

Appeal Decision

Hearing Held on 22 May 2025 Site visit made on 22 May 2025

by A Parkin BA (Hons) DipTP MRTPI

An Inspector appointed by the Secretary of State Decision date: 26th June 2025

Appeal Ref: APP/EPR/671

Rabone Lane, Smethwick B66 2LF

- The appeal is made under Regulation 31 of the Environmental Permitting (England and Wales) Regulations 2016.
- The appeal is made by Unimetals Recycling (UK) Limited. It is aggrieved by the Emission Limit Values attached to the Environment Agency's Notice of Variation for Permit EPR/ZP3691ET dated 18 December 2023. Specifically:
 - The emission limit value for dust for exhaust stack A1 in Schedule 3, table S3.1 (5mg/m³);
 - ii) The emission limit value for lead in relation to the discharge of process water and site surface water to the sewer at discharge point S2 in Schedule 3, table S3.2 (0.1mg/l); and
 - iii) The emission limit value for zinc in relation to the discharge of process water and site surface water to the sewer at discharge point S2 in Schedule 3, table S3.2 (1mg/l).

Decision

- The appeal is allowed and the Environment Agency is directed to vary Schedule 3 of Permit EPR/ZP3691ET, dated 18 December 2023, as set out below:
 - i) The emission limit value for dust at exhaust stack 1 (A1) in Schedule 3, table S3.1 is set at $10mg/m^3$;
 - ii) The emission limit value for lead in relation to the discharge of process water and site surface water to the sewer at discharge point S2 in Schedule 3, table S3.2 is set at 0.3mg/l; and,
 - iii) The emission limit value for zinc in relation to the discharge of process water and site surface water to the sewer at discharge point S2 in Schedule 3, table S3.2 is set at 2mg/l.

Preliminary Matters

- 2. The name of the appellant has changed since the appeal was made, from 'Sims Group UK Limited' to 'Unimetals Recycling (UK) Limited', following a change in ownership of the company.
- 3. I requested confirmation of the name of the company on Permit EPR/ZP3691ET. In response, a copy of the Notice of Variation issued on 30 October 2024 by the

Environment Agency, and which deals with the change in company name, was provided. Consequently, I am satisfied 'Unimetals Recycling (UK) Limited' is the appellant for this appeal.

- 4. Under Paragraph 3(e) of Schedule 6 of the Environmental Permitting (England and Wales) Regulations 2016 (as amended) (the EPR), an appeal of this type must be made not later than 6 months after the date of the decision. The Notice of Variation of the Permit that is the subject of this appeal (the Variation Permit) was issued on 18 December 2023 and the appeal was made on 17 June 2024 and so complies with this requirement.
- 5. However, in its Statement of Case dated 23 October 2024, the appellant sought to add further grounds to its appeal. These concerned the time limit (or lack thereof) for compliance with the emission limit values (ELVs) for lead and zinc; and, the requirement for instantaneous spot sampling of water emissions to the sewer.
- 6. The procedural acceptability of the further grounds for appeal was discussed at the Hearing. The appellant advised that these further grounds were identified from additional analysis of the Variation Permit. The appellant also considered that given monitoring and compliance timescales are closely linked with the original grounds for appeal concerning ELVs, the further grounds would be a helpful refinement.
- 7. However, the position of the appellant, which was accepted by the Environment Agency in this case, is without a clear legislative basis, and no compelling justification for why further grounds of appeal should exceptionally be accepted outside the specified timescales has been provided.
- 8. Furthermore, the Environment Agency accepted that an interested party, who had made representations to the appeal prior to the submission of the appellant's Statement of Case, could potentially be disadvantaged by the submission of further grounds for appeal after the appeal had been made. It is not, therefore, clear why the Environment Agency considered the actions of the appellant were procedurally acceptable in this case.
- 9. At the conclusion of the discussions, both parties requested further time to try and address these matters, including the provision of indicative wording for improvement conditions. Given the particular circumstances of this case, and without prejudice, I agreed to a short time period for further consideration of these matters by the parties. I closed the Hearing in writing on 12 June 2025.
- 10. The EPR provide clear time limits for making an appeal¹, and also specify what documents are required to be submitted for an appeal, including a statement of the grounds of appeal². Notwithstanding the position of the appellant and the Environment Agency on this matter, the further grounds for appeal were made after the six month deadline for making an appeal had passed. No compelling justification for this action has been provided by the appellant and I am not satisfied that interested parties would not be disadvantaged by considering these further grounds. Consequently, I do not accept the further grounds for appeal that were submitted by the appellant in October 2024 and I have not considered them in determining this appeal.
- 11. The parties mentioned at the Hearing that Condition 3.5.1 of the Variation Permit would allow for the monitoring arrangements to be altered with the

¹ Paragraph 3, Schedule 6 of the EPR

² Paragraph 2.(2)(a), Schedule 6 of the EPR

written agreement of the Environment Agency. As such, it would be possible for these matters to be addressed outside the appeal process, but that would be a matter for the parties.

Background and Main Issues

- 12.A metal recycling business has operated from the appeal site for many years. The wastes accepted and treated at the site include metals, end-of-life vehicles and Waste Electrical and Electronic Equipment (WEEE).
- 13. The site is mostly open, with impermeable, concrete surfacing covering external areas, where the waste is deposited, handled and stored. As a consequence of this, rain falling onto the site percolates through the stored waste, before passing through a simple filtration system and entering a foul water sewer that leads to the Minworth Sewage Treatment Works (MSTW). This discharge is authorised by a Trade Effluent Consent (TEC) from Severn Trent Water.
- 14. The main activities undertaken at the site include the processing and recovery of ferrous and non-ferrous metals, non-metallics and other process residues from the mechanical treatment of waste in a shredding machine.
- 15.Prior to the Variation Permit, only non-hazardous waste could be treated at the appeal site. It is not disputed that the types of waste treated and the method of treatment, including outside storage, and shredding, are the same as were previously permitted at the appeal site.
- 16.The Introductory Note that accompanies the Variation Permit states that 'This variation adds installation activities to the permit for the treatment of hazardous waste. This is due to a change in EWC code classification of small Mixed WEEE plastic casings. These can contain POPs (Persistent Organic Pollutants) and as a result are deemed to be hazardous waste.'
- 17. The manual depollution of WEEE, including the removal of batteries and circuit boards takes place at the appeal site. However, it is common ground that this pre-treatment of WEEE prior to shredding is not sufficient to render the material non-hazardous. Flame retardant metals and plastics would not be removed by the manual depollution process and their presence would mean the WEEE was hazardous waste.
- 18. The Variation Permit that is the subject of this appeal was needed in order for the appellant to continue to accept, store and mechanically shred WEEE materials, which are now designated as hazardous waste, at the appeal site. The storage and shredding of hazardous WEEE are Part A(1) activities³ and are therefore subject to Schedule 7 of the EPR, which transposes the Industrial Emissions Directive 2010 (IED) into English law.
- 19.Under the IED it is required that installations be operated in accordance with the principle that the best available techniques (BAT) are applied⁴. In the case of the operations at the appeal site the setting of Permit conditions is referenced in the Waste Treatment BAT Reference documents and includes the ELVs for polluting substances listed in Annex II of the IED, such as metals, metal compounds and dust⁵. However, whilst the ELVs and the equivalent

³ Section 5.3 A(1)(a)(ii) (disposal or recovery) and Section 5.6 A.(1)(a) (temporary storage) of the EPR

⁴ Article 11 of the IED

⁵ Article 14(1) of the IED

parameters and technical measures shall be based on the BAT, the use of any technique or specific technology shall not be prescribed⁶.

- 20.Contrary to the wording on the appeal form, the appellant is not concerned with Condition 3.1.1 of the Variation Permit. The appellant is concerned with the ELVs for dust, for lead and for zinc, contained within Schedule 3 of the Variation Permit. This is a matter controlled by Condition 3.1.2, which states 'The limits given in Schedule 3 shall not be exceeded.'
- 21.Notwithstanding the appellant's erroneous wording on the appeal form, I am satisfied it is clear what the grounds for appeal are in this case; the Environment Agency raised no concerns in this regard.
- 22. The appellant considers the Environment Agency has erred in its approach to setting the ELVs for dust, lead and zinc for the Variation Permit, which it considers are set at unreasonably low levels. The appellant is, therefore, seeking to replace the ELVs for dust, for lead and for zinc listed in Schedule 3 of the Permit with higher ELVs.
- 23.Consequently, the main issue is whether the ELVs for dust, lead and zinc on the Variation Permit are reasonable and necessary.

Reasons

Dust

- 24. Within the BAT Reference Document for Waste Treatment (Waste Treatment BREF), under the General BAT conclusions for the mechanical treatment of waste section, BAT25 states that in order to reduce emissions to the air of dust (and other substances) the BAT is to apply BAT14d (which concerns the containment, collection and treatment of diffuse emissions), and to use one or a combination of the four specified techniques.
- 25.Three of the four techniques listed at *BAT25* operate at the appeal site shredding machine: Cyclone, Wet Scrubbing and Water Injection into the shredder, whilst a Fabric Filter is not used.
- 26.*BAT25* and Table 6.3 of the *Waste Treatment BREF* set an upper limit BATassociated emissions level (BAT AEL) of 5mg/m³ for dust. However, where a Fabric Filter is 'not applicable', a higher upper limit BAT AEL of 10mg/m³ is set.
- 27.The two exhaust stacks serving the shredding machine at the appeal site, exhaust stack 1 (A1) and exhaust stack 2 (A2), are subject to different ELVs in the Variation Permit. Emission point A1 has a BAT AEL upper limit of 5mg/m³, whilst emission point A2 has a higher BAT AEL upper limit of 10mg/m³.
- 28. The Environment Agency explain that emission point A2 is located directly over the shredder and so it would be impracticable to use a Fabric Filter there because of the risk of deflagration, hence the higher BAT AEL for A2. In contrast, emission point A1 is not directly located over the shredder and so the Environment Agency considers a Fabric Filter could be used there without a risk of deflagration, hence the BAT AEL of 5mg/m³ for A1.
- 29. The appellant considers that whilst there is little risk of deflagration at A1, the use of damp techniques, such as Water injection and Wet Scrubbing, would mean the use of a Fabric Filter is not applicable at emission point A1, because it would become clogged by damp particulates and so would become ineffective.

⁶ Article 15(2) of the IED

- 30. Whilst not addressed by *BAT25* or in the *Waste Treatment BREF*, the disadvantage of using a Fabric Filter to deal with wet or sticky dusts due to the risk of the filter clogging, is identified in the *BAT Reference Document for Common Waste Water and Waste Gas Treatment/Management Systems in the Chemical Sector (Chemical Sector BREF*) at Table 3.244. The *Waste Treatment BREF* identifies the *Chemical Sector BREF* as one of a number of other BAT conclusions and reference documents which could be relevant for the activities covered. I am satisfied from the evidence that the Waste Treatment BREF should be read alongside the *Chemical Sector BREF* in this case and in this regard.
- 31. The Environment Agency considers the wording of the *Chemical Sector BREF* does not mean the use of Fabric Filters would be 'not applicable', whilst accepting there would be disadvantages with their use with wet or sticky dusts.
- 32.For any filter to operate effectively, it would need to be regularly cleaned and periodically replaced, which would entail costs to the appellant. The appellant has indicated that due to the associated use of Wet Scrubbers, a Fabric Filter at Emission Point A1 would cease to function and so require replacement on a daily basis. Were this to be the case, the use of a Fabric Filter would not be applicable due to lost shredding time and the actual Fabric Filter cleaning / replacement costs.
- 33.Whilst no evidence has been provided to support the appellant's assertion, with reference to the *Chemical Sector BREF*, I am satisfied that the use of two waterbased techniques at the shredder would significantly increase the likelihood of a Fabric Filter at Emission Point A1 becoming clogged with particles, requiring frequent cleaning / replacement to maintain its effectiveness.
- 34.At the Hearing, the Environment Agency stated that there were alternative ways of achieving the BAT AEL of 5mg/m³ at emission point A1 other than by using a Fabric Filter, and that the appellant's competitors are achieving this in similar situations. However, this would seem to be inconsistent with *BAT25* and Table 6.3 of the *Waste Treatment BREF*, which only allow a higher upper limit BAT AEL where a Fabric Filter is not applicable.
- 35.The Environment Agency has provided a list of metal shredding businesses elsewhere in England which are said to utilise damp techniques and Fabric Filters. The examples listed include two that are also owned by the appellant, in Avonmouth and in Hull.
- 36.However, the appellant does not consider the two examples it owns to be comparable to the appeal installation. Whilst these installations are said to use Water Injection and Fabric Filters, they do not use Wet Scrubbers, and so the appellant considers them to be different to the appeal installation. From the limited evidence provided by both parties it is not clear whether any of the examples are comparable to the appeal installation.
- 37.Furthermore, the use of alternative techniques would conflict with the Environment Agency's stated reasons for imposing the BAT AEL at Emission Point A1, on Page 3 of the Application Variation Decision Document (AVDD), that accompanied the Variation Permit. Here, the Environment Agency states 'we have set a BAT AEL limit of 5 mg/m³ because it is not directly located over the shredder. Given its location in relation to the shredder, we have considered that a bag filter can easily be used for emission control without risk of deflagration.' No reference is made to any techniques other than a (Fabric) bag filter for Emission Point A1.

- 38.The use of a Fabric Filter at Emission Point A1 would be likely to require a maintenance / replacement regime that would entail unreasonably high costs for the appellant, due to the increased likelihood of damp dust particles clogging the filter.
- 39.Article 15(2) of the IED, deals with ELVs, equivalent parameters and technical measures, and specifically states that techniques or specific technology should not be prescribed. Schedule 7 paragraph 5(h) of the EPR requires the Environment Agency to exercise its relevant functions so as to ensure compliance with Article 15 of the IED.
- 40.The AVDD could be seen to show that the Environment Agency has (effectively) prescribed the technique to be used to achieve the BAT AEL upper limit of 5mg/m³ on the Variation Permit. The *Waste Treatment BREF* could also be seen to be similarly prescriptive in *BAT25* and Table 6.3.
- 41.However, this is something which is open to interpretation, and in any event, is largely peripheral to the issue of whether the use of a Fabric Filter is applicable in this case, and consequently what the ELV for dust at Emission Point A1 should be.

Lead and Zinc

- 42. Within the *Waste Treatment BREF* in order to reduce emissions to water, the BAT is to treat waste water using an appropriate combination of specified techniques (*BAT20*).
- 43.BAT AELs for different substances, including a range of metals and metalloids, by indirect discharge to a receiving water body are contained in Table 6.2 of the *Waste Treatment BREF*. Within Table 6.2, the BAT AEL upper limit for lead is 0.1mg/l and is 1mg/l for zinc, following the specified treatment processes.
- 44.The specified treatment processes include mechanical treatment in shredders of metal waste. However, footnotes 4 and 5 for Table 6.2 state that the upper end of the range is 0.3 mg/l for lead and 2 mg/l for zinc following the mechanical treatment in shredders of metal waste.
- 45.As mentioned earlier, even with the manual depollution of WEEE at the appeal site, some plastic elements would remain. Consequently, the residual WEEE would contain both metal and non-metal elements and so would not be wholly 'metal waste'.
- 46.Nevertheless, Chapter 3 of the *Waste Treatment BREF* covers the treatment in shredders of 'metal waste', which includes WEEE. Furthermore, within Chapter 3 it is recognised that 'metal waste' would include 'residual non-metallic materials'.
- 47.Whilst this is somewhat ambiguous, I am satisfied that the higher upper limits for lead and zinc contained in the footnotes are the ones that would apply following the mechanical treatment in shredders of metal waste in this case.
- 48.On page 4 of the AVDD the Environment Agency states that because the shredder on site will be processing both metal waste and hazardous waste, the higher BAT AEL limits for lead and zinc cannot be applied. This is because 'the higher limits are applicable to mechanical treatment in shredders of 'metal waste'.
- 49.However, this interpretation is flawed in a number of respects. Firstly, and as set out above, in the *Waste Treatment BREF* `metal waste' includes WEEE and

can include non-metallic materials. Secondly, in seeking to differentiate 'hazardous waste' from 'metal waste', when 'metal waste' can also be 'hazardous waste'. Finally, *BAT20* and the BAT AELs for discharges to a receiving water body in the *Waste Treatment BREF* do not differentiate between 'hazardous' and 'non-hazardous' waste.

- 50.The issue of whether a 'Physico-Chemical' treatment is undertaken at the appeal site is also somewhat unclear, with reference to the *Waste Treatment BREF*. The Variation Permit application specifically refers to a 'Physico-Chemical' process, which is listed in the EPR⁷ and shredding is a 'physical' treatment. However, the mechanical treatment in shredders of metal waste is a specifically identified process in Table 6.2 of the *Waste Treatment BREF*, distinct from the identified 'Physico-Chemical' processes.
- 51.Of all the processes listed in Table 6.2, the mechanical treatment in shredders of metal waste is by far the closest to the waste treatment process to which the BAT AELs apply, which takes place at the appeal site.
- 52.At the Hearing and in its evidence, the Environment Agency referred to its published guidance on appropriate measures for permitted facilities dealing with WEEE⁸, including at Section 7.2(3). This guidance covers discharges to sewer...from all mechanical treatment of WEEE. The emission limits for lead and zinc are 0.1mg/l and 1mg/l respectively, which are different to the BAT AELs for discharges of lead and zinc to water contained in the *Waste Treatment BREF* for the mechanical treatment in shredders of metal waste⁹.
- 53.I note the industry presentations given by the Environment Agency earlier in 2022 regarding WEEE and Metal Shredders; to the FAQs and responses; and, to the letter to the appellant dated 22 June 2022, informing them of the upcoming publication of the technical guidance concerning shredding of metals and WEEE.
- 54. However, the ambiguities between the Environment Agency information on WEEE / metal shredders and the *Waste Treatment BREF*, are not clearly addressed in the guidance to show which emission limits would apply in this case. In the absence of such clarification, and with regard to the characteristics and location of the appeal site, I consider the BAT AELs in the *Waste Treatment BREF* to be more appropriate; the appeal site processes metal waste, which includes, but is not limited to, WEEE.
- 55.Surface water runoff from the appeal site is discharged to a foul water sewer that runs beneath Foundry Lane to the north of the site and discharges to the MSTW, subject to a TEC.
- 56.The TEC was issued on 11 May 2016 by Severn Trent Water, and amongst other things, requires the appellant to ensure that the effluent complies with the specified emission limits at Appendix 1 of the TEC. Of relevance to this appeal are the emission limits for lead and for zinc, which are 4mg/l and 10mg/l, respectively. These are considerably higher emission limits for lead and zinc than the BAT AELs in Table 6.2 of the *Waste Treatment BREF*.
- 57.Pursuant to the Water Framework Directive (WFD), the Environment Agency developed a tool to assist with compliance of the WFD requirements.

⁷ EPR - Section 5.3 A (1) a) (ii) - disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving physico-chemical treatment

⁸ Waste electrical and electronic equipment (WEEE): appropriate measures for permitted facilities (13 July 2022) ⁹ Footnotes 4 and 5 of Table 6.2 *Waste Treatment BREF*

Consequently, the H1 Assessment Tool was designed to focus on the presence of pollutants in water, rather than in the air or land.

- 58.The appellant produced an H1 assessment in 2018, as required by the Environment Agency. It is not disputed that this assessment was acceptable at the time it was produced. The same H1 assessment was re-submitted in June 2023, given that the type of waste received, the storage of the waste and the treatment of the waste at the site was unchanged. It is common ground that the H1 Assessment was appropriate to consider pollution to water and that the risk to receiving water from the site was insignificant, and so screened out.
- 59. The Environment Agency's risk assessment guidance states that where potential risks are screened out, then no further action is required. However, in this case the Environment Agency is concerned that sludge from the MSTW would be used to fertilise agricultural land and so the effects of this require further consideration. The use of sludge in agriculture is subject to specific regulations¹⁰, which impose limits on both lead and zinc within the sludge.
- 60.The 2018 *Waste Treatment BREF* states that all BAT AELs for emissions to water apply at the point where the emission leaves the installation. However, footnote 2 to Table 6.2 of the *Waste Treatment BREF* states that BAT AELs may not apply if the downstream waste water treatment plant abates the pollutants concerned, provided this does not lead to a higher level of pollution in the environment.
- 61.The H1 Assessment shows that there would be some reduction in both lead and zinc following treatment at the MSTW. The appellant has also raised concern that the Environment Agency failed to take into account the costs, including financial and environmental costs, of imposing the Variation Permit ELVs on the appellant.
- 62. However, the ability of the Environment Agency to set aside the BAT AELs, in this case due to the presence of the MSTW, is discretionary. The Environment Agency considers that because the MSTW operates a biological process to treat sewage that lead and zinc would not be sufficiently abated and so the BAT AELs apply. This is not unreasonable and it is fully within its discretion to do so.
- 63.However, I accept the appellant's point that the reasons for this action are not clear. The AVDD accompanying the Variation Permit is not fully completed, information is not always listed under the correct headings, and some information is missing or is open to interpretation. No information is provided under *Design Considerations* on the AVDD, and whilst some information to support the Environment Agency's approach is provided, such as under the *Key Issues of the Decision Emissions to Surface Water*, this does not clearly show how relevant factors, such as costs, were taken into account.
- 64.The AVDD includes references to the *Waste Treatment BREF* and the BAT AELs, to the various WEEE Regulations and guidance, as well as to the H1 Assessment and the downstream treatment of effluent at the MSTW. However, it is not clearly explained how the Environment Agency addressed the aforementioned ambiguities / conflicts in the policy and guidance; how the H1 Assessment, the operation of the MSTW, and the function and content of the TEC to the MSTW were considered; and, how the financial and environmental costs of the ELVs imposed on the Variation Permit were assessed.

¹⁰ The Sludge (Use in Agriculture) Regulations 1989

- 65.Furthermore, no reference is made on the AVDD to the Environment Agency's duty under Schedule 7(3) of the EPR, to exercise its functions under these Regulations for the purpose of achieving a high level of protection of the environment taken as a whole by, in particular, preventing or, where that is not practicable, reducing emissions into the air, water and land.
- 66.The wording of the AVDD is not helpful and has contributed, at least in part, to the appellant making an appeal in this case. However, from the submitted evidence and the discussions at the Hearing, I am satisfied the Environment Agency did consider the H1 Assessment, the MSTW and the wider financial and environmental costs in exercising its discretion in relation to the MSTW, and with regard to the Variation Permit, as I have done in determining this appeal. Whilst there remain disagreements between the parties over these issues, I am also satisfied the appellant and the Environment Agency have had the chance to explain their positions at the Hearing. I have considered these alongside the submitted evidence in reaching my conclusions.

Dust, Lead and Zinc ELVs

67.For these reasons, I am not satisfied that the ELV for dust and the ELVs for lead and zinc required by the Environment Agency are reasonable or necessary. Consequently, the ELV for dust for exhaust stack A1 in Schedule 3, table S3.1 of the Variation Permit should be set at an upper limit of 10mg/m³ and the ELVs for lead and zinc at discharge point S2 in Schedule 3, table S3.2 of the Variation Permit should be set at an upper limit of 0.3 mg/l for lead and 2 mg/l for zinc.

Other Matters

68.An interested party submitted some photographic evidence concerning dust emissions from the appeal site on the morning of 10 September 2024. The appellant advised that this matter was reported by them directly to the Environment Agency at the time. The issue, which was said to be a 'one-off' by the appellant, was resolved by increasing the amount of water injected into the shredder. The Environment Agency confirmed the incident was then resolved by way of a notice, a copy of which has been provided.

Conclusion

69.For the reasons given above, I conclude the appeal is allowed and that the Environment Agency be directed to vary the permit.

Andrew Parkin INSPECTOR

APPEARANCES – 22 May 2025

For the Appellant:

- Christopher Badger Counsel
- Claire Gregory Solicitor (Eversheds Sutherland)
- Clare Haste Unimetals
- Victoria Jones Unimetals
- Jennifer Stringer RPS Group
- Rayhela Ahmed-Monju RPS Group

For the Environment Agency:

- Ruchi Parekh Counsel
- Henry Blunden Solicitor (Environment Agency)
- Paul Fernee Environment Agency
- Paul Barker Environment Agency
- Andy Bee Environment Agency

Documents submitted during the Hearing:

- EPR Compliance Assessment Report ZP3032WF/0521424
- Schedule 5 Notification 10/09/24 @ 11:42 hrs
- Notice of Variation EPR/ZP3691ET/V008 30/10/24
- EA Letter to Inspector received 10/06/25
- Appellant Email to Inspector received 10/06/25
- Unimetals Draft Improvement Conditions
- POPS letter August 2020