated variation notice takes into account and brings together in a single document all previous variations that relate to the original permit issue. Where this has not already been done, it also modernises the entire permit to reflect the conditions contained in our current generic permit template.

Permit consolidation

In addition to implementing the permit review, the transferred part of permit EPR/RP3531LP has been consolidated with EPR/BS3859IF. This includes the consolidation of solvent recovery activities and associated waste storage from both permits into activity AR1, and the addition of activity AR5 - Section 4.1 Part A(1) (a) (ii) – polymerisation to produce polyester resin. The operation of medium combustion plant and furnaces on the Brooks Lane Organic site have also been consolidated through the application made by the operator.

Under application EPR/BS3859IF/C008, the operator also applied to add a cooling water system and upgrade two reactor vessels to fit pressure swing technology to allow better recovery of some solvents.

We have assessed compliance with the relevant appropriate measures' guidance for the part of EPR/RP3531LP that has been transferred and consolidated with EPR/BS3859IF.

Purpose of this document

This decision document provides a record of the decision making process. It:

- explains how the Environment Agency initiated variation has been determined;
- summarises the decision making process in the decision considerations section to show how the main relevant factors have been taken into account;
- highlights key issues in the determination.

Read the permitting decisions in conjunction with the environmental permit and the variation notice.

Key issues of the decision

Permitted activities

Activities relating to the regeneration of solvents and chemical activities from the Brooks Lane Organics site operated by BIP Environmental have been transferred from permit EPR/RP3531LP by the partial transfer of this permit and consolidated with permit EPR/BS3859IF Brooks Lane Organics, the Science Park site (operated by Indaver Solvents Limited).

The following table explains where each permitted activity in the consolidated permit originates, including activities AR13 to AR17 which have been added to the permit as a result of the permit review process:

Activity listed in the consolidated EPR/BS3859IF permit	Activity description	Activity added/ amended/ removed/ unchanged Activity reference in EPR/BS3859IF/V005 where applicable	Additional information
AR1	Section 5.3 Part A(1)(a)(v) Waste solvent reclamation and regeneration.	Amended by EPR/BS3859IF/C008 Previous reference A8	Waste solvent reclamation activities from both permits (EPR/RP3531LP and EPR/BS3859IF) have been consolidated under AR1.
AR2	Section 4.1 Part A(1)(a)(ii) Polymerisation to produce polyester resin	Transferred from EPR/RP3531LP	-

Activity listed in the consolidated EPR/BS3859IF permit	Activity description	Activity added/ amended/ removed/ unchanged Activity reference in EPR/BS3859IF/V005 where applicable	Additional information
AR3 to AR9	Section 4.1 Part A(1)(a) - (i), (ii), (iii), (iv), (v), (vi), (x) Production of fine chemicals under a multi-product protocol	Unchanged Previous reference A1 to A7	-
AR10	Section 5.6 Part A(1)(a)(i) Temporary storage of hazardous waste	Amended activity reference. Previous reference A11	Waste storage activities from both permits (EPR/RP3531LP and EPR/BS3859IF) have been consolidated under AR10.
AR11	Directly associated activity Steam and heat supply	Transferred from EPR/RP3531LP	Use of existing boilers and furnaces for indirect heating of reactor vessels.
AR12	Directly associated activity Provision of cooling water	Added by application EPR/BS3859IF/C008	-
AR13	Directly associated activity Raw material handling and storage	Added as a result of EPR/BS3859IF/V006 (permit review) and amended by EPR/BS3859IF/C008	Added because raw materials are used in the chemical production processes and in the solvent recovery process (amended by the part transfer and consolidation with EPR/RP3531LP).

Activity listed in the consolidated EPR/BS3859IF permit	Activity description	Activity added/ amended/ removed/ unchanged Activity reference in EPR/BS3859IF/V005 where applicable	Additional information
AR14	Directly associated activity Surface and process water collection and storage.	Added as a result of EPR/BS3859IF/V006 (permit review) and amended by EPR/BS3859IF/C008	Added to account for the existing collection of surface and process water and discharge of surface water/boiler blowdown to foul sewer (amended by the part transfer and consolidation with EPR/RP3531LP).
AR15	Directly associated activity Abatement system	Added as a result of EPR/BS3859IF/V006 (permit review) and amended by EPR/BS3859IF/C008	Added to account for the existing use of a wet scrubber to abate emissions from reactor vessels. Amended to account for the use of a thermal oxidiser and wet scrubber/atmospheric absorber present in the part of EPR/RP3531LP transferred and consolidated under EPR/BS3859IF/C008.
AR16	Waste operation R2 solvent reclamation and regeneration	Added as a result of EPR/BS3859IF/V006 (permit review) and amended by EPR/BS3859IF/C008	Added because non-hazardous waste solvents were previously permitted to be recovered [note 1] under EPR/BS3859IF but a waste operation was not present in the

Activity listed in the consolidated EPR/BS3859IF permit	Activity description	Activity added/ amended/ removed/ unchanged Activity reference in EPR/BS3859IF/V005 where applicable	Additional information
			permit. (amended by the part transfer and consolidation with EPR/RP3531LP).
AR17	Waste operation R13 temporary storage of non-hazardous wastes	Added as a result of EPR/BS3859IF/V006 (permit review) and amended by EPR/BS3859IF/C008	Added because non-hazardous waste solvents were previously permitted to be stored [note 1] pending transfer under EPR/BS3859IF but a waste operation was not present in the permit (amended by the part transfer and consolidation with EPR/RP3531LP).
N/A – removed	Section 5.3 Part A (1)(a)(iv) Repackaging (bulking) of waste oil and waste solvents prior to on-site treatment	Removed as a result of EPR/BS3859IF/V006 (permit review) Previous reference A9	Removed because the bulking takes place as part of the treatment activity, and upon review, we do not consider it to be a separate activity. It has been integrated within AR1.
N/A – removed	Section 5.3 Part A (1)(a)(x) Oil re-refining or other re-uses of oil	Removed as a result of EPR/BS3859IF/V006 (permit	Removed after the operator confirmed this activity is no longer

Activity listed in the consolidated EPR/BS3859IF permit	Activity description	Activity added/ amended/ removed/ unchanged Activity reference in EPR/BS3859IF/V005 where applicable	Additional information
		review) Previous reference A10	taking place on site and is not required on the permit.

Note 1: non-hazardous waste solvents were previously listed in Table S2.2 in EPR/BS3859IF and incorrectly allocated to hazardous waste storage/treatment activities.

Cooling water system and pressure swing technology

The new cooling system provides cooling to the waste solvent treatment vessels/equipment (note: each treatment 'vessel' comprises a separate set of equipment used to distill the waste solvents under pressure and/or vacuum including distillation columns. These vessels are listed within the list of equipment provided by the operator and are listed under the operating techniques in Table S1.2 in the permit). Cooling water from three cooling tanks (holding 40m^3 each) is sent to shell-and-tube heat exchangers located next to the solvent treatment vessels. Heat is transferred from the waste solvent to the cooling water without the two liquids coming into contact with each other. The heated cooling water is returned to the cooling towers where it is cooled using an air fan and percolation system so it can be re-used. A small quantity of dosing chemicals are added to prevent bacterial growth. The water treatment uses a purge system where a proportion of the water is blown down and sent to foul sewer. Indaver Solvents Limited have applied to increase their trade effluent discharge consent to 60m^3 per day to account for the extra volume of effluent from this process. We are satisfied that given the non-hazardous nature of the effluent and through compliance with their discharge consent, the effluent will not have a negative impact upon the receiving water body. There are no emissions to air or fugitive emissions expected from the process.

This permit also enables the use of pressure swing technology in two of the treatment vessels. This is an upgrade on the existing entrainer technology and will enable better separation of azeotropic mixtures (mixtures of liquids that cannot be separated by boiling point). The process is more efficient, increasing the recovery of waste solvents which in turn will reduce the volume of volatile compounds from emissions to air from the process. The wastewater generated will be less contaminated with solvents so we are satisfied that the implementation of this technology will likely lead to a reduction in environmental impact.

Infrastructure and waste storage/treatment limits

The only other changes to the infrastructure permitted on site are related to the transfer of part of EPR/RP3531LP and consolidation with EPR/BS3859IF under EPR/BS3859IF/C008. Tanks, treatment vessels, waste storage areas and other equipment required to operate the solvent reclamation and regeneration activities and chemical production activities taking place at the Brooks Lane site have been transferred across to the consolidated permit under this application and are otherwise unchanged. The new list of tanks and equipment used at the site is defined in the operating techniques Table S1.2 in the permit.

We have accepted the operator's arguments for the required throughput for the solvent reclamation activity. Other than the introduction of the pressure swing technology and the introduction of the cooling system which will have a minimal impact on the overall throughput (other than to help the plant run more efficiently), there is no change to the infrastructure leading to an increase in throughput. The consolidation of the solvent recovery activities from both permits results in an increase in throughput compared to the original permit whilst the requirement for waste to be formally accepted from the remaining part of the EPR/RP3531LP permit, means that an additional waste stream is now included in the throughput calculation.

Emission Points

The emission points present in the permit have been varied as a result of the permit review (EPR/BS3859IF/V006) and consolidation with EPR/BS3859IF (EPR/BS3859IF/C008).

We have made the changes to the emission points to air (Table S3.1) as explained in the following table:

Emission Point referred to in the consolidated permit	Source of emission	Emission point added/ amended/ removed/ unchanged Emission point reference in EPR/BS3859IF/V005 where applicable	Additional information
A1	Emissions from solvent treatment process in process building 1 abated via wet scrubber	Unchanged	-
A2	Emissions from solvent treatment process in process building 2 note 2 abated using thermal oxidiser	Added from EPR/RP3531LP	(reference in EPR/RP3531LP/V008 is A2)
A3	Emissions from solvent treatment process in process building 2 note 2 abated using atmospheric absorber	Added from EPR/RP3531LP	(reference in EPR/RP3531LP/V008 is A37)
A4	Emissions from standby boiler fuelled on gas oil (existing MCP)	Added from EPR/RP3531LP	(reference in EPR/RP3531LP/V008 is A1)
A5	Emissions from primary boiler fuelled on gas oil and processed boiler fuel (existing MCP)	Added from EPR/RP3531LP	(reference in EPR/RP3531LP/V008 is A1a)
A6	Emissions from oil (transfer medium) furnaces fired using gas oil (<1 MWth).	Added from EPR/RP3531LP	(reference in EPR/RP3531LP/V008 is A3)

Emission Point referred to in the consolidated permit	Source of emission	Emission point added/ amended/ removed/ unchanged Emission point reference in EPR/BS3859IF/V005 where applicable	Additional information
A7 to A9	Vents from 3 waste solvent storage tanks located in process building 2 note 2	Added from EPR/RP3531LP	Existing emission points not listed in existing permit. Added upon review.
A10 to A42	Vents from 33 waste solvent storage tanks	Added from EPR/RP3531LP	(reference in EPR/RP3531LP/V008 is A4-A36)
A43	Vent from boiler fuel storage tank VT37	Added from EPR/RP3531LP	Existing emission points not listed in existing permit. Added upon review.
A44 to A53	Vents from 10 waste solvent storage tanks	Added from EPR/RP3531LP	(reference in EPR/RP3531LP/V008 is A38 – A47)
A56 to A67	Pressure release valves from treatment vessels in process building 2 note 2	Added from EPR/RP3531LP	Existing emission points not listed in existing permit. Added upon review.
A68 to A70	Vents from waste water storage tanks.	Amended by permit review process	Existing emission points not listed in existing permit. Added upon review.
A71 to A78, A81 to A86	Vents from 14 waste solvent storage tanks.	Amended by permit review process Previous reference A3	Only one emission point listed originally. The site has several existing storage tanks which are vented to atmosphere not just one so this is corrected by the permit review.

Emission Point referred to in the consolidated permit	Source of emission	Emission point added/ amended/ removed/ unchanged Emission point reference in EPR/BS3859IF/V005 where applicable	Additional information
A87	Extraction filter from loading of raw materials into resin production vessel	Added from EPR/RP3531LP	Existing emission point not listed in existing permit. Added upon review.
LFO tank	Vents from two gas oil storage tanks	Added from EPR/RP3531LP	Existing emission point not listed in existing permit. Added upon review.
not in permit: A54 to A55	Vents from 2 waste solvent storage tanks (originally mis-labelled C23 and C24 but operator has confirmed these should be C53 and C54)	-	The operator has confirmed these tanks are non-operational and cannot currently be used.

Note 2: Process building 2 has been added to the permit by the part transfer and consolidation and is labelled in the site plan in Schedule 7.

We have added two emission points to water (other than sewer) in Table S3.2 from the part of the EPR/RP3531LP that has been transferred and consolidated with EPR/BS3859IF. These are:

- W1 – which refers to uncontaminated surface water run-off to the drain in the car park. No waste is stored or treated in this area. The emission is to surface water sewer.
- W2 – which refers to uncontaminated run-off from building rooftop downpipe. The emission is to surface water sewer.

We have amended emission point S1 after reviewing this emission, so the source is limited to surface water run-off and blowdown from the steam boilers/ cooling towers according to the operators' description of this emission. Because of the consolidation of the permits under EPR/BS3859IF/C008, there will only need to be one emission point to sewer going forward – the position of this has been clarified in the consolidated permit.

Limits and monitoring

Emissions to air:

We have added the emission limit of 30 mg/m^3 TVOC (total volatile organic compounds) to emission point A1 and emission point A3. The emission limit has been added to ensure compliance with the BAT-AEL for channelled emissions of TVOC from the regeneration of spent solvents (Waste Treatment BAT Conclusions Table 6.9). The emission limit of 20 mg/m^3 is retained for emission point A2. The monitoring frequency for emission points A1, A2 and A3 has been changed to once every 6 months in accordance with BAT 8. We have added the requirement to monitor speciated VOCs in accordance with e.g. Chemical Waste: appropriate measures for your permitted facility 7.1.1.

The operator is not currently complying with the limit of 30mg/m^3 TVOC on the atmospheric absorber stack or the wet scrubbers. The operator has applied to vary their permit to also abate their emissions using a steam boiler. This variation is being determined separately. The operator must demonstrate compliance with these limits going forward.

Emissions to sewer:

The emission comprises surface water run-off and boiler/cooling tower blowdown only. The BAT-AELs are not applicable as no process effluent is discharged to sewer. We have removed the previous requirement to monitor the discharge volume, flow rate, pH, organic nitrogen content and hydrocarbon content. These will be assessed by the sewage undertaker as per the existing trade effluent discharge consent(s) and do not require additional monitoring to be specified in the permit. We have added the requirement to visually assess the presence of oil and grease prior to discharge on a daily basis. This will help to ensure that contaminated effluent does not get discharged to foul sewer.

EWC waste codes and tables

The operator indicated that as part of the partial transfer of the waste solvent reclamation activities from EPR/RP3531LP and consolidation with EPR/BS3859IF (under EPR/BS3859IF/C008) they wished to retain the waste code list shown in Table S3.6 in EPR/RP3531LP/V008 and combine it with the wastes present in EPR/BS3859IF. In the Schedule 5 notice sent to the operator on 25/11/2024 we queried several waste codes that we considered may not contain solvents in the consolidated list that could be recovered or be suitable for the proposed treatment. The operator agreed to the removal of the following hazardous waste codes from the consolidated permit:

- 13 01 01* hydraulic oils containing PCBs

- 13 03 01* insulating oils or heat transmitting oils containing PCBs
- 14 06 01* chloroflurocarbons, HCFC, HFC
- 18 01 06* chemicals consisting of or containing dangerous substances
- 18 01 08* cytotoxic and cytostatic medicines
- 18 01 10* amalgam waste from dental care.

The operator agreed to the removal of the following non-hazardous waste codes from the consolidated permit:

- 18 01 01 sharps (except 18 01 03)
- 18 01 04 wastes whose collection and disposal is not subject to special requirements in order to prevent infection (for example dressings, plaster casts, linen, disposable clothing, diapers)
- 18 01 07 chemicals other than those mentioned in 18 01 06
- 18 01 09 medicines other than those mentioned in 18 01 06

The operator argued that the other waste codes that we queried will contain waste solvents that can be recovered. We have accepted this argument and accept that where the remaining waste codes contain waste solvents, the waste would be suited to the proposed treatments.

In the consolidated permit, the lists of wastes are split into treatment of hazardous waste (by solvent reclamation/regeneration), temporary storage of hazardous waste, treatment of non-hazardous waste (by solvent reclamation/regeneration), and temporary storage of non-hazardous wastes.

Improvement and pre-operational conditions

Improvement conditions

We have transferred to the consolidated permit any outstanding improvement conditions that clearly relate to the solvent reclamation/recovery process and land being transferred including directly associated activities and equipment (tanks and bunds etc.). We have relabelled the existing improvement conditions in order of date from the existing permits. We have pragmatically considered existing improvement conditions to determine if they are still required, are superseded by the appropriate measures guidance or superseded by an improvement condition we have added to the permit as a result of the permit review.

We have added the following improvement conditions to the permit as a result of the transfer and permit review as explained below:

- IC14 – review of wastewater storage prior to discharge to foul sewer. We observed on a visit to the site on 21/05/2024 that wastewater stored on site was visibly contaminated and smelt of organics. Given that the permitted discharge is of surface water run-off and boiler/cooling water

blowdown, we have added IC14 which requires the operator to identify any sources of contamination of this effluent stream and revise their procedures to prevent (or minimise where not practicable) contamination accordingly. This also ensures compliance with chemical waste: appropriate measures guidance e.g. 4.19. *You must keep clean rainwater and clean cooling water separate from wastes and waste waters.*

- IC15 – MPP revision. The multi-product protocol at the site has not been reviewed since 2005. Our guidance on the use of a multi-product protocol has been updated since then and was last revised in 2019. This improvement condition will ensure that the multi-product protocol is reviewed against our latest guidance and remains fit for purpose.
- IC16 to 19 have been added as a result of the permit review process (see Table 1 – summary of our assessment of the operator's Reg61 response below)
- IC20 – labelling of containers. During our site visit on 21/05/2024 we observed that several containers were labelled multiple times with conflicting information. This is not in accordance with our guidance: chemical waste: appropriate measures for permitted facilities. We have included IC20 to ensure that the operator reviews their processes for labelling containers and provides an updating procedure to the Environment Agency for approval.
- IC21 – storage of waste for longer than 6 months. During our site visit on 21/05/2024 we observed several IBCs seemingly containing hazardous waste that was older than 6 months. This is not in accordance with our guidance: chemical waste: appropriate measures for permitted facilities. The operator explained that the waste had been through the waste treatment process, could now be sold as product and is sometimes stored for longer than 6 months before re-use in the treatment process as a raw material. We have set IC21 requiring the operator to demonstrate compliance with the appropriate measures, specifically 4.15 and apply for end-of-waste status for any treated waste/product they wish to re-use in the waste treatment process.
- IC22 – see review of chemical activities below.
- IC23 – added to permit the operator to use processed boiler fuel. see section on pre-operational conditions below

The following table describes the origin of each of the improvement conditions in the consolidated permit:

Improvement Condition	Existing reference (where applicable) in previous permit	Additional information
IC1	IC12 from EPR/RP3531LP/V011	Superseded by the requirements of the appropriate measures' guidance.

Improvement Condition	Existing reference (where applicable) in previous permit	Additional information
IC2	IC14 from EPR/RP3531LP/V011	Superseded by IC16. Dichloromethane is not necessarily more hazardous than other substances stored and treated on site. The H1 assessment requirement in IC16 will ensure that the fate and impact of any emission from the treatment of storage of solvents and solvent containing wastes shall be assessed and where a risk to the environment cannot be ruled out, preventative measures are taken.
IC3	IC15 from EPR/RP3531LP/V011	Superseded by IC18. There were several existing ICs in the permits relating to bunding and containment which have been effectively consolidated into one condition in IC18.
IC4	IC16 from EPR/RP3531LP/V011	Superseded by IC18
IC5	IC17 from EPR/RP3531LP/V011	Superseded by IC18
IC6	IC16 from EPR/BS3859IF/V005	Superseded by the requirements of the appropriate measures' guidance.
IC7	IC17 from EPR/BS3859IF/V005	Superseded by the requirements of the appropriate measures' guidance.
IC8	IC18 from EPR/BS3859IF/V005	Superseded by the requirements of the appropriate measures' guidance.
IC9	IC19 from EPR/BS3859IF/V005	Superseded by IC18
IC10	IC20 from EPR/BS3859IF/V005	Superseded by IC18
IC11	IC21 from EPR/BS3859IF/V005	Superseded by IC18
IC12	IC22 from EPR/BS3859IF/V005	Superseded by IC18
IC13	IC23 from EPR/BS3859IF/V005	Superseded by the requirements of the appropriate measures' guidance.
IC14 to IC23	Added by this permit transfer, consolidation and variation	See discussion above.

Pre-operational conditions

Table S1.4 in EPR/BS3859IF/V005 contained two pre-operational conditions relating to new storage tanks. The operator has confirmed these tanks were never built and are not intended to be built going forward. We have removed the

pre-operational conditions from the consolidated permit. The site plan and operating techniques Table S1.2 have been updated accordingly (list of storage tanks *'request for information'* dated 10/01/2025)

Table S1.4A in EPR/RP3531LP/V008 contained 6 pre-operational conditions. These all relate to activities carried out by the part of the site which has not been transferred and consolidated. Table S1.4B (revised in EPR/RP3531LP/V010) contained pre-operational conditions PO7 to PO10. Pre-operational conditions PO7 to PO9 relate to activities carried out by the part of the site which has not been transferred and consolidated.

Processed boiler fuel (PO10 in EPR/RP3531LP/V010):
The operator submitted their methodology for ensuring adherence to the Processed boiler fuel specification listed in PO10, Table S1.3 and explained it's importance to their operation. We have accepted this revised methodology, and it is listed in Table S1.2 under 'Boiler Fuel Response V2' dated 07/04/2025. However, the details of monitoring of metals were limited and whilst the operator proposed quarterly monitoring of metals going forward, they did not supply evidence in the form of data from their analyses to support this argument. We have set improvement condition IC23 in the permit requiring the operator to devise a monitoring programme and monitor metal concentrations in their processed boiler fuel initially on a more regular basis (such as per batch) to demonstrate that quarterly monitoring is appropriate.

Review of chemical activities

The consolidated permit contains several Section 4 Part A chemical industry activities. Activity AR2 relates to the production of polyester resin in a condensation polymerisation reaction. This takes place in a dedicated vessel (SS9) contained in process building 2. Activities AR3 to AR9 relate to the production of fine chemicals under a multi-product protocol.

We have reviewed these activities as part of the Environment Agency-led variation and permit review EPR/BS3859IF/V006 against BAT and specifically the BAT Conclusions for common wastewater and waste gas treatment/ management systems in the chemical sector (CWW). There is some overlap between this set of BAT Conclusions and the requirements of the Waste Treatment BAT Conclusions. For example, periodic monitoring of fugitive emissions is required under both sets of BATC's as are odour and noise controls (where odour and noise emissions can be expected or are substantiated). Process effluent from chemical production is tankered off-site to a suitable waste contractor and is not treated on-site so BATCs relating to wastewater treatment and emissions are not applicable. Air emissions are channelled to an abatement system along with emissions from the solvent treatment process and will be limited by the emission limits applicable to the solvent treatment process.

The operator submitted an assessment of the chemical production operations against CWW; this has been uploaded to the public register and we agree with most of their comments. However, the operator has acknowledged that the chemical activities have not been previously reviewed against BAT and whilst the operator has an environmental management system in place, we do not believe the requirements of the chemical production activities are specifically addressed within this. We have included improvement condition IC22 in the permit which requires the operator to review their procedures for the chemical production activities and provide detail as required by BAT Conclusion 1 and 2 in their environmental management system.

The operator submitted their original multi-product protocol to us as part of their response to our request for information dated 29/11/2024. However, the existing MPP is dated from 2005 and our guidance 'Guidance on the use of a Multi-Product Protocol MPP at Chemical Production Installations' has been updated since then. Furthermore, the operator has acknowledged that the multi-product protocol needs to be updated to reflect the operations taking place on site. We have added improvement condition IC15 to the permit to ensure that the operator reviews their multi-product protocol and addresses key aspects such as an 'up-to-date "worst case" environmental assessment', 'justification of the range and scale of the procedures the protocol covers' and the inclusion of the MPP into the operators' environmental management system.

Process, ambient air monitoring, reporting and annual limits

We have added Table S3.4 in the permit which lists the process monitoring requirements for the facility.

- The requirement to monitor fugitive emissions from potential sources is listed in chemical waste: appropriate measures for permitted facilities section 6 (for example, 6.2.6 *'You must set up a leak detection and repair programme…'*) and BAT conclusion 14 h for facilities treating waste solvents and has been included to ensure compliance with this guidance.
- The requirement to assess the efficiency of carbon filters (where applicable) is specified in chemical waste: appropriate measures for permitted facilities section 6 specifically #6.1.6 *'Your procedures must make sure you correctly install, operate, monitor and maintain abatement equipment…'* and has been included to ensure compliance with this guidance.
- The requirement to monitor the temperature of the thermal oxidiser to ensure that the temperature does not fall below 850^0C (therefore preventing/minimising the formation of dioxins and furans) has been transferred from EPR/RP3531LP/V008 and consolidated in the current

permit.

We have added Table S3.5 in the permit which requires the operator to monitor fugitive emissions of VOCs in accordance with BAT Conclusion 9 and chemical waste: appropriate measure 6.2.6.

We have not included annual limits in the consolidated permit. Annual limits were previously specified in EPR/RP3531LP/V008 Table S4.3 and have not been transferred to the consolidated permit. The annual limits specified consisted of restrictions on emissions to air of sulphur dioxide and oxides of nitrogen (likely from the operation of combustion plant), and restrictions on emissions of mercury and cadmium to water. To ensure that emissions are adequately assessed, we have included IC 16 in the consolidated permit requiring the operator to complete a H1 assessment/modelling to assess the impact and fate of air emissions from the facility upon human and environmental receptors in accordance with our guidance and propose limits and additional abatement for any emission that could have a significant impact. In addition, the requirement to use gas oils with less than 0.1% w/w sulphur content added to Table S2.1 (added to ensure compliance with The Sulphur Content of Liquid Fuels (England and Wales) Regulations 2007) will prevent high volumes of sulphur dioxide being emitted. The operator has confirmed that going forward, the emission to foul sewer will only consist of surface water run-off and blowdown from cooling towers/boilers and is controlled by the operator's trade effluent discharge consent.

We are satisfied therefore that these measures will ensure equivalent or better environmental protection compared to the use of annual limits in the permit.

We have added monitoring requirements for annual production and treatment to Table S4.2 to ensure that we can assess compliance with the limits on waste tonnages stated in the permit in Table S1.1 and Tables S2.2 to S2.5 and we have a record of the volume of production on site. We have added monitoring requirements for the volume of effluent tankers off-site so that we have a record of the volume of process effluent that is disposed of via this route as opposed to via sewer.

Key issues relating to the Environment Agency led variation – permit review (EPR/BS3859IF/V006)

We have carried out an Environment Agency initiated variation to the permit following a permit review as required by legislation to ensure that permit conditions deliver compliance with relevant legislative requirements and appropriate standards to protect the environment and human health.

The Industrial Emissions Directive (IED) came into force on 7 January 2014 with the requirement to implement all relevant Best Available Techniques (BAT) Conclusions as described in the Commission Implementing Decision. Article 21(3) of the IED requires the Environment Agency to review conditions in permits

that it has issued and to ensure that the permit delivers compliance with relevant standards, within four years of the publication of updated decisions on Best Available Techniques (BAT) Conclusions.

The BAT Conclusions for Waste Treatment (the BREF) was published on 17 August 2018 following a European Union wide review of BAT, implementing decision (EU) 2018/1147 of 10 August 2018. Relevant existing facilities were expected to be in compliance with the BAT Conclusions within 4 years (i.e. by August 2022).

On 18 November 2020, Chemical Waste: appropriate measures for permitted facilities guidance was published on gov.uk. This technical guidance explains the standards that are relevant to regulated facilities with an environmental permit to treat or transfer chemical waste, providing relevant standards (appropriate measures) for those sites and incorporating the relevant requirements of the BAT Conclusions.

We issued a notice under regulation 61(1) of the Environmental Permitting (England and Wales) Regulations 2016 (a Regulation 61 Notice) on 17/11/2021 requiring the operator to provide information to confirm that the operation of their facility currently meets, or how it will subsequently meet, the standards (appropriate measures) described in our technical guidance.

The notice required that where the revised standards are not currently met, the operator should provide information that:

- Describes the techniques that will be implemented to ensure operations meet the relevant standards and by when, or
- Explains why they are not applicable to the facility in question, or
- Justifies why an alternative technique is appropriate and will achieve an equivalent level of environmental protection to the standards described in our guidance

The standards described in our technical guidance are split into 7 chapters:

- General management appropriate measures
- Waste pre-acceptance, acceptance and tracking appropriate measures
- Waste storage, segregation and handling appropriate measures
- Waste treatment appropriate measures
- Emissions control appropriate measures
- Emissions monitoring and limits appropriate measures
- Process efficiency appropriate measures

We have set emission limit values (ELVs) and monitoring requirements for relevant substances in line with our technical guidance and the BAT Conclusions for Waste Treatment, unless a tighter, i.e. more stringent, limit was previously imposed and these limits have been carried forward.

The Regulation 61 notice required the operator to confirm whether they could comply the standards described in each of these chapters. Table 1 below provides a summary of the response received and our assessment of it. The overall status of compliance with the standards (appropriate measures) is indicated in the table as:

NA – Not Applicable

CC – Currently Compliant

FC – Compliant in the future (through improvement conditions set in permit)

NC – Not Compliant

In accordance with Article 22(2) of the Industrial Emissions Directive, the Regulation 61 notice asked the operator to provide a soil and groundwater risk assessment, along with a baseline report or summary report confirming the current state of soil and groundwater contamination, where listed activities are undertaken that involve the use, production of release of relevant hazardous substances.

The Regulation 61 notice also asked the operator to confirm whether they operate a medium combustion plant or specified generator (as per Schedule 25A or 25B of EPR 2016) and whether they had considered how their operations could be affected by climate changes (e.g. through a climate change adaptation plan).

Our assessment of the responses received from the operator regarding soil and groundwater risk assessment, medium combustion plant and specified generators, and consideration of climate change are also summarised in Table 1.

The Regulation 61 notice response from the Operator was received on 21/11/2023.

We considered that the response did contain sufficient information for us to commence determination of the permit review.

Although we were able to consider the Regulation 61 notice response generally satisfactory at receipt, we needed more information in order to complete our permit review assessment. We requested this by email and the operator provided further information on 01/03/2024, 06/02/2025 and 08/04/2025. We made a copy of this information available on our public register.

Table 1 – Summary of our assessment of the operator's Reg 61 response

Appropriate measures	Compliance status	Assessment of the installation's compliance with relevant standards (appropriate measures) and any alternative techniques proposed by the operator
General management appropriate measures	FC	The operator identified several improvements relating to general management in their initial response which have now been rectified as stated in the response received on 08/03/2024 to our request for information dated 26/01/2024. The operator has their own management system in place accredited to ISO 9001 and ISO 14001. We have concerns regarding the labelling of containers for storage. We have identified several occasions where containers where mis-labelled or labelled multiple times with conflicting information. We have set IC20 in the permit requiring the operator to review their management system and staff training to ensure that all waste containers are labelled clearly with the required information.
Waste pre-acceptance, acceptance and tracking appropriate measures	CC	The operator stated in their response that they are compliant with this section of the measures. We have no reason to consider that the operator is not currently compliant with the measures stated in this section. Compliance with the appropriate measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.
Waste storage, segregation and handling appropriate measures	FC	The operator stated in their response that they are compliant with this section of the measures. However, we have concerns relating to the bunding and containment around storage areas and the construction of some of the existing tanks and pipework (IC20: see discussion on improvement conditions in key issues section above) and the contamination of effluent with organic waste (IC14). We have concerns relating to emissions from cold storage tanks which vent to atmosphere and are currently unabated and we also found that waste containers are mis-labelled on site. The operator has explained that they have started an improvement programme relating to tank and infrastructure upgrades which will fulfil the requirements of the appropriate measures. We have set the following improvement conditions relating to this section of the guidance, IC17, IC18 and IC20. Compliance with the rest of the appropriate measures in this section of the guidance to which an improvement condition has not been applied, has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.
Waste treatment appropriate measures	CC	The operator stated in their response that they are compliant with this section of the measures. We have no reason to consider that the operator is not currently compliant with the measures stated in this section. Compliance with the appropriate measures in this section of the guidance has been

		incorporated into the varied permit through the updated operating techniques listed in Table S1.2.
Emissions control appropriate measures	FC	The operator stated in their response that they are compliant with this section of the measures. Air emissions from recovery of waste solvents are abated and there are no emissions of process effluent to sewer (note: emissions from storage tanks are not abated – see discussion of Waste storage, segregation and handling appropriate measures above). However, the site did not provide an up-to-date emissions risk assessment (measure 6.1.3). The operator does not have a written 'leak detection and repair programme' in place to our knowledge (although they have purchased equipment which will allow them to carry out ambient air monitoring). We have included the following improvement conditions in the permit: IC16 and IC19. Compliance with the rest of the appropriate measures in this section of the guidance to which an improvement condition has not been applied, has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.
Emissions monitoring and limits appropriate measures	NC	The operator is not currently compliant with this section of the appropriate measures. As explained in the key issues section under emission points, the operator runs several different abatement systems for emissions to air. Whilst they are compliant with the limit on the permit for the thermal oxidiser, they are not currently compliant with the BAT-AEL for the atmospheric absorber stack or the wet scrubber. The operator must demonstrate compliance with this limit on all emissions relating to solvent treatment going forward. Compliance with the rest of the appropriate measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.
Process efficiency appropriate measures	CC/FC	The operator stated they were not compliant with this section of the measures in their original Reg61 response but were moving towards CSRD reporting which would include all reporting of energy, water and waste across the business. We have no reason to consider that the operator will not be compliant with this measure going forward. Compliance with the rest of the appropriate measures in this section of the guidance to which an improvement condition has not been applied, has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.
Reg 61 requirement	**Assessment of response received**	

Soil and groundwater risk assessment	The operator indicated monitoring was carried out at the end of 2022 following the sale of the businesses to Indaver. Monitoring will be carried out every 5 years for groundwater and every 10 years for soil as per the conditions of the permit (and in accordance with the requirements of IED).
Medium combustion plant and specified generators	The operator did not have any combustion plant on their permit when the Reg61 Notice was sent. However, combustion plant is being added to the permit as a result of the partial transfer of EPR/RP3135LP and consolidation with EPR/BS3859IF. The combustion plant has been assessed as part of the partial transfer and consolidation of the permits. The steam boilers are existing MCPs but are each less than 5MWth so emission limits and monitoring requirements only apply from 2030. The furnaces used to heat oil (transfer medium) are less than 1MWth so MCPD does not apply.
Climate change	Submission of climate change risk assessment is no longer application requirement. It now forms a part of the operator's EMS and will be reviewed within compliance assessment.
Summary of other changes made to the permit as a result of our assessment of the Reg 61 response	
Change	**Reason for change**
Note: Other changes made to the permit as a result of the applications made by the operator and the agency-led variation are described in the key issues section above.	

Variation application made by operator

This section summarises the key issues that we considered in relation to the partial transfer of permit EPR/RP3531LP/T015 and consolidation with EPR/BS3859IF under EPR/BS3859IF/C008.

Decision Considerations

Confidential information

A claim for commercial or industrial confidentiality has not been made.

The decision was taken in accordance with our guidance on confidentiality.

Identifying confidential information

We have not identified information provided as part of the application that we consider to be confidential.

The decision was taken in accordance with our guidance on confidentiality.

The regulated facility

We considered the extent and nature of the facilities at the site in accordance with RGN2 'Understanding the meaning of regulated facility', Appendix 2 of RGN2 'Defining the scope of the installation' and Appendix 1 of RGN 2 'Interpretation of Schedule 1'. Our decision making is summarised in the Key Issues section of this document.

The extent of the facilities are defined in the site plan and in the permit. The activities are defined in table S1.1 of the permit.

The site

The operator has provided plans which we consider to be satisfactory.

These show the extent of the site of the facility including the discharge points.

The plan is included in the permit.

Nature conservation, landscape, heritage and protected species and habitat designations

We have checked the location of the application to assess if it is within the screening distances we consider relevant for impacts on nature conservation,

landscape, heritage and protected species and habitat designations. The application is not within our screening distances for these designations.

Operating techniques

We have reviewed the techniques used by the operator and compared these with the relevant guidance notes and we consider them to represent appropriate techniques for the facility.

The operating techniques that the applicant must use are specified in S1.2 in the environmental permit.

Updating permit conditions during consolidation

We have updated permit conditions to those in the current generic permit template as part of permit consolidation. The conditions will provide the same level of protection as those in the previous permits.

Changes to the permit conditions

We have varied the permit as stated in the variation notice.

Improvement programme

We have included an improvement programme in the permit. This is explained in the key issues section of this document.

Emission limits

Emission limits have been added and amended by the application made by the operator to ensure that the operator complies with the applicable BAT-AELs for regeneration of solvents described in the Waste Treatment BAT Conclusions. This is explained in the key issues section of this document.

Monitoring

Monitoring requirements have been added and amended by the application made by the operator to ensure compliance with monitoring requirements listed in the Waste Treatment BAT Conclusions. This is explained in the key issues section of this document.

Reporting

We have added reporting of emissions from emission points A2 and A3 (emission limits and monitoring are discussed in key issues section), process monitoring and ambient air monitoring in Table S4.1. This will ensure compliance with our

guidance chemical waste: appropriate measures for permitted facilities.

We have amended/updated reporting requirements for annual production/treatment Table S4.2 to ensure compliance with the limits stated in Table S1.1 and Tables S2.2 to S2.5, for each activity.

We have removed the requirement in Table S4.3 to report the total mass release of VOCs as this will be covered by the added annual monitoring of fugitive emissions.

Growth Duty

We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 100 of that Act in deciding whether to grant the variation of this permit.

Paragraph 1.3 of the guidance says:

“The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation.”

We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise non-compliance and its purpose is not to achieve or pursue economic growth at the expense of necessary protections.

We consider the requirements and standards we have set in this permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution. This also promotes growth amongst legitimate operators because the standards applied to the operator are consistent across businesses in this sector and have been set to achieve the required legislative standards.