

Environment Agency permitting decisions

Bespoke permit

We have decided to grant the permit for Carr Crofts Waste Treatment Facility operated by Oates Environmental Limited.

The permit number is EPR/YP3832WS.

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

Purpose of this document

This decision document:

- explains how the application has been determined
- provides a record of the decision-making process
- shows how all relevant factors have been taken into account
- justifies the specific conditions in the permit other than those in our generic permit template.

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

Structure of this document

- Key issues
- Annex 1 the decision checklist
- Annex 2 the consultation, web publicising responses

Key issues of the decision

The facility comprises the following activities listed in Schedule 1 of the EP Regulations:

- Section 5.6 Part A(1)(a)
- Section 5.3 Part A(1)(a)(ii)
- Section 5.3 Part A(1)(a)(iv)
- Section 5.4 Part A(1)(a)(ii)

And the following waste operations:

- Storage and repackaging of non-hazardous waste for disposal or recovery.

The site is located on Carr Crofts Drive, Leeds (grid ref: SE 26792 33146). The facility comprises a warehouse building with office facilities and a yard area. The site has other similar units neighbouring, and housing within 50 m to the south and south-east. Several railway tracks run approximately 50 m to the north-west of the site. Part of the Leeds-Liverpool Canal, a site of special

scientific interest (SSSI) lies within 2 km of the site, as do several local wildlife sites.

The facility will handle both hazardous and non-hazardous waste on site, falling primarily in to two categories, the first being 'packaged waste' such as drummed wastes for storage and repackaging prior to off-site disposal or recovery and secondly 'liquid waste' such as oil/water mixes and leachates for treatment. Liquid waste will be brought to site via road tanker for bulk storage in tanks and then treatment via settlement/separation to remove oil phases and solids, followed by Ultrafiltration (UF). Annual waste throughput is less than 30,000 tonnes/year. Company vehicles will also be cleaned on site in the transport yard in a dedicated, contained area and the wash water will be treated via the UF plant. The final UF plant permeate will be discharged to sewer whilst the concentrate will be despatched off-site for disposal.

The site surface is concrete, and designed with suitable segregation, secondary and tertiary containment for the types and quantities of wastes handled. The applicant works to their own Environment management system (EMS) based on ISO 14001 principles.

Discharge to Sewer

The applicant intends to discharge treated effluent comprising of permeate from the UF plant to sewer. The UF plant will treat selected wastes, site surface water and vehicle washings.

The applicant has stated that they have agreed with Yorkshire Water that 200 m³/day at a maximum settled chemical oxygen demand (COD) of 3,000 mg/l may be discharged, however no consent to discharge has yet been given by the sewerage undertaker.

The applicant provided a H1 assessment based on the 200 m³/day release. An average discharge rate figure of 0.0056 m³/s was used based on this maximum. The receiving Waste Water Treatment Works is Yorkshire Water's plant at Knostrop.

The UF plant will operate within the hours agreed on the planning permission (8.00 - 18.00 weekdays and 8.00 - 12.00 pm on Saturdays). There will be occasions where the permeate will discharge to sewer from the storage tank when the UF plant is not running. Permeate may be discharged outside the normal hours from the storage tank.

As this is a new development, data for achievable effluent quality was taken from a prototype UF unit put together in-house by the applicant. The data provided was based on two generic samples of proposed effluent of oil/water/soluble loads taken from 3 different multiple loads. The data was used as the basis for their H1 assessment.

We assessed the original H1 and then did our own assessment using the applicant's emission data and amended inputs for the following:

- Corrected river flow rate for the receiving water.
- A more realistic worst case operational mode of 85% utilisation (as opposed to the applicant's estimate of 32%) to take account of potential impacts from permeate discharge when the plant is not running (85% equates to approx. 24 hours per day, six days per week).
- Realistic Sewage Treatment Factors for the receiving plant, taken from the H1 guidance, have been applied.
- Selected appropriate Environmental Quality Standards (EQSs) for the receiving water (many metal EQSs are water hardness dependant).

Using the methodology in H1 Part A screening, all substances at the process contribution (PC) failed Test 1 so were put forward for Test 2:

Substance	EQS (µg/l)	PC (µg/l)	PC % of EQS	Test 2: PC <4% of EQS?
Arsenic	50	0.0126	0.03	PASS
Boron	2000	129.0999	6.45	FAIL
Cadmium	0.25	0.0006	0.24	PASS
Chromium (IV)	3.4	0.0029	0.09	PASS
Copper	28	0.3363	1.20	PASS
Lead	7.2	0.0643	0.89	PASS
Mercury	0.05	0.0000	0.02	PASS
Nickel	20	0.4584	2.29	PASS
Selenium	10*	0.0051	0.05	PASS
Zinc	125	1.0350	0.83	PASS

* No EQS given in H1 – we have used the standard for Protection of Surface Waters Intended for the Abstraction of Drinking Water

Substance	EQS (µg/l)	PC (µg/l)	PC % of Maximum allowable concentration (MAC) EQS	Test 2: PC <4% of MAC EQS?
Cadmium	1.5 (MAC)	0.0009	0.0574	PASS
Mercury	0.07 (MAC)	0.0000	0.0174	PASS

Cadmium and mercury are priority hazardous substances, and so were also assessed against the H1 significant load criteria.

Substance	Annual Load (kg)	Significant Load for substance (kg)	Significant Load Test
Cadmium	0.0901	5	PASS
Mercury	0.0018	1	PASS

All the above substances are considered therefore insignificant apart from Boron. Boron was put forward for the further H1 screening tests 3 and 4, looking at background concentration.

Substance	EQS (µg/l)	PC (µg/l)	Background Concentration (BC) (µg/l)	Predicted Environmental Concentration (PEC) (µg/l)
Boron	2000	129.0999	1000*	1129

* No upstream data available - BC assumed to be 50% of EQS as per H1 guidance for more polluted watercourses.

Substance	(PEC-BC)/EQS	Test 3: PEC-BC >10% EQS?	% PEC of EQS	Test 4: PEC >100% EQS?
Boron	6.5%	PASS	56.5	PASS

As Boron has passed both Test 3 and Test 4, it can be screened out as not liable to cause pollution, and no limit is required.

An improvement condition has been set to ensure that the UF plant achieves an equivalent standard of treatment to the prototype used for the effluent testing. The applicant will need to demonstrate the treated effluent performance is still within the scope of the data provided as the basis for the H1 assessment. Should the effluent be outside the expected treatment performance a further assessment may be needed to ensure the impact is acceptable. We have also set a pre-operational condition for the operator to provide a copy of the consent to discharge from the sewerage undertaker prior to any discharge of effluent from the site.

Operating Techniques

The facility is considered to be operating to the requirements of Sector Guidance Note S5.06 for Hazardous and Non-hazardous Waste Treatment. The site tank farm will be bunded to CIRIA C736 standards. A pre-operational condition has been set for tanks, bunding and pipework to be tested prior to operations commencing.

The facility requires a Fire Prevention Plan (FPP) in accordance with our FPP guidance as it accepts solid combustible non-hazardous waste under a waste operation activity alongside the installation activities. This has been approved and incorporated as a technique for the facility in table S1.2.

Annex 1: decision checklist

This document should be read in conjunction with the application, supporting information and permit.

Aspect considered	Justification / Detail	Criteria met
		Yes
Consultation		
Scope of consultation	The consultation requirements were identified and implemented. The decision was taken in accordance with our Public Participation Statement and our Working Together Agreements.	✓
Responses to consultation, web publicising	The web publicising, consultation responses (Annex 2) were taken into account in the decision. The decision was taken in accordance with our guidance.	✓
Operator		
Control of the facility	We are satisfied that the applicant (now the operator) is the person who will have control over the operation of the facility after the grant of the permit. The decision was taken in accordance with EPR RGN 1 Understanding the meaning of operator.	✓
The facility		
The regulated facility	The extent/nature of the facilities taking place at the site required clarification. The decision on the facility was taken in accordance with RGN 2. The regulated facility has both an installation and waste operation activities as described below. The regulated facility is an installation which comprises the following activities listed in Part 2 of Schedule 1 to the Environmental Permitting Regulations and the following directly associated activities. <ul style="list-style-type: none"> • S5.6 A(1)(a) - temporary storage of hazardous waste with a total capacity exceeding 50 tonnes; • S5.3 A(1)(a) - disposal or recovery of hazardous waste with capacity exceeding 10 tonnes per day involving one or more of the following activities: (iv) repackaging prior to submission to any of the other activities listed in Section 5.3 or in Section 5.1; • S5.3 A(1)(a) - disposal or recovery of hazardous waste with capacity exceeding 10 tonnes per day involving one or more of the following activities:(ii) physico-chemical treatment; • S5.4 A(1)(a) - disposal of non-hazardous waste with a 	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	<p>capacity exceeding 50 tonnes per day involving one or more of the following activities: (ii) physico-chemical treatment.</p> <ul style="list-style-type: none"> • DAA: Storage of non-hazardous waste. <p>The regulated facility is a waste operation at which the following recovery and disposal operations will be undertaken.</p> <ul style="list-style-type: none"> • D15 - storage pending any of the operations numbered D1 to D14. • R13 - storage of waste pending any of the operations numbered R1 to R12. • D14 - repackaging prior to submission to any of the operations numbered D1 to D13. • R3 - recycling/reclamation of organic substances which are not used as solvents. • R4 - recycling/reclamation of metals and metal compounds. • R5 - recycling/reclamation of other inorganic materials. 	
European Directives		
Applicable directives	All applicable European directives have been considered in the determination of the application.	✓
The site		
Extent of the site of the facility	<p>The operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility.</p> <p>A plan is included in the permit and the operator is required to carry on the permitted activities within the site boundary.</p>	✓
Site condition report	<p>The operator has provided a description of the condition of the site.</p> <p>We consider this description is satisfactory. The decision was taken in accordance with our guidance on site condition reports and baseline reporting under IED – guidance and templates (H5).</p>	✓
Biodiversity, Heritage, Landscape and Nature Conservation	<p>The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat.</p> <p>The following sites were identified within the appropriate screening distances:</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	<p>Leeds - Liverpool Canal: Site of Special Scientific Interest (SSSI) and Local Wildlife Site (LWS) Kirkstall Valley: LWS Farnley Reservoir & Silver Royd: LWS Farnley Fishpond: Local Nature Reserve (LNR)</p> <p>A full assessment of the application and its potential to affect the sites has been carried out as part of the permitting process. We consider that the application will not affect the features of the sites.</p> <p>We have not formally consulted on the application. The decision was taken in accordance with our guidance.</p>	
Environmental Risk Assessment and operating techniques		
Environmental risk	<p>We have reviewed the operator's assessment of the environmental risk from the facility.</p> <p>The operator's risk assessment is unsatisfactory and required additional Environment Agency assessment to make up the shortfall. See Key issues section for discussion of the discharge to sewer.</p> <p>The assessment shows that, applying the conservative criteria in our guidance on Environmental Risk, all emissions may be categorised as environmentally insignificant.</p>	✓
Operating techniques	<p>We have reviewed the techniques used by the operator and compared these with the relevant guidance notes. The applicable technical guidance is How To Comply and Sector Guidance Note S5.06 for Hazardous and Non-hazardous Waste Treatment. See Key Issues section for discussion of operating techniques.</p> <p>The proposed techniques/emission levels for priorities for control are in line with the benchmark levels contained in the TGN and we consider them to represent appropriate techniques for the facility.</p>	✓
The permit conditions		
Waste types	<p>We have specified the permitted waste types, descriptions and quantities, which can be accepted at the regulated facility.</p>	✓

Aspect considered	Justification / Detail	Criteria met Yes
	<p>We are satisfied that the operator can accept these wastes. Waste pre-acceptance, acceptance and storage procedures are in accordance with sector guidance requirements.</p> <p>We have removed wastes containing PCBs from the treatment operation (phase separation, ultrafiltration): 13 03 01* insulating or heat transmission oils containing PCBs. PCB-containing wastes should only be subject to a treatment which destroys the PCBs. The operator confirmed they did not object to this change.</p> <p>We have removed EWC codes ending '99' and '98' (wastes 'not otherwise specified'). We do not include specific codes ending in '99' in permits without the use of further qualifying descriptions, to prevent any potential pollution of the environment or harm to human health arising from the receipt of unspecified wastes.</p> <p>We have removed the following non-hazardous wastes which are potentially highly odorous in treatment. An Odour Management Plan (OMP) must be in place if these wastes are treated. The operator did not include an OMP in the application and agreed to the removal of the waste codes.</p> <p>19 06 03 liquor from anaerobic treatment of municipal waste 19 06 05 liquor from anaerobic treatment of animal and vegetable waste 20 03 04 septic tank sludge 20 03 06 waste from sewage cleaning</p> <p>Further operational controls are placed on the waste types to be accepted and treated via the criteria set out in Tables S2.2 and S2.3, based on waste types suitable to the operations, and restrictions proposed by the operator as suitable for the UF process (for example via hazardous properties type not suitable).</p> <p>We made these decisions with respect to waste types in accordance with SGN S5.06 and How to Comply.</p>	

Aspect considered	Justification / Detail	Criteria met
		Yes
Pre-operational conditions	Based on the information in the application, we consider that we need to impose pre-operational conditions. See Key Issues Section.	✓
Improvement conditions	Based on the information on the application, we consider that we need to impose improvement conditions. See Key Issues section. We have imposed improvement conditions to ensure that: ➤ appropriate measures are in place to ensure that accidents that may cause pollution are minimised.	✓
Incorporating the application	We have specified that the applicant must operate the permit in accordance with descriptions in the application, including all additional information received as part of the determination process. These descriptions are specified in the Operating Techniques table in the permit.	✓
Emission limits	No emission limits are set.	✓
Monitoring	No monitoring is required.	✓
Reporting	We have specified reporting in the permit. Reporting requirements are in line with those required by our installation template conditions for annual reporting and quarterly waste returns. We made these decisions in accordance with S5.06.	✓
Operator Competence		
Environment management system	There is no known reason to consider that the operator will not have the management systems to enable it to comply with the permit conditions. The decision was taken in accordance with RGN 5 on Operator Competence.	✓
Technical competence	Technical competency is required for activities permitted. The operator is a member of an agreed scheme.	✓
Relevant convictions	The National Enforcement Database has been checked to ensure that all relevant convictions have been declared. No relevant convictions were found. The operator satisfies the criteria in RGN 5 on Operator Competence.	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
Financial provision	There is no known reason to consider that the operator will not be financially able to comply with the permit conditions. The decision was taken in accordance with RGN 5 on Operator Competence.	✓

Annex 2: Consultation, web publicising responses

Summary of responses to consultation, web publication and the way in which we have taken these into account in the determination process.

Response received from
Public Health England (PHE)
Brief summary of issues raised
<p>The main concerns are those associated with the processing/repacking of solid waste at the site.</p> <p>The mechanisms by which solid waste will be treated are unclear and may give rise to dust/particulate emissions as well as odour. The application states these activities will take place within a building fitted with ventilation. No details are provided of any potential emissions of odour or dust or abatement which may be fitted to the installation. The regulator should ensure that any potential dust emissions from solid waste treatment are controlled as appropriate.</p>
Summary of actions taken or show how this has been covered
<p>A revised waste acceptance procedure has been received following a schedule 5 notice. The operator is not proposing to bulk up or repack solid dusty or odorous wastes. For bulking of solid waste Local Exhaust Ventilation will be used if required. PHE are satisfied with the proposals. The waste acceptance procedure has been included as an operational technique in table S1.2</p>