

# Permitting decisions

## Refusal

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We have decided to refuse the permit for the AO Recycling Telford Storage Depot.

The proposed facility location is AO Recycling Telford Storage Depot, Waste & Metal House, Lightmoor Road, Little Dawley, Telford, TF4 3QN.

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements.

### Purpose of this document

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

- highlights [key issues](#) in the determination
- gives reasons for refusal
- shows how all relevant factors have been taken into account; and
- shows how we have considered the [consultation responses](#)

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

Read the permitting decisions in conjunction with the refusal notice.

## Key issues of the decision and reasons for refusal

### Summary of our decision

We have decided to refuse the Environmental Permit Application (reference EPR/AP3636JW/A001) ("the Application") for a bespoke permit at the Telford Storage Depot ("the 'Site'") applied for by AO Recycling Limited ("the Applicant"). The Application is refused on the grounds that the Applicant has failed to provide:

- a sealed drainage system
- a Fire Prevention Plan that meets the objectives of the current Environment Agency guidance 'Fire prevention plans: Environmental Permits', last updated 4 May 2018
- suitable measures for waste acceptance, handling and storage; and
- an appropriate environmental risk assessment for odour and noise.

The Applicant has not demonstrated that the Site can be operated without posing an unacceptable risk of environmental pollution or harm to human health or that they would comply with the conditions of a permit.

## Legal framework

We are required by The Environmental Permitting (England and Wales) Regulations 2016 (“EPR 2016”) to ensure that environmental permits contain all measures necessary to ensure operators apply the Best Achievable Technique (“BAT”), Schedule 7, paragraph 5, EPR 2016 and to ensure compliance with the requirement that waste management is carried out without endangering human health or harming the environment, Schedule 9, Part 1, paragraph 3, EPR 2016.

Section 7.3 of the Environmental Permitting Core guidance for the Environmental Permitting (England and Wales) Regulations 2010 (last revised March 2013) also states that:

*The application to the regulator will, as relevant, include an assessment of the environmental risk of the proposals including the risk under both normal and abnormal operations. The regulator should satisfy itself that the operator’s assessment of the risk is sufficiently robust. In particular, any assumptions that the operator has made about its proposals must be clearly justified. The regulator should assess the application and the adequacy of the impact assessment including whether the control measures proposed by the operator are appropriate for mitigating the risks and their potential impact.*

## Background

### Timeline of application

We received the Application for a bespoke installation permit on 19 April 2018. This could not be duly made so a request for further information was sent on 16 May 2018. Responses were received from the Applicant on 16 May 2018, 18 May 2018, 22 May 2018, 23 May 2018, 25 May 2018 and 30 May 2018. The Application was duly made following the Applicant’s last response on 30 May 2018.

We reviewed the duly made Application and issued a first Schedule 5 Notice on 10 July 2018 to request further information from the Applicant. The deadline for a response to this Notice was set at 31 July 2018. We received responses from the Applicant on 17 July 2018, 20 July 18 and 31 July 2018. These responses did not satisfy our request for information.

On 20 August 2018 we sent a draft version of the second Schedule 5 Notice to the Applicant. The Environment Agency held a meeting with the Applicant on 21 August 2018 to discuss the outstanding issues and the additional information required with regards to the site drainage. This Notice was issued on 29 August 2018 and the deadline for a response was set at 19 September 2018. Responses were received from the Applicant on 30 August 2018, 31 August 2018 and 19 September 2018. These responses still did not satisfy our request for information.

We advised the Applicant on 27 September 2018 of our intention to refuse the Application. An overview of the key issues with the Application was sent to the Applicant on 2 October 2018 and a meeting was held on 3 October 2018 to discuss the outstanding issues and the additional information required. The due date for a further response to address the second Schedule 5 Notice in light of the issues raised on 2 October 2018 and 3 October 2018 was agreed for 17 October 2018. Responses were received on 15 October 2018, 16 October 2018 and 7 November 2018.

On 13 November 2018 we advised the Applicant again of our intention to refuse the application.

### Proposed regulated facility

The Applicant applied for a regulated facility to temporarily store 3,000 tonnes of hazardous waste comprising waste refrigeration units only. This is a form of Waste Electrical and Electronic Equipment (WEEE). Storage of 3,000 tonnes of hazardous waste comprises an ‘installation’ under Schedule 1, Part 2, Chapter 5 of EPR 2016 as follows:

*Section 5.6 Part A(1)(a) – Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes pending any of the activities listed in Sections 5.1, 5.2, 5.3 and paragraph (b) of this Section,*

*except temporary storage, pending collection, on the site where the waste is generated or activities falling within Section 5.2.*

Although the Application received on 27 March 2018 included European Waste Catalogue (“EWC”) codes 16 02 09\*, 16 02 10\* and 16 02 15\*<sup>1</sup> for component parts removed from WEEE, these were removed from the Application on 15 October 2018 following discussions with the Applicant. These were not consistent with the remainder of the Application, which was premised on the Site receiving whole refrigeration units only.

The Application also included a number of non-hazardous EWC codes. The Applicant was informed, both prior to the Application being duly made and during determination of the Application, that storage of 3,000 tonnes of non-hazardous waste could not be applied for or be permitted as part of the Section 5.6 hazardous waste installation activity. The storage of non-hazardous wastes would need to be applied for as a waste operation.

The Site directly borders the Lightmoor, Vane Coppice and Oilhouse Coppice local wildlife site and there is a surface water pond located approximately 70 metres to the south of the Site. The bedrock geology beneath the Site is categorised as a category ‘A’ aquifer. Residential receptors are present within 100 metres to the south-west, north-west and north-east of the Site. There are further residential receptors located approximately 400 metres east of the Site.

#### Requirements to operate using best available techniques

Installation activities, including those listed under Section 5.6, must be operated by applying BAT. This is defined in Article 3 of the Industrial Emissions Directive as follows:

*(10) ‘best available techniques’ means the most effective and advanced stage in the development of activities and their methods of operation which indicates the practical suitability of particular techniques for providing the basis for emission limit values and other permit conditions designed to prevent and, where that is not practicable, to reduce emissions and the impact on the environment as a whole:*

- (a) ‘techniques’ includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned;*
- (b) ‘available techniques’ means those developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the costs and advantages, whether or not the techniques are used or produced inside the Member State in question, as long as they are reasonably accessible to the operator;*
- (c) ‘best’ means most effective in achieving a high general level of protection of the environment as a whole.*

Guidance on BAT for waste installation facilities is available in the European Commission’s Waste Treatment BAT Reference document (“the Waste Treatment BREF”), the Environment Agency’s Sector Guidance Note, EPR S5.06, ‘Guidance for the Recovery and Disposal of Hazardous and Non Hazardous Waste’ (“S5.06”) and web guidance. We expect the Applicant to have adopted all of the relevant standards and BAT from these key guidance documents.

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<sup>1</sup> An asterisk next to a EWC code denotes that it is hazardous waste.

## Key issues

### Site drainage

#### Requirements

Our guidance '[Control and monitor emissions for your environmental permit](#)' (published on 1 February 2016 and last updated 08 November 2018) advises applicants to ensure that their site surfaces and site drainage infrastructure will prevent pollution of surface water and groundwater. It also states that rainfall collection systems should be separated from areas of the site which are or may be contaminated.

Section 2.1.2 of S5.06 states that the offloading, sampling point/reception and quarantine areas of waste facilities should have an impervious surface with self-contained drainage to prevent any spillage entering the storage systems or escaping off-site. Section 2.1.3 states that offloading and quarantine points should have an impervious surface with self-contained drainage and that storage area drainage infrastructure should ensure that all contaminated run-off is contained.

Guidance on the Best Available Treatment Recovery and Recycling Techniques and Treatment of WEEE - November 2006 ("BATRRT") reiterates the requirement for sites to have sealed drainage systems. Sealed drainage is defined in BATRRT and in EPR 2016 (Schedule 3, Part 1, Chapter 1, Section 1(1)) as a drainage system with an impermeable surface which does not leak and which will ensure that:

- no liquid will run off the pavement other than via the system  
and
- except where they may lawfully be discharged, all liquids entering the system are collected in a sealed sump.

Section 128 of BATRRT highlights that:

*All liquid runoff from an impermeable pavement used for the storage of hazardous WEEE and hazardous components will be regarded as being contaminated, unless it can be shown otherwise (irrespective of whether there happens to be any activity on the pavement at the time.) On most sites, two systems for the management of water will be necessary, for clean water and for contaminated water. Clean water can be dealt with by surface drains that should carry only uncontaminated water from roofs to a watercourse or soakaway. The treatment of contaminated water to the necessary standard will require a sealed drainage system, as defined above. It may be necessary to obtain a consent if water is to be discharged.*

This was highlighted to the Applicant via email on 23 May 2018 prior to the Application being duly made.

Any permit which may have been issued for the Site would have also contained the following condition:

*All activities shall take place on impermeable surfaces with sealed drainage, unless otherwise specified in Table S1.1 or agreed in writing with the Environment Agency.*

#### The Application

The Applicant proposed a single drainage system for the Site, whereby runoff from all areas would discharge to ground via an interceptor and three onsite soakaways. For this to meet the definition of sealed drainage, the Applicant was required to provide information and suitable environmental risk assessments which would enable us to permit a lawful discharge.

After the Application was duly made, we were verbally informed by the Applicant that the Site would use an intermediate storage tank to collect and monitor site drainage prior to discharge into the soakaways. Consequently, we asked the Applicant how they would ensure that the storage tank would be effective in preventing pollution in question 20 of our first Schedule 5 Notice. Subsections of this question specifically asked:

- whether the tank would be resistant to fire
- how the Applicant would prevent the tank from overflowing
- whether monitoring of the discharge would be continuous or based on spot samples

- the monitoring methods which would be used
- the parameters that would be tested for to ensure the contents of the tank are free of contamination
- whether the discharge would be continuous or intermittent  
and
- how contaminated drainage would be treated or disposed of.

The Applicant's response on 17 July 2018 stated that:

- the tank would be resistant to fire
- a continuous interceptor monitor would be used
- the discharge from the tank would be continuous
- 'If the system becomes polluted and the alarm is triggered/system seals the water will then be tested for pollutants. If any are found then water will be removed from site and disposed of'; and
- the interceptor would be fitted with an overflow monitor.

The response was incomplete in that it did not confirm which parameters would be tested for and which monitoring methods would be used. It was also contradictory, in that it stated monitoring would be continuous but that the drainage would only be tested for pollutants if the system became polluted. On 31 July 2018 we were verbally informed by the Applicant that the Site would not have a tank and that monitoring of the discharge would occur at the interceptor stage of the system.

Our second Schedule 5 Notice requested further information about the proposed drainage system and discharge to ground. We asked for a part B6 application form to be completed and for a groundwater risk assessment to be submitted in line with our guidance '[Groundwater risk assessment for your environmental permit](#)' (published on 1 February 2016 and updated 3 April 2018). We also asked for information on the site infrastructure, including the interceptor and soakaways, to demonstrate how the Applicant could control and prevent the discharge of contaminated drainage to the environment. This information would enable us to determine whether the risk to the environment from the discharge of site drainage under normal operating conditions and abnormal operating scenarios i.e. accidents and incidents (e.g. fires) would be acceptable. We also asked how the Applicant could stop the continuous discharge to ground and to confirm the site containment capacity, in the event that the site drainage became contaminated. This was discussed in a meeting with the Applicant on 21 August 2018. We informed the Applicant that, without a full and satisfactory response, we would be unable to grant a lawful discharge for the soakaways and so the Applicant would be required to propose an alternative system to demonstrate sealed drainage.

The response we received on 30 August 2018 was incomplete. A part B6 application form was not provided, question 1a of the Notice, and the groundwater risk assessment received was incomplete, question 1b. In addition, we did not receive all of the requested information regarding the interceptor, question 1d, the discharge, question 1e, or the soakaways, question 1f. This was communicated to the Applicant on 2 October 2018 and in a face-to-face meeting on 3 October 2018.

The Applicant's response on 15 October 2018 contained a partially completed Part B6 application form and on 16 October 2018 we received an updated groundwater risk assessment.

#### Environment Agency description of issues

Although the Application was improved in part by the responses received on 15 October 2018 and 16 October 2018, it remained incomplete and inaccurate in other areas. This is discussed in the paragraphs below.

The relevant questions of application form Part B6 – 'New bespoke water discharge activity and groundwater (point source) activity' were not all answered and the information provided was unclear in parts for the following reasons:

- The maximum rate of rainfall-dependent discharge was given in response to question 3e as 0.3 litres per second (25,920 litres per day), but in response to question 3b the maximum volume of effluent to

be discharged in a day was stated to be 28.8 cubic metres. The effluent calculation sheet did not appear to be included in the Applicant's response.

- The responses to questions 7 and 9 and the relevant appendix were incomplete.
- The response to question 10 stated that the effluent will discharge to a borehole or well and not through more than one outlet – this contradicted with other Application documents which showed three separate soakaways to land.

The Groundwater Risk Assessment ("GRA") was also considered to be unsatisfactory for the following reasons:

- Mercury switches were considered in the GRA but they were not referenced as a source of potential contamination.
- An assessment matrix was provided but there was no qualitative analysis of whether the given scores represented an acceptable environmental risk.
- Sample results from an alternative site were presented in the GRA but not identified as such. Some of the drinking water standards and limits of detection given appeared to be incorrect.
- Automatic shut-off of the penstock valve was relied upon as a risk mitigation measure but this was unsupported by the remainder of the Application, which suggested that it would be manually operated.
- It was unclear whether the interceptor could achieve the discharge concentration of 5 milligrams per litre of oil or dissolved oil. The impact of this emission on the receiving environment was not considered in the GRA.
- Quarterly sampling of the discharge was proposed but insufficient details were provided including the location for the sampling point, the parameters to be tested or the remedial actions which would have been taken if contaminants were found.

Monthly sampling of the soakaways was also proposed but insufficient detail was provided. We do not know the sampling location, methods or parameters to be tested. We do not know the trigger levels to be used by the Applicant to identify contamination or the actions which would be taken to remedy any pollution and prevent reoccurrence.

### Conclusion

As discussed above, there is potential for the proposed operations to cause environmental pollution through contamination of the surface water or groundwater. As the Applicant has failed to demonstrate that all appropriate measures will be in place and that the proposed drainage system will not cause an adverse environmental impact, it was concluded that we cannot grant a lawful discharge for the soakaways. In the absence of alternative proposals, it is considered that the Site does not have an appropriate sealed drainage system and that it therefore does not meet the requirements of BAT as outlined above or demonstrate that the conditions of a permit would be complied with.

### Further inconsistencies

We asked the Applicant whether drainage from the Site could be discharged to foul sewer rather than directly to the environment. There is a presumption that trade effluent will be discharged to sewer for treatment prior to release to the environment. The Applicant stated in their response on 30 August 2018 that the nearest sewer is 500 metres from the Site and that connection would not be feasible. The Applicant's response on 15 October 2018 states that the nearest sewer is 190 metres from the Site. Although our databases suggest the nearest foul sewer network to be located approximately 190 metres from the Site, clarification of this and justification for not connecting to sewer should be provided if a future permit application is made.

## **Waste acceptance and rejection**

### Requirements

Section 2.1.2 of S5.06 lists indicative BAT requirements for waste acceptance. This requires the designation of dedicated waste reception and quarantine areas. It also requires that the waste offloading, reception and quarantine areas are provided with an impervious surface with self-contained drainage, to prevent any spillage entering the storage systems or escaping off-site. Compliance with this BAT requirement is necessary in order to protect the environment, due to the potential for waste refrigeration units to leak substances such as oil and for non-permitted and unknown wastes to be received at the site, which could pose additional pollution risks.

### The Application

The non-technical summary of the Application received on 16 May 2018 stated that 'All receipt, handling and storage of WEEE will take place on good quality, steel reinforced concrete surfaces that drain through a sealed drainage system.'

Our first Schedule 5 Notice asked the Applicant to detail the drainage arrangements for the waste unloading and quarantine areas and we noted the requirement for a sealed drainage system. In their response on 17 July 2018, the Applicant stated that surface water from 'all areas in which waste will be unloaded, inspected and stored will go through the same drainage system'. As discussed above, this system incorporated an oil-water interceptor and three onsite soakaways to ground. This would only be considered a sealed drainage system if the discharge could be permitted, and a permit could only be granted following our approval of a suitable environmental risk assessment.

Our second Schedule 5 Notice asked the Applicant for a groundwater risk assessment in line with our guidance '[Groundwater risk assessment for your environmental permit](#)'. We noted that the Applicant must consider all substances which could be present in the discharge based on a worst-case scenario, and that we expected consideration of a range of potential contaminants with regards to wastes stored in the reception and quarantine areas. If the Applicant decided not to pursue their proposals for a discharge to ground, we asked the Applicant to confirm how they would isolate and manage drainage from these areas. The Applicant's responses on 30 August 2018 and 31 August 2018 did not satisfactorily assess the risk to groundwater or propose isolation of the drainage systems from the waste reception and quarantine areas.

The absence of containment for the reception and quarantine areas was raised to the Applicant as a key issue on 2 October 2018 and 3 October 2018. The Applicant's response on 15 October 2018 disputed the requirement for self-contained drainage on the basis that the Site would not receive or sample liquid wastes. However, the requirements of S5.06 for waste reception and quarantine areas apply to all hazardous waste storage facilities and are not limited to facilities that receive liquid wastes. Further, the waste refrigeration units will be untreated and so are likely to contain some potentially polluting liquids, such as oil in the cooling circuits.

The Applicant's response also stated that waste will be sorted on the delivery trailers rather than in a dedicated reception area. Rejected units would not be unloaded from the delivery trailers. The Applicant proposed to remove items such as food waste and PCB (polychlorinated biphenyl) capacitors from the refrigeration units whilst on the trailers, put them into containers and store them in the quarantine area. As discussed above, drainage from the quarantine area is not self-contained and would ordinarily discharge to ground through the soakaways. The Applicant proposed to prevent the release of contaminated drainage by operation of a penstock valve.

In email correspondence received on 17 September 2018, the Applicant proposed to store quarantined waste undercover but this was not supported by the remainder of the Application and it was not clear what form of cover would be provided.

### Environment Agency description of issues

Although the Fire Prevention Plan ("FPP") version 2.3 stated that:

'Wastes are received in the reception area only'

the Applicant failed to provide any further information regarding the design or operation of a dedicated reception area or demonstrate how their alternative measures of sorting waste on delivery vehicles would meet the requirements of the relevant guidance. The Application did not demonstrate how it would be possible to sort and separate wastes within the confines of a delivery trailer in order to identify and manage potentially non-conforming wastes.

We are not satisfied that the proposed waste acceptance measures meet the requirements of our guidance (S5.06) to ensure protection of the environment. Section 2.1.2 of S5.06 requires facilities to have dedicated waste reception and quarantine areas and for these areas to have self-contained drainage. The Application for the proposed facility did not demonstrate that this requirement would be met, nor that the discharge of surface water to ground will not cause environmental pollution.

Further, we consider the Applicant's proposals to prevent the release of contaminated drainage by the operation of a penstock valve and interceptor to be unsatisfactory. The interceptor would only be able to prevent the release of oils, to an extent, and silt and the application did not detail how the valve would be operated to prevent contaminated drainage discharging from the site. If manually operated, it would be difficult for site operatives to detect pollution in the first instance, particularly if the contamination is not visible, and it would not be possible to operate it when the site is unstaffed. As the interceptor would receive surface water from the waste reception and quarantine areas of the Site, it would also be possible for contaminants to be present in the water other than oil and silt, which would not be removed by the interceptor.

### Conclusion

We have concluded that the Application has not demonstrated that the measures proposed are equivalent to a self-contained waste reception area, which is identified as BAT in S5.06. We have also concluded that the proposals for a waste quarantine area do not represent BAT.

Without the provision of dedicated and contained waste reception and quarantine areas, we consider that there would be a risk that unacceptable/non-conforming wastes could be received, unloaded and held at the facility without appropriate containment, which could lead to the contamination of site surface water discharged to ground via the soakaways.

## **Firefighting water supply**

### Requirements

Storage sites for WEEE (including waste refrigeration units) require FPPs in accordance with our online guidance '[Fire prevention plans: environmental permits](#)', last updated 4 May 2018. The fire prevention measures in the guidance have been designed to meet three objectives:

- minimise the likelihood of a fire happening
  - aim for a fire to be extinguished within 4 hours
- and
- minimise the spread of fire within the site and to neighbouring sites.

We expect applicants to submit a FPP that includes all of the measures in the guidance or demonstrate that they have alternative measures that meet the three objectives. Any permit which would have been issued for the Site would have contained the following condition:

*The operator shall take all appropriate measures to prevent fires on site and minimise the risk of pollution from them including, but not limited to, those specified in any approved fire prevention plan.*

Section 16 of the guidance states that applicants must have enough water available for firefighting to take place to manage a worst case scenario – considered to be a fire in the largest waste pile on site.

To meet the objectives of the guidance, applicants need to demonstrate access to water supplies of at least 2,000 litres a minute for a minimum of 3 hours for a 300 cubic metres pile of combustible material. As the



largest waste pile on the Site would be 450 cubic metres, a supply of 3,000 litres per minute would be required.

### The Application

In error, we did not request a FPP prior to the Application being duly made.

We asked for a FPP to be written in accordance with our online guidance in our first Schedule 5 Notice. We requested a response within three weeks but received a response from the Applicant after one week. An initial review suggested that the response was incomplete so this was highlighted to the Applicant by email on 18 July 2018. As an example, we noted that the FPP did not contain any information on water supplies. An email response on 20 July 2018 stated that there was a hydrant 60 metres from the Site and that the Fire and Rescue Service (“FRS”) would have access to a pond and tertiary river. This information was not sufficient to meet the requirements stated in the guidance.

We asked the Applicant to demonstrate access to sufficient water supplies in our second Schedule 5 Notice. The Applicant’s response on 30 August 2018 referenced three water hydrants. The nearest, located 5 metres from the Site, would have a capacity of 15 litres per second: 900 litres per minute. The second and third hydrants would each have capacities of 20 litres per second: 1,200 litres per minute, but they are located 325 metres and 497 metres from the Site. Water would also be sourced from the mains supply on site: 10 litres per minute and from that carried by the FRS. If accessible, these combined water supplies would exceed the requirement of 3,000 litres per minute. However, on 2 October 2018 we highlighted concerns as to the feasibility of the water supplies due to the distance of the second and third hydrants from the boundary of the Site. On 15 October 2018 we received a revised version of the FPP - version 2.3.

Our FPP guidance also requires the location of water supplies to be identified on a site plan. This was requested in both Schedule 5 Notices and on 2 October 2018 we communicated to the Applicant that the plans in the FPP did not contain all of the relevant features. Despite this, the location of the three water hydrants were not identified in version 2.3 of the FPP.

### Environment Agency description of issues

As identified above, we have concerns regarding the feasibility of water supplies due to the distances of the hydrants from the Site. We understand that the FRS typically carry 10 lengths of 25 metre-long hose and as the second and third water hydrants are located more than 250 metres from the Site, the FRS may be unable to access them to fight a fire on the Site. Without the second and third hydrants, the Application fails to demonstrate access to a sufficient volume water for firefighting purposes.

Although the most recent FPP states that the Applicant will consult with the Shropshire FRS to devise a ‘Fire Response Strategy’ to address the barriers in providing the required rate and volume of water, we cannot permit operation of the Site without demonstration of access to sufficient firefighting water supplies or suitable alternative measures.

### Conclusion

Without sufficient water supplies we conclude that the objectives of the FPP guidance – to aim for a fire to be extinguished within 4 hours and to minimise the spread of fire with in the site and to neighbouring sites – have not been met by the Applicant.

## **Containment of firewater**

### Requirements

As stated above, any permit which may have been issued for the Site would have contained the following condition:

*The operator shall take all appropriate measures to prevent fires on site and minimise the risk of pollution from them including, but not limited to, those specified in any approved fire prevention plan.*

Section 17 of our online guidance [‘Fire prevention plans: environmental permits’](#) states:

'Applicants must be able to contain the run-off from firewater to prevent pollution of the environment and that all reasonably practicable steps must be taken to prevent firewater entering surface waters and the ground. If waste is stored on hardstanding, applicants must assess the potential effect of firewater on the local groundwater, surface water bodies and any well, spring or borehole within 50 metres used for the supply of water for human consumption.'

As discussed above, the Site is required to have access to 3,000 litres of water per minute. Over three hours, this totals 540,000 litres which would require containment or suitable assessment.

Areas of natural and unmade ground are also required to be shown on a site plan in the FPP as this could affect the containment of firewater.

#### The Application

Our first Schedule 5 Notice requested a FPP in line with our online guidance. The first FPP received on 17 July 2018 stated that firewater would be either disposed of offsite or discharged through the onsite soakaway, but it did not consider site containment requirements. On 18 July 2018 we advised the Applicant that their response did not contain a sufficient level of detail and that firewater containment was not considered in the FPP. Their response on 20 July 2018 stated that the drainage capacity onsite was 174.5 cubic metres: 174,500 litres. This is significantly less than the required 540,000 litres.

Our second Schedule 5 Notice again asked the Applicant to demonstrate the ability to contain three hours' worth of firewater. The Applicant's second FPP received on 30 August 2018 stated that the Site is bounded by 0.125 metre high kerbs and has a surface area of 11,262 square metres, so the containment capacity would be 1,407,750 litres. Although this is more than the required volume, we considered that the Applicant's calculations were incomplete because they did not consider surface gradients, the permeability of the ground and kerbing, and the volume of space which would be occupied by waste stored on the site. This was highlighted to the Applicant on 2 October 2018.

The third FPP received on 15 October 2018, stated that the Site is contoured such that surface water would divert to the southeast section of the Site and that this part of the Site is bounded by raised impermeable concrete kerbs. The site plan in this FPP showed kerbing only on the southern boundary of the Site. A further email response on 7 November 2018 states that the area is 2,770 square meters and the kerbing is 30 centimetres high, so the containment volume is 831 cubic metres. The Applicant also stated that sandbags would be placed on the southern boundary in the event of a fire.

There are drains leading to soakaways on the Site. To prevent the initial release of firewater to ground, the Applicant's FPP proposed to operate a penstock valve. The site plans in the FPP showed the penstock valve located near the southern side of the site, amongst the waste storage piles and away from the entrance to the site. The FPP stated:

'In the event that surface water becomes contaminated, the penstock will automatically close to contain spillages and leaks'.

The Emergency Action Plan, received on the same date, states that that the penstock valve will be activated and that staff or the FRS will ensure that the penstock is down before fighting the fire.

In the absence of a suitable risk assessment, we informed the Applicant that firewater could not be discharged to ground due to the potential for significant contamination. We also highlighted to the Applicant that the FPP did not identify a sump or collection point for tankering firewater offsite.

Contradictory statements were submitted regarding the permeability of the site. The FPP received on 30 August 2018 stated that 'the yard area is 95% concrete'. The FPP received on 15 October 2018 stated:

'the site predominantly consists of reinforced concrete hardstanding'.

Clarification of site surface permeability was requested in both Schedule 5 Notices. On 2 October 2018, we also highlighted the fact to the Applicant that the site plans did not contain all the relevant features. The plans in the most recent FPP failed to show the site surfacing.

### Environment Agency description of issues

The Application failed to demonstrate the ability to contain 540,000 litres of firewater from the Site. The FPP failed to identify ground contours and we still had concerns that firewater would be able to run off from the centre and northern sections of the Site, which appeared to be uncurbed.

Containment in the southern section of the site had also not been demonstrated. The containment capacity calculations did not take into account the gradient of the ground and the volume of space which may be occupied by waste stored in this area.

The penstock valve would be relied upon to prevent the direct release of firewater to ground via the onsite soakaways, but it was not clear how this could be operated. The application documents indicated that it would be manually closed, which raised concerns as to its accessibility in the event of a fire. It was also not clear how the penstock valve would be engineered to ensure that it would remain sealed and not present a pathway for firewater to escape the Site.

Although sandbags may be used as a tertiary containment measure, it is not appropriate to rely on these for primary containment of firewater. If proposed in a future permit application, sandbags should also be included in the standalone FPP together with details of how they would be maintained to ensure that they are effective.

### Conclusion

The Applicant did not demonstrate that they would take all appropriate measures to minimise pollution from firewater as would have been required by the conditions of any permit which would have otherwise been issued for the Site. This is also required by the FPP guidance and section 2.2.2 of S5.06.

There were several inconsistencies in the documents that were submitted by the Applicant and the proposal to discharge firewater to ground was not supported by a suitable environmental risk assessment. We therefore cannot approve this aspect of the FPP.

### **Fire prevention plan – other issues**

We are also not satisfied with the following aspects of the most recent FPP, version 2.3, received 15 October 2018, though we consider that these could have been resolved through further requests for information:

- The FPP did not contain a compass rose showing the prevailing wind direction. The site plans also did not identify all relevant sensitive receptors within a 1 kilometre radius of the Site. These are requirements of section 6.2 of our FPP guidance.
- The FPP states that the Site will contain 3,000 tonnes of non-hazardous waste. This waste stream has not been assessed in the Application because it would not form part of a hazardous waste storage installation. The Applicant would either need to remove this reference from their FPP or submit a suitable permit application for a waste facility to store this non-hazardous waste.
- Availability and use of the quarantine area requires clarification. The site plan shows only one quarantine area and the Application stated that this will be used to store rejected wastes. The FPP also stated that heated wastes would be put in the quarantine area for assessment, but that 'A fire/storage bay is left permanently empty due to it being designated as the quarantine area for the site.' Therefore, it is unclear what the quarantine arrangements would be for the Site.
- Actions to be taken to inform neighbours in the event of a fire were contained in a separate document. This should be contained in the FPP to enable this to be used as a standalone document.

### **Handling of waste**

#### Requirements

BATRRT guidance identifies the requirement for fridges and freezers to have their fluids removed under safe conditions, and for chlorofluorocarbons ("CFCs"), hydrochlorofluorocarbons ("HCFCs"), hydrofluorocarbons

("HFCs") and hydrocarbons ("HCs") to be removed and destroyed from waste appliances in a safe and controlled manner. Uncontrolled releases cannot be permitted.

### The Application

The Applicant proposed to receive and store waste refrigeration units prior to treatment. The Application stated that fridges would be handled following the Applicant's handling report to ensure no breakages of the cooling circuit. It also stated that refrigerators would be stored on their sides with doors facing down.

Our first Schedule 5 Notice asked the Applicant to demonstrate how they would handle refrigerators in a way which would prevent damage to the cooling circuits, compressors and foam insulation, which could result in the release of oil and refrigerant gas. In their response on 17 July 2018, the Applicant referenced a document titled 'Safe System of Work'. However, this document was not submitted.

Our question was repeated in a second Schedule 5 Notice and a 'Safe System of Work' procedure was received on 30 August 2018. This document showed a 'flat stacked' procedure, whereby the refrigeration unit lies flat with its compressor facing towards the ground. A second layer of units is then added and the stack is moved by a forklift truck.

On 2 October 2018 we highlighted to the Applicant that there could be a risk of the 'flat stacked' procedure causing damage to the cooling circuits resulting in the loss of oils and refrigerant gas. The Applicant's response on 15 October 2018 stated that this procedure had been developed in line with The European Committee for Electrotechnical Standardization ("CENELEC") EN 50625-1 Standard for Collection, Logistics and Treatment of Cooling Equipment and that it had been assessed by WEELABEX, WEEE Label of Excellence Auditors.

### Environment Agency description of issues

Although the Applicant is WEELABEX certified, this information alone does not demonstrate to us that the 'flat stacked' handling procedure would not cause damage to the untreated waste refrigeration units. Stacking refrigeration units on their backs, where the cooling circuits are typically located, could cause damage to the refrigeration system and result in the uncontrolled release of oil and refrigerant gas (e.g. CFCs, HCFCs, HFCs and HCs).

### Conclusion

We are not satisfied that the Applicant's waste handling procedure has demonstrated that the relevant requirements of the BATRRRT guidance will be met and that the storage/handling of cooling appliances at the facility will not have an adverse environmental impact.

## **Noise risk assessment**

### Requirements

S5.06 outlines the requirement for applicants to address the risks of noise arising from their operations. Online guidance is available on how to complete a risk assessment ("[Risk assessments for your environmental permit](#)" published 1 February 2016 and last updated 8 May 2018). As discussed above, there are sensitive residential receptors within 100 metres of the site boundary. Further, two of the external consultees raised a risk of noise from this Site (see the Consultation section below).

Any permit which would have been issued for the Site would have contained the following condition:

*Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.*

## The Application

A noise risk assessment was included with the application. The first version was very limited in its scope – it stated that noise sources were limited, that vehicles would be regularly maintained and that the overall risk was low due to sound proofing and management techniques.

Our first Schedule 5 Notice asked the Applicant to demonstrate how noise would be prevented and minimised to prevent pollution. We noted that we were unclear as to what the sound proofing would be, and that the assessment should consider the risks from handling waste. The Applicant's response on 17 July 2018 removed reference to sound proofing and stated that the Site would operate from 6 am until 6 pm Monday to Saturday and that forklift trucks would be used to move waste. This did not demonstrate how noise would be prevented or minimised during operational hours so we requested further information in a second Schedule 5 Notice.

The second Notice asked for an updated risk assessment to consider all potential sources of noise on site and all physical and procedural measures to prevent noise from the handling of waste. The response on 30 August 2018 added that fire walls would provide sound proofing. This again was insufficient as, for example, it did not consider noise which could arise from the movement of waste outside of the bays.

On 2 October 2018 we informed the Applicant that there was insufficient detail/clarity in their risk assessment, particularly in regards to identification of sources and control measures. Their response on 15 October 2018 was that the fire blocks and perimeter fencing would act as sound barriers, that activities would be operated between the hours of 9 am to 5 pm, that there would be a third party environmental noise assessment, weekly monitoring and a complaints procedure.

## Environment Agency description of issues

The most recent risk assessment received on 15 October 2018 still did not clearly identify all sources of noise or propose suitable management measures to prevent or minimise noise generation on site, such as that which may arise from the delivery, handling and storage of waste or the weekly testing of alarms.

Further, although a third-party environmental noise assessment in line with BS 4142 and weekly internal monitoring was proposed in the Application, insufficient details were provided to demonstrate how this would help to prevent or minimise noise from the site. For example, we did not know the method or timing of weekly monitoring, and so we do not know whether it would be representative of ordinary site operations, and we do not know how the Applicant would assess the results of the monitoring, or the actions which they would take if unacceptable levels of noise were to be detected.

As the Application is for a new facility, an appropriate noise risk assessment must be provided as part of the application in order to assess the potential noise impact upon local receptors and demonstrate that appropriate noise control measures will be in place, where necessary, prior to operation. Therefore it would not be acceptable to assess the risk of noise after operations have begun, as proposed by the Applicant.

## Conclusion

The Applicant has not provided an appropriate noise assessment for the facility or demonstrated that they would comply with the permit condition prohibiting noise pollution through the implementation of appropriate measures to prevent and control potential noise emissions.

## **Odour risk assessment**

### Requirements

S5.06 outlines the requirement for applicants to address the risks of odours which may arise from their operations. Online guidance is available on how to complete a risk assessment '[Risk assessments for your environmental permit](#)' published 1 February 2016 and last updated 8 May 2018.

Any permit which would have been issued for the Site would have contained the following condition:

*Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used*

*appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.*

### The Application

The boundary of the Site is within 100 metres of residential receptors to the south-west, north-west and north-east. The area around the Site would therefore be sensitive to odour.

We understand that the Applicant intends to only store hazardous waste refrigeration units on site, though the Application retains references to non-hazardous waste. Refrigeration units are not inherently odorous but there is a risk that they could contain residual food waste, which could be a potential source of odour if received and not managed appropriately. A suitable risk assessment was therefore required to identify sources and to propose measures to manage odour.

The Applicant's first risk assessment stated that odour sources were limited and that the overall risk would be 'low due to sound proofing systems'. This was clearly inadequate so we asked the Applicant in our first Schedule 5 Notice for a corrected risk assessment and to demonstrate how they would prevent odour pollution arising from the storage of refrigeration units.

The Applicant's response on 17 July 2018 stated that units would be checked for biodegradable materials and that, if found, they would be quarantined. The acceptance procedure received on the same date stated that items found in fridges would be removed, quarantined and removed within 7 days. It also stated that 'Items that are accepted onto the site but are not in a storable condition will be put into quarantine and sent to the processing facility (within 48 hours). The items would be:

- Items that will potentially give off odour.'

These statements were inconsistent and were not included in the risk assessment so our second Schedule 5 Notice again asked the Applicant to submit an updated environmental risk assessment which considered all potential sources of odour on site and all physical and procedural measures to prevent odour from the storage of waste.

The Applicant's proposed risk management measures received on 30 August 2018 included the removal of odorous waste from site and the removal of odours from sensitive receptors by the prevailing wind. The Emergency Action Plan received on this date also stated that there would be weekly formal visual inspections for odour. On 2 October 2018 we informed the Applicant that their risk assessment contained insufficient detail/clarity and that the proposed monitoring was contradictory.

The risk assessment received on 15 October 2018 referenced the waste acceptance procedure, the short residence time of quarantined food wastes namely: 48 hours and weekly perimeter monitoring as management measures. It also stated that the prevailing wind, noted as westerly in the FPP, would move odour away from the sensitive receptors to the south of the site. The waste acceptance procedure, the most recent version also received 15 October 2018, stated that food waste would be removed from refrigeration units whilst on the delivery vehicle and then stored for up to 7 days in the quarantine area.

### Environment Agency description of issues

The odour risk assessment did not consider all relevant sensitive receptors; the Applicant's statement regarding the wind direction failed to consider receptors located on other sides of the Site.

Given the large volume of waste to be received and stored on the Site, we question the feasibility of operators sorting and removing all food waste from units whilst on delivery trailers. If residual food waste is consequently left in refrigeration units, there is a risk for these to become odorous when stored for up to 3 months.

Similarly to the noise issues discussed above, insufficient details were provided for the proposed odour monitoring. We do not know whether the monitoring would be representative or the actions which would be taken in response to monitoring to ensure that the Site would not cause odour pollution.

### Conclusion

We conclude that the Applicant has not demonstrated that appropriate measures will be in place to prevent odour and that they will comply with the permit condition prohibiting odour pollution from the site.

## **Overall conclusion**

Any permit we would have issued for the Site would contain conditions requiring that the Applicant apply BAT. We have given the Applicant several opportunities to demonstrate that they would comply with the relevant requirements of guidance for the storage of hazardous waste: we have issued two Schedule 5 Notices requesting further information, one of which was extended, and held two face-to-face meetings. However, the Applicant's written responses have not satisfactorily demonstrated compliance with the relevant requirements of the guidance.

Section 7.7 of the Core Guidance states that the regulator may decide to refuse an application where the information provided by the operator does not provide a reasonable basis to determine the permit conditions, taking into account the operator's responses to requests for more information.

As detailed in this document, we are not satisfied that Applicant has provided an appropriate assessment of environmental risk for the facility (particularly with regards to the emission to ground) or demonstrated that the design and operation will employ BAT and that the conditions of an environmental permit would be complied with in order to prevent pollution. Therefore, in accordance with Schedule 5, Part 1, paragraph 13 of EPR 2016, we have a duty to refuse the application.

## Consultation

The following summarises the responses to consultation with other organisations and the way in which we have considered these in the determination process.

### Responses from organisations

<b>Response received from</b>
Public Health England ('PHE')
<b>Brief summary of issues raised</b>
<p>PHE recommended that any permit issues for the site contains conditions to ensure that the following potential emissions do not impact upon public health: emissions from accidental fire; accidental spillages to land and noise.</p> <p>PHE had no significant concerns regarding risk to health of the local population from the proposed activity provided that the applicant takes all appropriate measures to prevent or control pollution in accordance with the relevant sector technical guidance or industry best practice.</p>
<b>Summary of actions taken or show how this has been covered</b>
<p>We have assessed the proposals in the Application taking into account the issues raised by PHE. Based on our assessment we are not satisfied that the Applicant will take all appropriate measures to prevent or control pollution will be taken, therefore we have refused the Application.</p>

<b>Response received from</b>
Local Authority Environmental Health ('LAEH') – Telford and Wrekin Council
<b>Brief summary of issues raised</b>
<p>LAEH stated that they regularly received noise complaints from the site and that there have been odour complaints in the vicinity.</p>
<b>Summary of actions taken or show how this has been covered</b>
<p>We have assessed the proposals in the Application taking into account the issues raised by the LAEH. Based on our assessment we consider that the Applicant has not demonstrated that they will prevent noise and odour pollution from the Site, therefore we have refused the Application.</p>