Augean SOUTH LTD

ENVIRONMENTAL PERMIT TREATMENT APPLICATION

FOR THE DEVELOPMENT CONSENT ORDER APPLICATION FOR THE ALTERATION AND CONSTRUCTION OF HAZARDOUS WASTE AND LOW LEVEL RADIOACTIVE WASTE FACILITIES AT THE EAST NORTHANTS RESOURCE MANAGEMENT FACILITY, STAMFORD ROAD, NORTHAMPTONSHIRE

PINS project reference: WS010005

PINS document reference: 9.2.1.1.1 EPTA

March 2022

MJCA
Technical advisers on environmental issues

Baddesley Colliery Offices, Main Road, Baxterley, Atherstone,
Warwickshire, CV9 2LE.
Telephone : 01827 717891, Fax : 01827 718507



PINS document reference 9.2.1.1.1 EPTA

Documents provided to PINS for the application to vary Environmental Permit number EPR/YP3138XB for the waste treatment and recovery facility operated by Augean South Limited at East Northants Resource Management Facility

Document Name	Provided or not
Application report	Yes
Appendix A – Pre-application advice and Environment Agency correspondence	Yes
Appendix B – Application forms	Yes
Appendix C – Non technical summary	Yes
Appendix D – Summary of the management system	Yes
Appendix E – Certificates of technical competence	Not provided as this appendix contains personal data.
Appendix F – Technical description of the waste neutralisation process	Yes. Appendix B and C are not included as they are commercially confidential.
Appendix G – Best Available Techniques (BAT) Assessment for the waste neutralisation process	Yes
Appendix H – Environment Risk Assessment	Yes

AN APPLICATION TO VARY ENVIRONMENTAL PERMIT NUMBER EPR/YP3138XB FOR THE WASTE TREATMENT FACILITY OPERATED BY AUGEAN SOUTH LIMITED AT EAST NORTHANTS RESOURCE MANAGEMENT FACILITY

Report reference: AU/KCW/AW/5651/01/APP
May 2021

Technical advisers on environmental issues

Baddesley Colliery Offices, Main Road, Baxterley, Atherstone, Warwickshire, CV9 2LE
Tel. (01827) 717891 Fax. (01827) 718507

CONTENTS

TABLES

FIGURES

APPENDICES

1. Introduction

1.1 MJCA is commissioned by Augean South Limited (Augean) to prepare an application to vary Environmental Permit number EPR/YP3138XB (the permit) for the Waste Treatment Facility (the site) operated by Augean at East Northants Resource Management Facility (ENRMF), Stamford Road, Peterborough, PE8 6XX. The site location is shown on Figure 1. The site is centred approximately at National Grid Reference (NGR) TF 006 001. The permit was last varied (V006) on 18 February 2021 to add activities for the recovery of hazardous waste and non-hazardous waste via the previously existing treatment technique of solidification/stabilisation.

1.2 An enhanced pre-application advice meeting was held with the Environment Agency on 19 November 2020 to discuss the scope of this variation application. Copies of the correspondence associated with the pre-application advice are presented at Appendix A. Whilst certain elements of the proposals have been revised since the pre-application meeting the advice remains relevant and the application has been prepared with reference to the pre-application advice.

1.3 The permit currently authorises the operation of a waste treatment and recovery facility for the treatment of hazardous waste and non-hazardous waste by soil washing, waste stabilisation and bioremediation (the treatment facility). Details of the currently permitted activities, including activity specific annual tonnage limits are reproduced in Table 1 of this report. The treatment facility including storage areas is located in the north western corner of the hazardous waste landfill site operated by Augean under Environmental Permit number EPR/TP3430GW. A separate application to vary Environmental Permit number EPR/TP3430GW to increase the area of the existing permitted landfill site was submitted to the Environment Agency on 7 May 2021. The proposed increased boundary of Environmental Permit number EPR/TP3430GW is shown in blue on Figure 2 for reference.

1.4 The waste treatment area is located in the northern part of the treatment facility permit boundary. The boundary of the treatment facility permit is shown in green on Figure 2. There are no proposals to amend the treatment facility permit boundary as part of this application.

1.5 The different consented treatment processes at the site are designed to maximise flexibility in the processes which are carried out at any one time. Not all processes

are operated concurrently as many share the same plant which is reconfigured depending on the nature of the process being applied and the wastes which require treatment. In order to further increase this flexibility as well as to enable rapid responses to opportunities for the treatment of waste for use in recovery operations, it is proposed that changes will be made to the individual activity specific annual tonnage limits and that an overall maximum limit of 250,000 tpa (tonnes per annum) will be specified across the activities comprising soil washing, stabilisation, bioremediation and a proposed new activity comprising the neutralisation of hazardous waste and non-hazardous waste. Further details of the proposed changes the subject of this application to vary the permit are presented in section 2 of this report and in the technical assessments and reports provided with the application.

1.6 The facilities at ENRMF are an acknowledged part of the nationally significant infrastructure for the management of hazardous waste and are the subject of a Development Consent Order (DCO) which was granted in July 2013 and amended in June 2018. Augean is preparing to submit an application for a new DCO which includes an extension in the timescales for the operation of the site and increasing the throughput of the treatment facility to 250,000tpa. Augean is carrying out an Environmental Impact Assessment (EIA) of the overall proposals which will be submitted with the DCO application in July 2021.

1.7 The application to vary the permit has been prepared with reference to relevant guidance provided by the Environment Agency on the gov.uk website. The application comprises completed Parts A, C2, C3 and F1 of the Environmental Permitting Application Forms which are presented at Appendix B. A non-technical summary of the application is presented at Appendix C.

1.8 Augean has in place a management system to support the operation of the installation under the Environmental Permit. The site will continue to be operated under an Environmental Management System (EMS) that is certified to ISO14001 and which forms part of the Augean integrated environmental, quality and health and safety management system. The management system identifies roles and responsibilities relevant to the operation of the installation and provides procedures that must be followed under normal operating conditions and specific procedures to deal with abnormal operating conditions or in the event of an incident. The management system has been developed with reference to relevant guidance

produced by the Environment Agency to support the operation of this type of regulated facility under an Environmental Permit. A summary of the management system is included at Appendix D to this report.

1.9 Augean is committed to training its staff so that they are technically competent to undertake the waste operations and uses the formal Chartered Institution of Wastes Management/Waste Management Industry Training and Advisory Board (CIWM/WAMITAB) scheme for these purposes. The training standards set out in the CIWM/WAMITAB scheme, as applicable to the operation of hazardous waste treatment facility, are adopted for training purposes. The associated Certificate of Technical Competence (CoTC) and Continuing Competence Certificate (CCC) of the relevant person are included at Appendix E to this report.

2. Proposed changes

2.1 The following changes are proposed in respect of the waste treatment facility:

- Addition of a new process at this site for the neutralisation of hazardous waste and non-hazardous waste. The proposed waste neutralisation process and the list of wastes which are treated for disposal or recovery are consistent with the process currently undertaken by Augean Treatment Limited at Port Clarence Waste Recovery Park, Stockton on Tees under Environmental Permit Number EPR/YP3234XR/V007. The activity therefore comprises a process approved previously by the Environment Agency and a process for which Augean has operational experience.

- An increase from 150,000 tonnes to 250,000 tonnes for the activity specific annual limit for the stabilisation process and for the solidification/stabilisation process.

- Table S2.7 of the permit specifies a maximum quantity of 5,000m^3 at one time for the storage of waste in the dredging waste temporary storage area (DWTSA). The DWTSA was constructed in 2013 pursuant to written agreement with the Environment Agency. A copy of a letter dated 26 November 2013 from the Environment Agency confirming the approval of the Construction Quality Assurance (CQA) Completion report for the DWTSA is presented at Appendix A. The DWTSA was extended in 2018 pursuant to written agreement with the Environment Agency. A copy of an email dated 4 May 2018 from the Environment Agency confirming the approval of the CQA Plan and Specification proposals for the extension of the DWTSA is presented at Appendix A. It is proposed that a further extension to the area of the DWTSA will be constructed in 2021. Consistent with the approach taken in 2013 and 2018 the design and construction of the extension to the DWTSA will be the subject of written agreement with the Environment Agency. It is proposed that the storage capacity specified in Table S2.7 for the DWTSA is increased to 12,000m^3 consistent with the increase in storage capacity generated by the 2018 and proposed 2021 extensions to the area of the DWTSA. Consistent with the current DWTSA the outline design of the 2021 extension will include the following elements:

- The lining system for the extension to the DWTSA will comprise a 1m thick clay liner.

- A perimeter bund will be constructed round the extension to tie in with the perimeter bund for the existing DWTSA.

As described above, full details of the design and construction of the extension of the DWTSA will be the subject of written agreement with the Environment Agency.

2.2 For clarity the proposed new activities and proposed changes to the currently permitted activities are summarised in Table 1 of this report together with a full list of the other activities specified in Table S1.1 of the permit. Table 1 also provides signposting for the supporting information and technical assessments provided with the application to vary the permit including the proposed list of waste types for each of the new activities.

2.3 As identified in Table 1, and consistent with the pre-application advice, the application for the new waste neutralisation process is supported by a document presenting a technical description of the neutralisation process (Appendix F), a Best Available Techniques (BAT) assessment (Appendix G) and an Environmental Risk Assessment (ERA) (Appendix H).

2.4 As identified in Table 1, and consistent with the pre-application advice, the proposal to increase the activity specific annual limit for the stabilisation process and for the solidification/stabilisation process is supported by a Storage and Processing capacity assessment (Section 2 of the ERA presented at Appendix H) and an ERA (Appendix H). The ERA includes a qualitative assessment of the risks associated with the increase in the storage capacity of the DWTSA. As the proposed change to the stabilisation activity and to the solidification/stabilisation activity is limited to an increase in annual tonnage only, and as there are no proposals to change the nature of the operations or the plant and equipment used in the processes, and as the proposed change to the DWTSA is limited to an increase in storage capacity, it is unnecessary to include a BAT assessment for the stabilisation process or for the solidification/stabilisation process or for the increase in the storage capacity of the DWTSA. This approach is consistent with the pre-application advice and the discussions during the pre-application meeting.

2.5 Table 1 identifies that activity specific limits of 250,000 tonnes per annum will apply to: the stabilisation process; the solidification/stabilisation process; and to the new waste neutralisation process, and activity specific limits of 100,000 tonnes per annum and 20,000 tonnes per annum will apply to (and remain unchanged for) the soil washing process and bioremediation processes respectively. However, the total maximum annual throughput at the site across all activities will be 250,000 tonnes per annum.

Activity	**Maximum tonnes per annum**	**Change compared to currently permitted tonnage**
Soil Washing process	100,000	No change from 100,000
Bioremediation process	20,000	No change from 20,000
Stabilisation process	250,000	Increased from 150,000
Solidification/stabilisation process	250,000	Increased from 150,000
Neutralisation process	250,000	Not currently permitted
Total across all activities	**250,000**	**Not currently specified**

2.6 The pre-application advice identifies that if there is an increased risk of dust emissions at the site, for example due to an increase in tonnage at the site, then it may be necessary to include an emissions (dust) management plan with the application. Section 1 of this report explains that as the treatment processes will not all operate concurrently and as the ERA presented at Appendix H demonstrates that the residual risk in respect of fugitive emissions of particulate matter is low, it is unnecessary to include an emissions (dust) management plan with the application.

2.7 The pre-application advice identifies that if there is an increased risk of odour emissions at the site, for example due to an increase in the tonnage for treatment by bioremediation, then it may be necessary to include an odour management plan with the application. As there will be no increase in the consented activity specific waste throughput for the bioremediation process and as the ERA presented at Appendix H demonstrates that the residual risk in respect of odour emissions is very low it is unnecessary to include an odour management plan with the application.

3. Application form continuation

Part C3 Table 1a

3.1 The Listed Activities and Directly Associated Activities (DAA) that may be undertaken at the installation are specified in Table S1.1 of the permit. The relevant parts of Table S1.1 including the proposed changes to the current activities and proposed new activities have been reproduced in Table 1 of this report as the information does not fit into the boxes provided in application form Part C3. Further details are presented also in the technical description of the neutralisation process presented at Appendix F.

TABLES

Table 1

Currently permitted activities and proposed changes the subject of the application to vary the permit for the ENRMF Treatment Facility

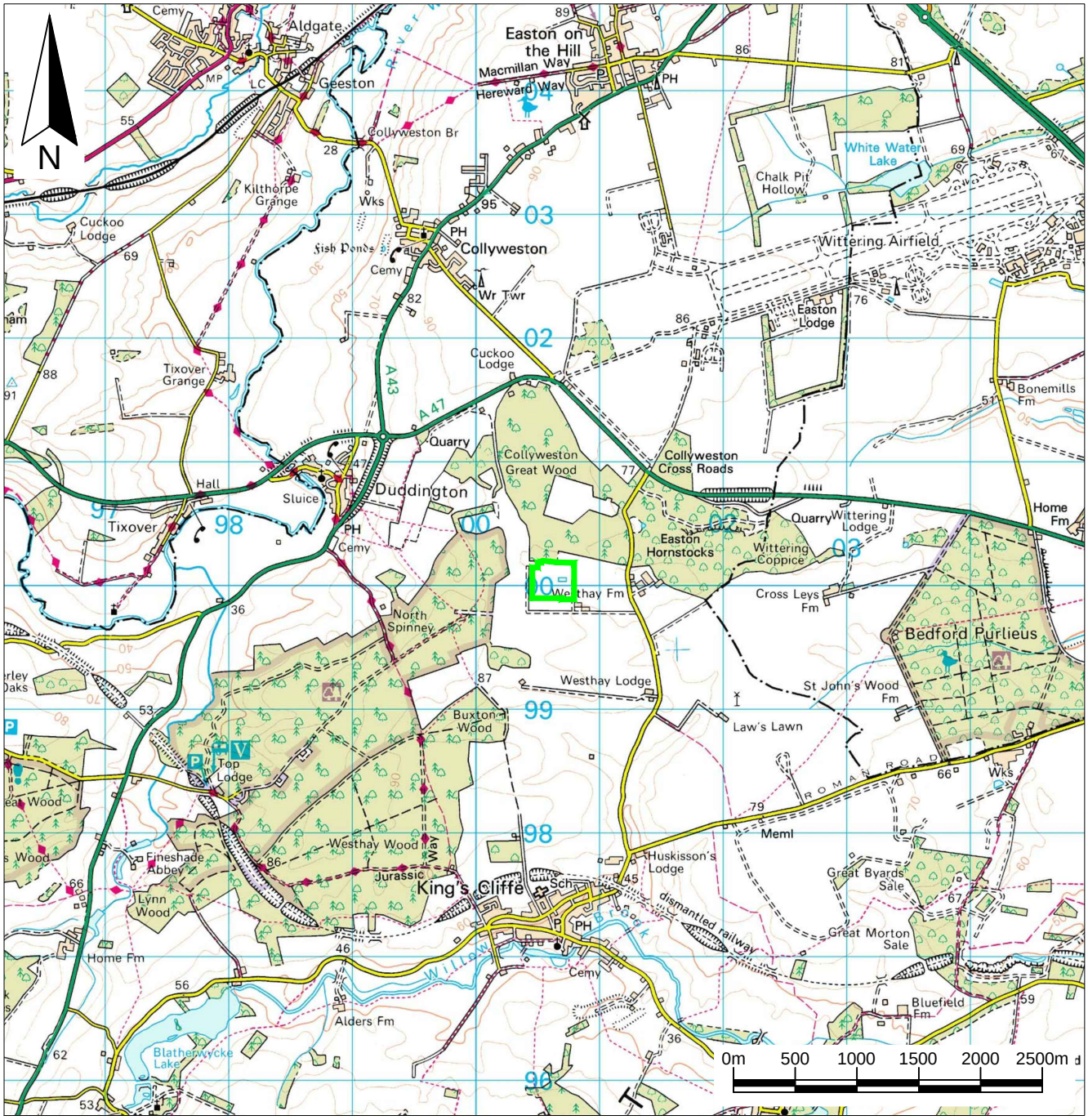
Activity Ref	Activity listed in Schedule 1 of EPR	Description of activity	Waste Types	Currently permitted tonnage per annum	Proposed changes	Supporting documents provided with the application to vary the permit
AR1 **AR10**	S5.3 A(1)(a)(ii) DAA	Soil Washing process for **hazardous** waste **recovery** Soil Washing process for **non-hazardous** waste **recovery**	Table S2.2	100,000	No changes proposed	n/a
AR2 **AR4**	S5.3 A(1)(a)(ii) S5.4 A(1)(a)(ii)	Stabilisation process for **hazardous** waste **disposal** Stabilisation process for **non-hazardous** waste **disposal**	Table S2.3	150,000	Increase maximum annual throughput to 250,000 tonnes	Environmental Risk Assessment (App H) Storage & processing capacity assessment (App H)
AR3 **AR17**	S5.3 A(1)(a)(vi) Waste Operation	Solidification/Stabilisation process for **hazardous** waste **recovery** Solidification/Stabilisation of **non-hazardous** waste for **recovery**	Table S2.8 Table S2.9	150,000	Increase maximum annual throughput to 250,000 tonnes	Environmental Risk Assessment (App H) Storage & processing capacity assessment (App H)
AR5 **AR6**	S5.3 A(1)(a)(i) S5.4 A(1)(b)(i)	Bioremediation process for **hazardous** waste **recovery** Bioremediation process for **non-hazardous** waste **recovery**	Table S2.4	20,000	No changes proposed	n/a
AR7 **AR12**	S5.3 A(1)(a)(vi) DAA	Screening of **hazardous** waste to recover oversized fractions Screening of **non-hazardous** waste to recover oversized fractions	Table S2.6	No limit	No changes proposed	n/a
AR8 **AR13**	S5.6 A(1)(a) DAA	Temporary storage of **hazardous** waste for disposal or recovery Storage of **non-hazardous** waste for disposal or recovery	Table S2.5 Table S2.7	180,000 5,000m^3	No changes proposed Increase to 12,000m^3	 Environmental Risk Assessment (App H)
AR9	S3.1 B(b)	Blending cement	n/a	n/a	No changes proposed	n/a
AR11	DAA	Screening to recover metals and metal compounds	Table S2.3	150,000	No changes proposed	n/a
AR14	DAA	Fuel Storage	n/a	n/a	No changes proposed	n/a
AR15	DAA	Surface water management	n/a	n/a	No changes proposed	n/a
AR16	DAA	Storage of landfill leachate	n/a	n/a	No changes proposed	n/a
NEW AR	S5.3 A(1)(a)(vi) S5.3 A(1)(a)(ii) Waste Operation S5.4 A(1)(a)(ii)	Neutralisation of **hazardous** waste for **recovery (AR4 WRP)** Neutralisation of **hazardous** waste for **disposal (AR4 WRP)** Neutralisation of **non-hazardous** waste for **recovery (AR38 WRP)** Neutralisation of **non-hazardous** waste for **disposal (AR4 WRP)**	S2.14# S2.14# S2.15# S2.14#	Not currently permitted	New activities/waste operation with a maximum annual throughput of 250,000 tonnes	Environmental Risk Assessment (App H) Best Available Techniques Assessment (App G) Technical description and process flow (App F)

Notes
There are no proposed changes for currently permitted activities in black text. Activities/details in blue text comprise proposed changes.
Although activity specific limits are proposed for individual activities the annual aggregated limit across all activities will be 250,000 tonnes per annum hence there is no overall increase in throughput at the site.

Key to abbreviations
AR = Activity Reference specified in Table S1.1 of EPR/YP3138XB/V006
DAA = Directly Associated Activity
EPR = The Environmental Permitting (England and Wales) Regulations 2016 UK SI No. 1154
# = Table S2.14 and S2.15 of Environmental Permit Number EPR/YP3234XR/V007 for Port Clarence Waste Recovery Park, Stockton on Tees operated by Augean Treatment Limited

Notes
The EA confirmed in the pre-application advice that for activities for which an increase in tonnage is proposed it would be necessary to include a worst case tonnage risk assessment, an impact on emissions assessment and storage and processing capacity assessments for these activities. The ERA includes a worst case tonnage risk assessment and an impact on emissions assessment. A storage and processing capacity assessment for the solidification/stabilisation process is presented in section 2 of the ERA.

FIGURES



Key / Notes

Approximate boundary of Environmental Permit number EPR/YP3138XB

Rev	Status	Drn	App	Chk	Date
	Final	KR	AW	LH	14/05/21

Site: EAST NORTHANTS RESOURCE MANAGEMENT FACILITY

Client: Augean SOUTH LTD

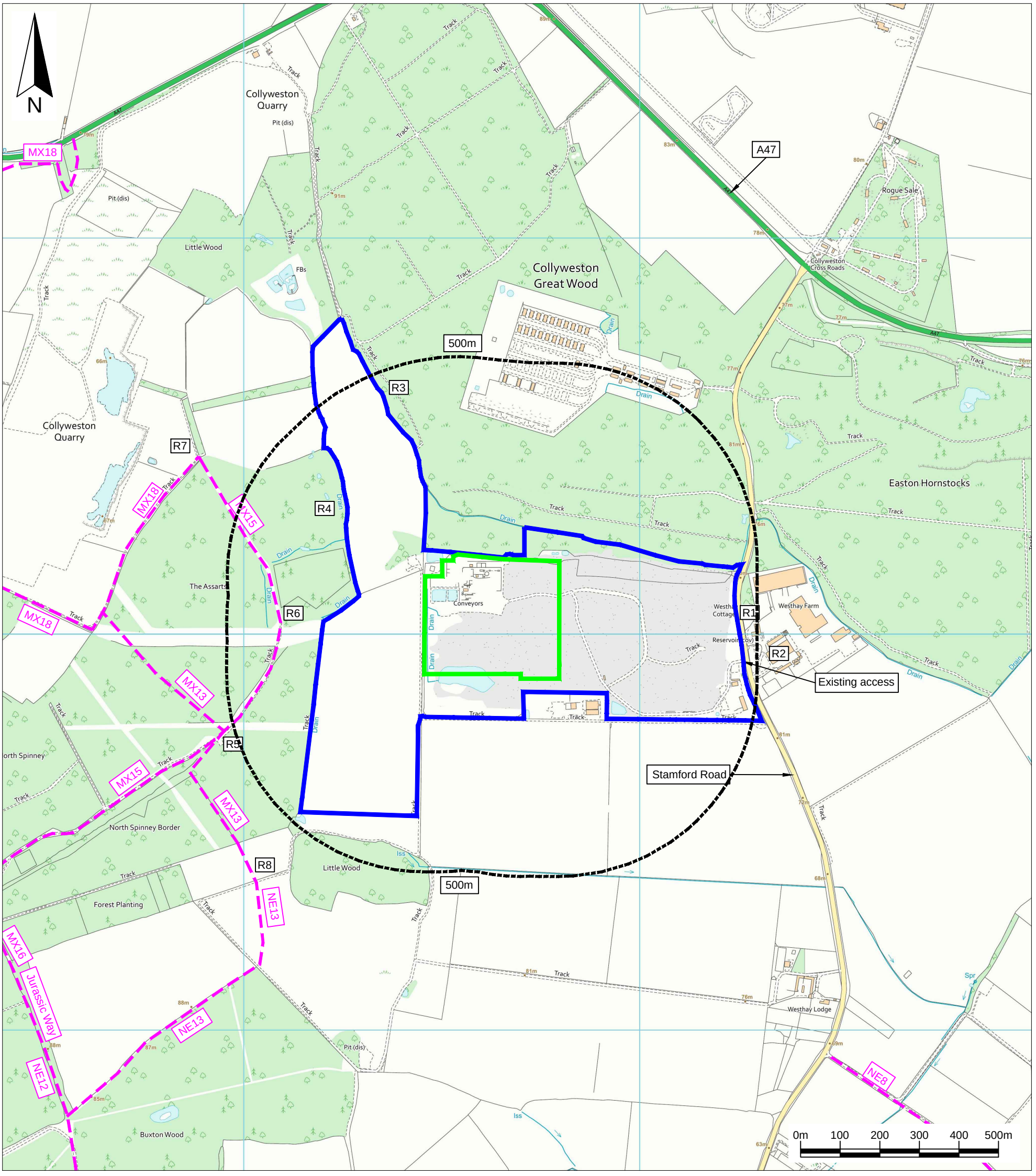
Title: The site location

Figure 1

Scale: 1:50,000@A4

Drawing Ref: AU/KCW/12-20/22146

MJCA
Technical advisers on environmental issues
Baddesley Colliery Offices,
Main Road, Baxterley, Atherstone,
Warwickshire, CV9 2LE.
Telephone : 01827 717891
Fax : 01827 718507



Key / Notes

- Approximate boundary of Environmental Permit number EPR/YP3138XB
- Proposed boundary of Environmental Permit EPR/TP3430GW/V006
- Approximately 500m distance from the Environmental Permit boundary
- Public rights of way
- R1 Receptor

Note:
Public rights of way taken from the Northamptonshire County Council Interactive Mapping http://maps.northamptonshire.gov.uk

Rev	Status	Drn	App	Chk	Date
	Final	KR	AW	LH	14/05/21

Site: EAST NORTHANTS RESOURCE MANAGEMENT FACILITY

Client: Augean South Ltd

Title: Environmental site setting

Figure 2

Scale: 1:10,000@A3

Drawing Ref: AU/KCW/12-20/22147

MJCA
Technical advisers on environmental issues
Baddesley Colliery Offices,
Main Road, Baxterley, Atherstone,
Warwickshire, CV9 2LE.
Telephone : 01827 717891
Fax : 01827 718507

APPENDICES

APPENDIX A

PRE-APPLICATION ADVICE AND ENVIRONMENT AGENCY CORRESPONDENCE

Installations pre-application form

We need to collect some contact details

Are you the

Consultant or Agent

Your contact details:We will send all correspondence to the email address you give us below.

Title (Mr., Mrs., Dr. etc)	Dr
Full Name	[redacted]
Email	
Daytime phone number	

Applicant details:

Applicant/Business Name:	Augean South Limited
Company No. (if applicable):	04636789
Building name or number	4 Rudgate Court
Road Name	Walton
Town	Wetherby
County	West Yorkshire
Postcode	LS23 7BF

We need to collect some site details

Site name and address (England only)

Site name	East Northants Resource Management Facility
Site address 1	Stamford Road
Site address 2	Kings Cliffe
Site address 3	Peterborough
Site address 4	-
Postcode	PE8 6XX

Q1. National Grid reference for the centre of the site Enter 2 letters and 10 digits. For example, ST 58132 72695.

TF 00575 00120

Q2. Environment Agency referencePlease provide your existing Environment Agency permit or pre-application reference, if you have one. It's usually in the format EPR/AB1234CD/A001.

I have an existing permit reference

If applicable enter your reference in the box below:
EPR/YP3138XB

Which installations pre-application service do you require?

Q3. Which pre-application service do you require?

enhanced pre-application advice (chargeable service)

Installations enhanced pre-application services

Q7. Use the text box below to tell us briefly how your application meets one or more of the criteria above?

It is considered that this request for enhanced pre-application advice meets at least four of the criteria specified above. The treatment plant and the adjacent hazardous waste landfill site are currently defined as Nationally Significant Infrastructure Projects and are the subject of an application for an application for a further Development Consent Order to be made in early 2021 including an increase in the consented overall throughput of the waste treatment plant. The application details are available here: https://infrastructure.planninginspectorate.gov.uk/projects/east-midlands/east-northants-resource-management-facility-western-extension/ Infrastructure relating to the proposed activities will be subject to significant investment by Augean and the advice to be provided by the Environment Agency will assist in defining the scope and timing of the permit variation application including the extent of any new infrastructure which will inform Augean's DCO application and investment and funding decisions. Depending on the scope of the application and given its association with the DCO application there is a potential that the Environment Agency may consider the application to be of high public interest. The DCO and proposed permit variation application for the ENRMF treatment facility is being progressed in tandem with the DCO and permit variation applications for the adjacent ENRMF landfill site which has been the subject of a recent enhanced pre-application meeting with the Environment Agency. The treatment activities undertaken at the ENRMF treatment facility are integral to the activities at the adjacent landfill site as the outputs from the treatment plant comprise the majority of the inputs to the adjacent hazardous waste landfill site.

Q8. What enhanced pre-application advice you would like us to provide? Try to include any specific technical questions you would like to ask.

We would be pleased to receive enhanced pre-application advice in the form of a discussion (via telephone or video conference) in respect of the specific activity comprising the stabilisation of hazardous waste by acid neutralisation of Air Pollution Control Residues (APCR) as both a disposal and a recovery activity depending on the destination and use of the output at the time. We would like to understand the variations that are needed to the permit other than the changes to the authorised EWC codes and to understand the information and justification it will be necessary to provide in an application to the Environment Agency to authorise this activity as recovery. In addition we wish to discuss aspects relating to Best Available Techniques (BAT) with reference to Sector Guidance Note S5.06 and the Waste Treatment BREF (COMMISSION IMPLEMENTING DECISION (EU) 2018/1147 of 10 August 2018 establishing best available techniques (BAT) conclusions for waste treatment, under Directive 2010/75/EU of the European Parliament and of the Council). Consistent with our understanding of the EA guidance on the application of SGN S5.06 and a recent consultation draft of the proposed replacement guidance we understand that it will not be necessary to carry out a BAT review of the existing waste activities, plant and techniques at the permitted site until 2022, however we wish to discuss and confirm that the submission of a variation application will not trigger the need for an early BAT review of all current activities as well as the new activity.

Q9. Who should we invoice for your enhanced pre-application advice? Name to go on invoice If this is a company or organisation, give its full name so that the invoice is correct

Augean South Limited

What is the invoice address? This appears on the invoice and is where it would be posted to

Invoice address 1	4 Rudgate Court
Invoice address 2	Walton
Invoice address 3	Wetherby, West Yorkshire
Postcode	LS23 7BF

Q11. Send invoice by email to (Optional)

[redacted]

AGENDA

ENRMF Treatment Facility – Enhanced pre-application meeting

19 November 2020 11am – 1pm

Format: Microsoft Teams
(Meeting to be set up and invitations arranged by the Environment Agency)

Attendees:
[redacted]

1. Proposals to amend the maximum annual quantity of waste authorised to be accepted and treated at the site. The permit (EPR/YP3138XB) currently authorises:

   a. Soil washing 100,000 tonnes per annum
   b. Stabilisation 150,000 tonnes per annum
   c. Bioremediation 20,000 tonnes per annum

   It is proposed that individual activity specific limits will not be specified and an overall maximum of 250,000 tpa will be specified across the activities comprising soil washing, bioremediation, stabilisation and the proposed new activity of acid neutralisation of APCR (which involve principally the same plant and process, see item 3 below).

2. BAT Requirements

   As the tonnage variation which will apply to stabilisation (Item 1 above) will authorise only a change in the total tonnage received and treated and no changes will be made to the plant or operation or control of the process (i.e. it is not a new installation or new or replacement plant at an existing waste installation) we should be grateful for confirmation from the Environment Agency that it will be unnecessary to include with the application a BAT review of the stabilisation process subject to the 2018 Waste Treatment BREF (Commission Implementing Decision (EU) 2018/1147). It is assumed that consistent with Environment Agency guidance, for existing waste installations, operators will need to make sure that the BAT conclusions are met in full by August 2022.

3. Treatment of hazardous waste by acid neutralisation of Air Pollution Control Residues (APCR) as both a disposal and a recovery activity.

   a. Discussion of the variations that are needed to the permit to accommodate this activity and to understand the information and justification it will be necessary to provide in an application to the Environment Agency to authorise this activity as a recovery and a disposal activity.
   b. If this specific activity is undertaken using existing plant (with the possible addition of new acid storage tanks) will this variation application need to be supported by a BAT review of the activity?

Dr [redacted]
Augean South Limited
4 Rudgate Court
Walton
Wetherby
West Yorkshire
LS23 7BF

Our reference: YP3138XB/V007
Date: 23/11/2020

Dear Dr [redacted]

Pre application advice – Enhanced service

I am pleased to provide you with your enhanced level of pre-application advice for East Northants Resource Management Facility as requested on 24/09/2020.

Our advice is based on the information provided on your pre-application advice form and our video conference on 19/11/2020.

We discussed the following:

- **Proposed increase in annual throughput to soil washing, stabilisation and bioremediation activities.**
  We advised that a single site tonnage could be applied to allow flexibility across activities. This would require:
  - a worst case tonnage risk assessment for each activity
  - an impact on emissions assessment
  - a storage capacity assessment
  - a processing capacity assessment
  - an assessment of any other changes to the site made to accommodate this

  See documentation and fee requirement in table below.

- **New waste sector guidance and application of BAT**
  We advise that new or substantially changing activities would need to comply with the latest BAT standards.

- **Treatment of hazardous waste by acid neutralisation**
  We advise the following would be required:
  - risk assessment
  - BAT assessment
  - process flow

- process equipment
- acid tank secondary containment
- reaction information
- waste types
- outputs
- potential destination for recovery
- acids types and mixing ratios
- pH and temperature control
- controls for recovery of waste and disposal of waste – inputs and outputs

We advise that this activity could be recovery or disposal and if both are required an application for two separate scheduled activities may be required.
We advised that even if the equipment is already used on site for other activities, this would be a new activity and that the process must be assessed in line with the new BAT standards.

- **Demonstrating treatment for recovery**

  We advised that for all recovery operations an operator must demonstrate there are reasonable recovery outlets for their process outputs. They must also demonstrate that waste input types will result in an output which a reasonable recovery outlet can accept.

No increase in site boundary was proposed

What enhanced pre application covers

Further information on the enhanced pre-application service is detailed on section 2 of the Environmental permitting charges guidance on GOV.UK.

As part of this service we have provided you with the following information:

Application reference number	EPR/YP3138XB/V007
Habitats screening	N/A
Documents attached	N/A
Application charge required	**Change to annual throughput to soil washing, stabilisation, bioremediation activities** Charging Scheme Environmental permitting charges guidance Section 3.4.2 states this is a minor technical variation. However Section 3.5.2 outlines situations where this proposal maybe a normal variation. **Please check this section.** Section 3.7 outlines charging scenarios for sites with multiple activities. In this case the activities are not repeat activities they are different processes and their annual tonnage is being individually raised based on a worst case 250,000 as a flexible

	site total. Therefore a minor variation fee for each activity applies if the change is not effected by Section 3.5.2. Projected charge for minor technical variations S5.3 A(1)(a)(ii) – Soil washing 1.16.1.2 - [redacted] S5.3 A(1)(a)(ii) – Stabilisation 1.16.1.2 - [redacted] S5.4A(1)(a)(ii) – Stabilisation 1.16.2.2 - [redacted] S5.3 A(1)(a)(i) – Bioremediation 1.16.1.1- [redacted] S5.4A(1)(b)(i) – Bioremediation 1.16.2.1 - [redacted] https://www.gov.uk/government/publications/environmental-permitting-charging-scheme-2019 **Addition of APCR and acid treatment process.** Section 3.8 states this is a new permit application charge. Note the permit variation application type will be a substantial variation application. https://www.gov.uk/government/publications/environmental-permitting-charges-guidance/environmental-permitting-charges-guidance Projected charge Disposal S5.3 A (1) (a) (ii) - 1.16.1.2 - [redacted] Recovery S5.3 A (1) (a) (vi) - 1.16.1.3 - [redacted]
Forms required to be submitted	Form A, C2, C3 and F1 • https://www.gov.uk/government/publications/application-for-an-environmental-permit-part-a-about-you • https://www.gov.uk/government/publications/application-for-an-environmental-permit-part-c2-varying-a-bespoke-permit • https://www.gov.uk/government/publications/application-for-an-environmental-permit-part-c3-varying-a-bespoke-installation-permit • https://www.gov.uk/government/publications/application-for-an-environmental-permit-part-f1-opra-charges-declarations

Additional documents required	• **Non-Technical Summary:** You need to send us a simple explanation of what the activities or changes are. This should include a summary your operations, a summary of the key technical standards and control measures arising from your risk assessment. • **Environmental Risk Assessment**: You should describe the environmental risk posed by your proposals. This must take the form of an environmental risk assessment which should follow the methodology set out in 'Risk assessments for your environmental permit' at https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit • **Site Plan(s)** only if proposals substantial change the site layout • **Technical Description and BAT assessment:** You will need to provide a technical description of the changes you propose to make, detailing any changes to plant, equipment and infrastructure, including design capacities. You must demonstrate that you will meet any relevant standards given in technical guidance. https://www.gov.uk/guidance/chemical-waste-appropriate-measures-for-permitted-facilities and any relevant BAT-AELs. This should include consideration for any relevant Directives, such as Energy Efficiency Directive and Waste Framework Directive (WFD). https://www.gov.uk/guidance/best-available-techniques-environmental-permits https://www.gov.uk/government/publications/sector-guidance-note-s506-recovery-and-disposal-of-hazardous-and-non-hazardous-waste • **Odour Management Plan:** If there is an increased risk of odour e.g. increase tonnage for bioremediation • **Emissions (Dust) Management Plan** If there is an increased risk of dust e.g. increase tonnage on site

Additional information	N/A

A complete application must contain the following information below:

Declaration	**Please ensure the declaration section is completed by each relevant person. For a limited company, this must be a director/company secretary as listed on Companies House.**
Payment	Please note your application will not be processed until we receive the full payment.

What happens next?

If you submit an environmental permit application then please quote this pre-application reference number: EPR/YP3138XB/V007

If the advice above details using the online digital application form, your application can be submitted using this method. If not, please send your completed application documents via email to: psc@environment-agency.gov.uk

Or by post to:

Environment Agency, Permitting Support Centre, Quadrant 2, 99 Parkway Avenue, Sheffield, S9 4WF

Current application timescales

Dealing with the impact of COVID-19

We are following Government advice to manage the risks of Coronavirus to our organisation, to protect the health, safety and wellbeing of our staff and sustain our critical operations.

We are doing all we can to maintain our service, however it may take us longer than usual to respond to you. It is important that you inform us of any applications that are critical to maintain national resilience, national infrastructure and critical environmental protection.

Our current queues are large and we are taking longer than usual to allocate work for duly made checks. Please see the table below for current average queue times.

Application type	Average time on queue
New standard rules	8-10 weeks
New Bespoke	18-20 weeks
Admin variation	6-8 weeks

Minor variation	12-14 weeks
Normal variation	21-23 weeks
Substantial variation	21-23 weeks
Transfer	13-15 weeks
Surrender	15-17 weeks
Medium Combustion Plant	12-14 weeks

Disclaimer

The advice given is based on the information you have provided, and does not constitute a formal response or decision of the Environment Agency with regard to future permit applications. Any views or opinions expressed are without prejudice to the Environment Agency's formal consideration of any application. Please note that any application is subject to duly making and then full technical checks during determination, and additional information may be required based on your detailed submission and site specific requirements and the advice given is to address the specific pre-application request.

This advice covers installations only. Other permissions from the Environment Agency and/or other bodies may be required for associated or other activities.

Enhanced pre application cost estimate

At this stage the pre-application advice is expected to cost up to £650.00 plus VAT. An invoice will be sent separately at a later date.

This pre-application request is now closed.

We consider this pre application request is now closed however if you have any questions regarding this letter please contact Daniel Kirk. If you require additional enhanced pre-application advice please complete our online form.

We look forward to working with you on this project.

If you have any questions please call 03708 506 506.

Yours sincerely

[redacted]

Permitting Officer, National Permitting Service

[redacted]

creating a better place

Environment Agency

Mr [redacted]
MJ Carter Associates Limited
Baddesley Colliery Offices
Main Road
Baxterly
Atherstone
Warwickshire
CV9 2LE

Our ref: CQAr/DWTSA/JB/261113

Your ref: AU/KC/DFR/3171/01

Date: 26 November 2013

Dear Mr [redacted]

East Northants Resource Management Facility – Construction Quality Assurance Completion Report for the Dredging Waste Temporary Storage Area

Thank you for submitting the Construction Quality Assurance (CQA) Completion Report for the Dredging Waste Temporary Storage Area (DWTSA) at the East Northants Resource Management Facility.

Following our review of the report and recent site inspection we are satisfied that the works have been completed in accordance with the agreed CQA Plan and specification. Therefore we can approve the document as a record of completion of the DWTSA to the agreed design.

Please do not hesitate to contact me if you have any queries.

Yours sincerely

[redacted]
Technical Specialist (Groundwater and Contaminated Land)
Direct dial [redacted]
Direct e-mail [redacted]

Cc: [redacted] (EA) email only
(Augean) email only

[redacted]

From: [redacted]
Sent: 04 May 2018 11:34
To: [redacted]
Cc: [redacted]
Subject: RE: East Northants Resource Management Facility - extension to Dredging Waste Temporary Storage Area

[redacted],

Further to our earlier telephone conversation, I can confirm we have reviewed the CQA Plan and Specification proposals for the extension of the lagoon and consider that they are acceptable. Therefore, we are happy for the extension to be constructed. However, the extended lagoon will have a volume in excess of the 5000m3 permit allowance and this should not be exceeded unless a permit variation is submitted and agreed. In the meantime, we will require that a clearly visible 5000m3 level marker is put into the extended lagoon to ensure that this volume is not exceeded. In addition, can you confirm the volume of the extended lagoon?

Regards

[redacted]
Technical Specialist - Groundwater & Contaminated Land

Lincolnshire and Northamptonshire Area
Environment Agency
✉ Ceres House, Searby Road, Lincoln, LN2 4DW.
☎ [redacted]
☎ [redacted] (internal)
[redacted]
www.gov.uk/environment-agency

From: [redacted]
Sent: 20 April 2018 14:08
To: [redacted]
Cc: [redacted]
Subject: East Northants Resource Management Facility - extension to Dredging Waste Temporary Storage Area

Please find attached a document in relation to East Northants Resource Management Facility extension to Dredging Waste Temporary Storage Area.

[redacted]
MJCA
Baddesley Colliery Offices
Main Road
Baxterley
Atherstone
Warwickshire
CV9 2LE

Tel: 01827 717891
Fax: 01827 718507
www.mjca.co.uk

Technical advisers on environmental issues
Established in 1983
Over 30 years of reliability in a changing environment

APPENDIX B

APPLICATION FORMS

Application for an environmental permit Part A – About you

You will need to fill in this part A if you are applying for a new permit, applying to change an existing permit or surrender your permit, or want to transfer an existing permit to yourself. Please check that this is the latest version of the form available from our website.

You can apply online for Waste standard rules environmental permits, bespoke waste permits and bespoke Medium combustion plant permits

Apply online for an environmental permit.

Please read through this form and the guidance notes that came with it.

The form can be:

1) **saved onto a computer and then filled in. Please note that the form follows a logic that means questions will open or stay closed depending on a previous answer. So you may not be able to enter text in some boxes.**
2) **printed off and filled in by hand. Please write clearly in the answer spaces.**

Note: if you believe including information on a public register would not be in the interests of national security you must enclose a letter telling us that you have told the Secretary of State. We will not include the information in the public register unless directed otherwise.

It will take less than one hour to fill in this part of the application form.

Where you see the term 'document reference' on the form, give the document references and send the documents with the application form when you've completed it.

Contents

1 About you

Are you applying as an individual, an organisation of individuals (for example, a partnership), a company (this includes Limited Liability Partnerships) or a public body?

An individual	☐ Now go to section 2 and if you are applying for a new permit or transferring a permit for an installation or waste activity please also fill in Appendix 1
An organisation of individuals (for example, a partnership)	☐ Now go to section 3 and if you are applying for a new permit or transferring a permit for an installation or waste activity please also fill in Appendix 1
A public body	☐ Now go to section 4
A registered company or other corporate body	☑ Now go to section 5 and if you are applying for a new permit or transferring a permit for an installation or waste activity please also fill in Appendix 1

2 Applications from an individual

2a Please give us the following details

Name

Title (Mr, Mrs, Miss and so on) _____

First name _____

Last name _____

Now go to section 6

3 Applications from an organisation of individuals or charity

3a Type of organisation

For example, a charity, a partnership, a group of individuals or a club

3b Details of the organisation or charity

If you are an organisation of individuals, please give the details of the main representative below. If relevant, provide details of other members (please include their title Mr, Mrs and so on) on a separate sheet and tell us the document reference you have given this sheet

Contact name

Title (Mr, Mrs, Miss and so on)

First name

Last name

Now go to question 3c or section 6

3c Details of charity

Full name of charity

This should be the full name of the legal entity not any trading name.

3d Company registration number

If you are registered with Companies House please tell us your registration number

3e Charity Commission number

If you are registered with the Charity Commission please tell us your registration number

Now go to section 6

4 Applications from public bodies

4a Type of public body

For example, NHS trust, local authority, English county council

4b Name of the public body

4c Please give us the following details of the executive

An officer of the public body authorised to sign on your behalf

Name

Title (Mr, Mrs, Miss and so on)

First name

Last name

Position

Now go to section 6

5 Applications from companies or corporate bodies

5a Name of the company

Augean South Limited

5b Company registration number

04636789

Date of registration (DD/MM/YYYY)

14/01/2003

If you are applying as a corporate organisation that is not a limited company, please provide evidence of your status and tell us below the reference you have given the document containing this evidence.

Document reference

5 Applications from companies or corporate bodies, continued

5c Please give details of the directors

If relevant, provide details of other directors and company secretary, if there is one, on a separate sheet and tell us the reference you have given this sheet.

Document reference: Further details are included in the application cover letter

Details of company secretary (if relevant) and director/s

Title (Mr, Mrs, Miss and so on): [redacted]

First name: [redacted]

Last name: [redacted]

Title (Mr, Mrs, Miss and so on): [redacted]

First name: [redacted]

Last name: [redacted]

Now go to section 6

6 Your address

6a Your main (registered office) address

For companies this is the address on record at Companies House.

Contact name

Title (Mr, Mrs, Miss and so on): [redacted]

First name: [redacted]

Last name: [redacted]

Address: 4 Rudgate Court
Walton
Wetherby
West Yorkshire

Postcode: LS23 7BF

Contact numbers, including the area code

Phone: [redacted]

Fax:

Mobile:

Email: [redacted]

For an organisation of individuals every partner needs to give us their details, including their title Mr, Mrs and so on. So, if necessary, continue on a separate sheet and tell us below the reference you have given the sheet.

Document reference:

6b Main UK business address (if different from above)

Contact name

Title (Mr, Mrs, Miss and so on):

First name:

Last name:

Address:

Postcode:

6 Your address, continued

Contact numbers, including the area code

Phone

Fax

Mobile

Email

Now go to section 7

7 Contact details

7a Who can we contact about your application?

It will help us if there is someone we can contact if we have any questions about your application. The person you name should have the authority to act on your behalf.

Please add a second contact on a separate sheet if this person is not always available.

Document reference of this separate sheet

This can be someone acting as a consultant or an 'agent' for you.

Contact name

Title (Mr, Mrs, Miss and so on) [redacted]

First name [redacted]

Last name [redacted]

Address MJCA, Baddesley Collery Offices

Main Road, Baxterley

Atherstone

Warwickshire

Postcode CV9 2LE

Contact numbers, including the area code

Phone 01827 717891

Fax

Mobile [redacted]

Email [redacted]

7b Who can we contact about your operation (if different from question 7a)?

Contact name

Title (Mr, Mrs, Miss and so on) [redacted]

First name [redacted]

Last name [redacted]

Address East Northants Resource Management Facility

Stamford Road

Kings Cliffe

Peterborough

Postcode PE8 6XX

Contact numbers, including the area code

Phone [redacted]

Fax

Mobile

Email [redacted]

7 Contact details, continued

7c Who can we contact about your billing or invoice?

Note: Please provide the name and address that all invoices should be sent to for your subsistence fees.

As in question 7a ☐

As in question 7b ☐

Please give details below if different from question 7a or 7b.

Contact name

Title (Mr, Mrs, Miss and so on) [redacted]

First name [redacted]

Last name [redacted]

Address East Northants Resource Management Facility
Stamford Road
Kings Cliffe
Peterborough

Postcode PE8 6XX

Contact numbers, including the area code

Phone [redacted]

Fax

Mobile

Email [redacted]

8 How to contact us

If you need help filling in this form, please contact the person who sent it to you or contact us as shown below.

General enquiries: 03708 506 506 (Monday to Friday, 8am to 6pm)

Textphone: 03702 422 549 (Monday to Friday, 8am to 6pm)

Email: enquiries@environment-agency.gov.uk

Website: www.gov.uk/government/organisations/environment-agency

If you are happy with our service, please tell us. It helps us to identify good practice and encourages our staff. If you're not happy with our service, please tell us how we can improve it. More information on how to do this is available at: www.gov.uk/government/organisations/environment-agency/about/complaints-procedure.

Please tell us if you need information in a different language or format (for example, in large print) so we can keep in touch with you more easily.

9 Where to send your application

For how many copies to send see the guidance note on part A.

For water discharges by email to PSC-WaterQuality@environment-agency.gov.uk

For waste and installations by email to PSC@environment-agency.gov.uk

For flood risk activity permits send 1 copy only to enquiries@environment-agency.gov.uk or to the local Environment Agency office for where the work is proposed to be carried out.

Or

Permitting Support, NPS Sheffield
Quadrant 2
99 Parkway Avenue
Parkway Business Park
Sheffield
S9 4WF

Feedback

(You don't have to answer this part of the form, but it will help us improve our forms if you do.)

We want to make our forms easy to fill in and our guidance notes easy to understand. Please use the space below to give us any comments you may have about this form or the guidance notes that came with it.

How long did it take you to fill in this form?

We will use your feedback to improve our forms and guidance notes, and to tell the Government how regulations could be made simpler.

Would you like a reply to your feedback?

Yes please ☐

No thank you ☐

For Environment Agency use only

Date received (DD/MM/YYYY)

Our reference number

Payment received?

No ☐

Yes ☐ Amount received

£

Appendix 1 – Date of birth information for installation and waste activities (applications for a new permit or transferring a permit) only

Date of birth information in this appendix will not be put onto our Public Register

Are you applying as an individual, an organisation of individuals (for example, a partnership) or a company (this includes Limited Liability Partnerships)?

An individual ☐ Now go to 2

An organisation of individuals (for example, a partnership) ☐ Now go to 3

A registered company or other corporate body ☐ Now go to 4

2 Applications from an individual

Please give us the following details

Name

Date of birth (DD/MM/YY)

3 Applications from an organisation of individuals or charity

Details of the organisation or charity

If you are an organisation of individuals, please give the date of birth details of the main representative below. If relevant, provide details of other members on a separate sheet and tell us the document reference you have given this sheet.

Name

Date of birth (DD/MM/YY)

Document reference

4 Applications from companies or corporate bodies

Name of the company

Please give the date of birth details for all directors and company secretary if there is one. If relevant, provide those details of other directors on a separate sheet and tell us the document reference you have given this sheet.

Details of company secretary (if relevant) and director/s

Name

Date of birth (DD/MM/YY)

Name

Date of birth (DD/MM/YY)

Name

Date of birth (DD/MM/YY)

Document reference

Application for an environmental permit
Part C2 – General – varying a bespoke permit

Environment Agency

Fill in this part of the form, together with part A and the relevant parts of C3 to C7 and part F1 or F2, if you are applying to vary (change) the conditions or any other part of the permit. Please check that this is the latest version of the form available from our website.

You only need to give us details in this application for the parts of the permit that will be affected (for example, if you are adding a new facility or changing existing ones).

Waste operation changing to installation or vice versa?

If your changes mean that a waste operation becomes an installation (or vice versa) you also need to fill in either part C3 (waste to installation) or part C4 (installation to waste).

You do not need to resend any information from your original permit application if it is not affected by your proposed changes.

Please read through this form and the guidance notes that came with it.

The form can be:

1) saved onto a computer and then filled in. Please note that the form follows a logic that means questions will open or stay closed depending on a previous answer. So you may not be able to enter text in some boxes.
2) printed off and filled in by hand. Please write clearly in the answer spaces.

It will take less than two hours to fill in this part of the application form.

Contents

1 About the permit

Note: If you are applying to convert your existing permit to a standard permit or add a standard facility you need to fill out form C1.

1a Discussions before your application

If you have had discussions with us before your application, give us the permit reference or details on a separate sheet. Tell us below the reference you have given this extra sheet.

Permit or document reference: AU/KCW/AW/5651/01 - Appendix A

1b Permit number

What is the permit number that this application relates to? EPR/YP3138XB

1c Site details

What is the name, address and postcode of the site?

Site name: East Northants Resource Management Facility

Address: Stamford Road
King's Cliffe
Peterborough

Postcode: PE8 6XX

2 About your proposed changes

2a Type of variation

What type of variation are you applying for?

Minor technical ☐
Normal variation ☐
Substantial ☑

2 About your proposed changes, continued

2b Changes or additions to existing activities

Please give us brief details in the box below. More detailed information can be given in Table 1 below.

Further details are provided in Section 2 of the application report.

Fill in Table 1 with details of all the proposed changes to current activities. In the final column of the table, give us the document reference for the proposed changes and send them to us with your filled in application form.

Fill in a separate table for each activity you are applying to vary or add. Use a separate sheet if you have a long list and send it to us with your application form. Tell us below the reference you have given this document.

Document reference

You only need to fill in one table for your mining waste operations.

2c Consolidating (combining) or updating existing permits

If your proposed change is to modernise (update) your permit, now answer 2c1; otherwise go to 2d.

If your proposed change is to consolidate (combine) a number of permits, now answer 2c2; otherwise go to 2d.

Note: In both cases we may require additional information from you about, for example, your management system. Therefore we would always advise you to talk to us before you submit any application to modernise or consolidate permits.

2c1 Do you want to have a modern style permit?

No ☐

Yes ☐

2c2 Identify all the permits you want to consolidate (combine) by listing the permit numbers in Table 2 below

Table 2 – Permit numbers

2d Treating batteries

2d Are you proposing to treat batteries?

No ☑

Yes ☐ Tell us how you will do this and send us a copy of your explanation and tell us below the reference you have given this explanation

Document reference for the explanation

2e Ship recycling

2e1 Is your activity covered by the Ship Recycling Regulations 2015? (See the guidance notes on part C2.)

No ☑

Yes ☐ Tell us how you will do this. Please send us a copy of your explanation and your facility recycling plan, and tell us below the reference numbers you have given these documents

Document reference for the explanation

Document reference for the facility recycling plan

2e2 Is this a renewal of an existing authorisation covered by the Ship Recycling Regulations 2015?

No ☑

Yes ☐ Tell us the expiry date of your existing authorisation (DD/MM/YYYY)

2 About your proposed changes, continued

Table 1 – Changes to existing activities

Fill in Table 1 with details of all the proposed changes to current activities. In the final column of the table, give us the document reference for the proposed changes and send them to us with your filled in application form.

Name	Installation schedule 1 references	Description of the installation activity	Description of waste operation	Description of the mining waste operations	Description of water discharge activity	Description of groundwater activity	Proposed changes document reference
i.e. name of installation, waste operation, mining waste operation, water discharge activity or groundwater activity							
Example – effluent unique name					Example – treated sewage effluent		
If you do not have enough room, go to the line below or send a separate document and give us the document reference here							
ENRMF	S5.3 Part A(1)(a)(ii)	Stabilisation Haz (D)					AU/KCW/AW/5651/01
	S5.4 Part A(1)(a)(ii)	Stabilisation NH (D)					Section 2 & Table 1
	S5.3 Part A(1)(a)(ii)	Neutralisation Haz (D)					
	S5.3 Part A(1)(a)(vi)	Neutralisation Haz (R)					
	S5.4 Part A(1)(a)(ii)	Neutralisation NH (D)					
			Neutralisation NH (R)				
	S5.3 Part A(1)(a)(vi)	Solid/Stab Haz (R)					
			Solid/Stab NH (R)				

2 About your proposed changes, continued

2f Low impact installations (installations only)

2f1 Will any changes mean that any of the regulated facilities will become low impact installations?

No ☑ Now go to section 3

Yes ☐ If yes, tell us how you meet the conditions for a low impact installation (see the guidance notes on part C2 – Appendix 1)

Document reference

Tick the box to confirm you have filled in the low impact installation checklist in appendix 1 for each regulated facility ☐

3 Your ability as an operator

If you are applying to add waste installations or waste operations to a permit that has not previously had them, you need to fill in all of section 3.

If you are applying to consolidate (combine) two or more permits or have an updated permit you must fill in question 3d.

This section does not apply for applications to surrender a permit.

3a Relevant offences

Installations and waste operations only (see the guidance notes on part C2).

3a1 Have you, or any other relevant person, been convicted of any relevant offence?

No ☑ Now go to question 3b

Yes ☐ Please give details below

Name of the relevant person

Title (Mr, Mrs, Miss and so on)

First name

Last name

Position held at the time of the offence

Name of the court where the case was dealt with

Date of the conviction (DD/MM/YY)

Offence and penalty set

Date any appeal against the conviction will be heard (DD/MM/YYYY)

If necessary, use a separate sheet to give us details of other relevant offences and tell us below the reference number you have given the extra sheet.

Document reference

Now go to question 3b

Please also complete the details in Appendix 2.

3b Technical ability

Specified waste management activities and waste operations only (see the guidance notes on part C1).

Please indicate which of the two schemes you are using to demonstrate you are technically competent to operate your facility and the evidence you have enclosed to demonstrate this.

ESA/EU skills

I have enclosed a copy of the current Competence Management System certificate ☐

CIWM/WAMITAB scheme

Please select **one** of the following:

- I have enclosed a copy of:
  - the relevant qualification certificate/s ☑

  or
  - evidence of deemed competence ☐

  or

3 Your ability as an operator, continued

- Environment Agency assessment ☐

or

- evidence of nominated manager status under the transitional provisions for previously exempt activities ☐

and, if deemed competent or Agency-assessed, or if there is evidence of a nominated manager, or if the original qualification is over two years old:

I have enclosed a copy of the relevant current continuing competence certificate/s ☑

For each technically competent manager please give the following information. If necessary, use a separate sheet to give us these details and tell us below the document reference you have given the extra sheet.

Title (Mr, Mrs, Miss and so on) [redacted]

First name [redacted]

Last name [redacted]

Phone [redacted]

Mobile

Email [redacted]

Please provide the environmental permit number/s and site address for **all** other waste activities that the proposed technically competent manager provides technical competence for, including permits held by other operators. Continue on a separate sheet as required.

Permit number	Site address	Postcode
EPR/TP3430GW	East Northants Resource Management Facility Hazardous Waste Landfill Site	PE8 6XX

Document reference AU/KCW/AW/5651/01/APP - Appendix E

Now go to question 3c

Please also complete the details in Appendix 2.

3c Finances

Installations, waste operations and mining waste operations only (see the guidance notes on part C2).

Please note that if you knowingly or carelessly make a statement that is false or misleading to help you get an environmental permit (for yourself or anyone else), you may be committing an offence under the Environmental Permitting (England and Wales) Regulations 2016.

Do you or any relevant person or a company in which you were a relevant person have current or past bankruptcy or insolvency proceedings against you?

No ☑

Yes ☐ Please give details below, including the required set-up costs (including infrastructure), maintenance and clean up costs for the proposed facility against which a credit check may be assessed

We may want to contact a credit reference agency for a report about your business's finances.

3 Your ability as an operator, continued

Landfill, Category A mining waste facilities and mining waste facilities for hazardous waste only

How do you plan to make financial provision (to operate a landfill or a mining waste facility you need to show us that you are financially capable of meeting the obligations of closure and aftercare)?

Renewable bonds ☐

Cash deposits with the Environment Agency ☐

Other – provide comprehensive details ☐

Document reference

Provide a cost profile and expenditure plan of your estimated costs throughout the aftercare period of your site.

Document plan reference

Now go to question 3d

3d Management systems

You must have an effective, written management system in place that identifies and reduces the risk of pollution. You may show this by using a certified scheme or your own system.

Your permit requires you (as the operator) to ensure that you manage and operate your activities in accordance with a written management system.

You need to be able to explain what happens at each site and which parts of the overall management system apply. For example, at some sites you may need to show you are carrying out additional measures to prevent pollution because they are nearer to sensitive locations than others.

You can find guidance on management systems on our website at www.gov.uk/government/organisations/environment-agency.

Tick this box to confirm that you have read the guidance and that your management system will meet our requirements ☐

What management system will you provide for your regulated facility?

ISO 14001 ☑

BS 8555 (Phases 1–5) ☐

Acorn ☐

Green dragon ☐

Own management system ☐

Please make sure you send us a summary of your management system with your application.

Document reference/s AU/KCW/AW/5651/01/APP - Appendix D

4 Consultation

Fill in 4a to 4c for installations and waste operations and 4d for installations only.

Could the waste operation or installation involve releasing any substance into any of the following?

4a A sewer managed by a sewerage undertaker?

No ☑

Yes ☐ Please name the sewerage undertaker

4b A harbour managed by a harbour authority?

No ☑

Yes ☐ Please name the harbour authority

4c Directly into relevant territorial waters or coastal waters within the sea fisheries district of a local fisheries committee?

No ☑

Yes ☐ Please name the fisheries committee

4 Consultation, continued

4d Is the installation on a site for which:

4d1 a nuclear site licence is needed under section 1 of the Nuclear Installations Act 1965?

No ☑

Yes ☐

4d2 a policy document for preventing major accidents is needed under regulation 5 of the Control of Major Accident Hazards Regulations 2015, or a safety report is needed under regulation 7 of those Regulations?

No ☑

Yes ☐

5 Supporting information

5a Provide a plan or plans for the site

See the guidance notes on part C2 for what needs to be marked on the plan.

Clearly mark the site boundary or discharge point, or both. Also include site drainage plans, site layout plans, and plant design drawings/process flow diagrams (as required). (See the guidance notes on part C2.)

Document reference/s of the plans: AU/KCW/AW/5651/01/APP - Figures

5b Do any of the variations you plan to make need extra land to be included in the permit?

No ☑

Yes ☐ Please provide a site report for the extra land

Document report reference/s:

5c Provide a non-technical summary of your application

Document reference of the summary: AU/KCW/AW/5651/01/APP - Appendix C - NTS

5d Risk of fire from sites storing combustible waste

Are you applying for an activity that includes the storage of combustible wastes?

(This applies to all activities excluding standalone water and groundwater discharges.)

No ☑ Go to question 5f

Yes ☐ Go to question 5e

5e Will your variation increase the risk of a fire occurring or increase the environmental risk if a fire occurs?

See the guidance notes on part C2.

No ☐

Yes ☐ Provide a fire prevention plan. You need to highlight any changes you have made since your pre-application discussions

Document reference of the plan:

5f Adding an installation

If you are applying to add an installation, tick the box to confirm that you have sent in a baseline report and provide a reference ☐

Document reference of the report:

6 Environmental risk assessment

If you need one, see the guidance notes on part C2.

Provide an assessment of any additional risks the proposed changes or additions to your regulated facilities poses to the environment as part of your application to vary this permit. The risk assessment must follow the methodology set out in 'Risk assessments for your environmental permit' at https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit or an equivalent method.

Document reference for the assessment: AU/KCW/AW/5651/01/APP - Appendix H

7 How to contact us

If you need help filling in this form, please contact the person who sent it to you or contact us as shown below.

General enquiries: 03708 506 506 (Monday to Friday, 8am to 6pm)

Textphone: 03702 422 549 (Monday to Friday, 8am to 6pm)

Email: enquiries@environment-agency.gov.uk

Website: www.gov.uk/government/organisations/environment-agency

If you are happy with our service, please tell us. It helps us to identify good practice and encourages our staff. If you're not happy with our service, please tell us how we can improve it.

Please tell us if you need information in a different language or format (for example, in large print) so we can keep in touch with you more easily.

Feedback

(You don't have to answer this part of the form, but it will help us improve our forms if you do.)

We want to make our forms easy to fill in and our guidance notes easy to understand. Please use the space below to give us any comments you may have about this form or the guidance notes that came with it.

How long did it take you to fill in this form?

We will use your feedback to improve our forms and guidance notes, and to tell the Government how regulations could be made simpler.

Would you like a reply to your feedback?

Yes please ☐

No thank you ☐

For Environment Agency use only

Date received (DD/MM/YYYY)

Our reference number

Payment received?

No ☐

Yes ☐ Amount received

£

Plain English Campaign's Crystal Mark does not apply to appendix 1.

Appendix 1 – Low impact installation checklist

Installation reference				
Condition	Response			Do you meet this?
A – Management techniques	Provide references to show how your application meets A			Yes ☐ No ☐
	References			
B – Aqueous waste	Effluent created		m^3/day	Yes ☐ No ☐
C – Abatement systems	Provide references to show how your application meets C			Yes ☐ No ☐
	References			
D – Groundwater	Do you plan to release any hazardous substances or non-hazardous pollutants into the ground?		Yes ☐ No ☐	Yes ☐ No ☐
E – Producing waste	Hazardous waste		Tonnes per year	Yes ☐ No ☐
	Non-hazardous waste		Tonnes per year	
F – Using energy	Peak energy consumption		MW	Yes ☐ No ☐
G – Preventing accidents	Do you have appropriate measures to prevent spills and major releases of liquids? (See 'How to comply'.)		Yes ☐ No ☐	Yes ☐ No ☐
	Provide references to show how your application meets G			
	References			
H – Noise	Provide references to show how your application meets H			Yes ☐ No ☐
	References			
I – Emissions of polluting substances	Provide references to show how your application meets I			Yes ☐ No ☐
	References			
J – Odours	Provide references to show how your application meets J			Yes ☐ No ☐
	References			
K – History of keeping to the regulations	Say here whether you have been involved in any enforcement action as described in Compliance History Appendix 1 explanatory notes		Yes ☐ No ☐	

Appendix 2 – Date of birth information for Relevant offences and/or Technical ability questions only

Date of birth information in this appendix will not be put onto our Public Register

Have you filled in the Relevant Offences question?

Yes ☑

No ☐

Have you filled in the Technical ability question?

Yes ☑

No ☐

2 Relevant Offences - date of birth information

Please give us the following details

Name: Not applicable

Date of birth (DD/MM/YY):

3 Technical ability - date of birth information

Name: [redacted]

Date of birth (DD/MM/YY): [redacted]

Application for an environmental permit Part C3 – Variation to a bespoke installation permit

Environment Agency

Fill in this part of the form, together with part A, part C2 and part F1, if you are applying to vary (change) the conditions or any other part of the permit. Please check that this is the latest version of the form available from our website.

You only need to give us details in this application for the parts of the permit that will be affected (for example, if you are adding a new facility or making changes to existing ones).

You do not need to resend any information from your original permit application if it is not affected by your proposed changes.

Please read through this form and the guidance notes that came with it.

The form can be:

1) saved onto a computer and then filled in. Please note that the form follows a logic that means questions will open or stay closed depending on a previous answer. So you may not be able to enter text in some boxes.
2) printed off and filled in by hand. Please write clearly in the answer spaces.

It will take less than three hours to fill in this part of the application form.

Contents

1 What activities are you applying to vary?

Fill in Table 1a below with details of all the activities listed in schedule 1 of the Environmental Permitting Regulations (EPR) and all directly associated activities (DAAs) (in separate rows), that you propose to carry out at the installation.

Note: if you want to add a Medium combustion plant or specified generator (MCP/SG) to your installation please use part C2.5 instead.

Fill in a separate table for each installation you are applying to vary. Use a separate sheet if you have a long list and send it to us with your application form. Tell us below the reference you have given the document.

Document reference: AU/KCW/AW/5651/01/APP - Section 2

1 What activities are you applying to vary?, continued

Table 1a – Types of activities

Schedule 1 listed activities						
Installation name	Schedule 1 references (See note 1)	Description of the Activity (See note 2)	Activity capacity (See note 3)	Annex I (D codes) and Annex II (R codes) and descriptions	Hazardous waste treatment capacity (if this applies) (See note 3)	Non-hazardous waste treatment capacity (if this applies) (See note 3)
Add extra rows if you need them. If you do not have enough room, go to the line below or send a separate document and give us the document reference here	Put your main activity first			For installations that take waste only	For installations that take waste only	For installations that take waste only
ENRMF		As details do not fit in this table they are				
		presented in AU/KCW/AW/5651/01/APP - Table 1				

Directly associated activities (See note 4)		
Name of DAA	Description of the DAA (please identify the schedule 1 activity it serves)	
Add extra rows if you need them	See AU/KCW/AW/5651/01/APP - Table 1	
For installations that take waste (See note 5 below)	Total storage capacity	
	Annual throughput (tonnes each year)	250,000.00

1 What activities are you applying to vary?, continued

Notes

1 Quote the section number, part A1 or A2 or B, then paragraph and sub paragraph number as shown in part 2 of schedule 1 to the regulations.

2 Use the description from schedule 1 of the regulations. Include any extra detail that you think would help to accurately describe what you want to do.

3 By 'capacity', we mean:

- the total incineration capacity (tonnes every hour) for waste incinerators
- the total landfill capacity (cubic metres) for landfills
- the total treatment capacity (tonnes each day) for waste treatment operations
- the total storage capacity (tonnes) for waste storage operations
- the processing and production capacity for manufacturing operations, or
- the thermal input capacity for combustion activities

4 Fill this in as a separate line and give an accurate description of any other activities associated with your schedule 1 activities. You cannot have DAAs as part of a mobile plant application.

5 By 'total storage capacity', we mean the maximum amount of waste, in tonnes, you store on the site at any one time.

Types of waste accepted

For those installations that take waste, for each line in Table 1a (including DAAs), fill in a separate document to list those wastes you will accept on to the site for that activity. Give the List of Wastes catalogue code and description (search for 'Technical guidance on how to assess and classify waste' at www.gov.uk/government/organisations/environment-agency).

If you need to exclude waste from your activity or facility by restricting the description, quantity, physical nature, hazardous properties, composition or characteristic of the waste, include these in the document. Send it to us with your application form.

Please provide the reference for each document.

You can use Table 1b as a template.

If you want to accept any waste with a code ending in 99, you must provide more information and a full description of the waste in the document, (for example, detailing the source, nature and composition of the waste). Where you only want to receive specific wastes within a waste code you can provide further details of the waste you want to receive. Where a waste is dual coded you should use both codes for the waste.

Document reference of this extra information: List of wastes for the neutralisation process (Appendix F)

Table 1b – Template example – types of waste accepted and restrictions

Waste code	Description of the waste
Example	Example
02 01 08*	Agrochemical waste containing hazardous substances
18 01 03*	Infectious clinical waste, not contaminated with chemicals or medicines – human healthcare (may contain sharps) for alternative treatment
17 05 03*/17 06 05*	Non-hazardous soil from construction or demolition contaminated with fragments of asbestos cement sheet

2 Point source emissions to air, water and land

Fill in Table 2 below with details of the emissions that result from the operating techniques at each of your installations.

Fill in one table for each installation.

Table 2 – Emissions

Installation name	ENRMF			
Point source emissions to air				
Emission point reference and location	Source	Parameter	Quantity	Unit
No changes to point source emissions to air	A1 - Silo	Particulates	0.00	No visible dust
	A2 - Silo	Particulates	0.00	No limit set
	A3 - Stab Plant	Particulates	0.00	No visible dust
	A5 - Debagging	Particulates	0.00	No visible dust
Point source emissions to water (other than sewers)				
Emission point reference and location	Source	Parameter	Quantity	Unit
No point source emissions to water				
See Table S3.3 of the permit				
Point source emissions to sewers, effluent treatment plants or other transfers off site				
Emission point reference and location	Source	Parameter	Quantity	Unit
Not applicable				
Point source emissions to land				
Emission point reference and location	Source	Parameter	Quantity	Unit
Not applicable				

Supporting information

3 Operating techniques

3a Technical standards

Fill in Table 3a for each activity at the installation you refer to in Table 1a above and list the 'Best Available Techniques' you are planning to use. If you use the standards set out in the relevant BAT conclusion(s), BAT reference document(s) (BREF) and/or technical guidance(s) (TGN) there is no need to justify using them within your documents in Table 3a.

You must justify your decisions in a separate document if:

- there is no technical standard
- the technical guidance provides a choice of standards, or
- you plan to use another standard

This justification could include a reference to the Environmental Risk Assessment provided in part C2 (general bespoke permit) of the application form.

For each of the activities listed in Table 1a, the documents in Table 3a should summarise:

- the operations undertaken
- the measures you will use to control the emissions from your process, as identified in your risk assessment or the relevant BAT conclusions, BREF or technical guidance
- how you will meet other standards set out in the relevant BAT conclusions document, BREF or technical guidance

Table 3 – Technical standards

Fill in a separate table for each activity at the installation.

Installation name	ENRMF	
Description of the schedule 1 activity or directly associated activity Add extra rows if you need them	Best available technique (BATC, BREF or TGN reference) (see footnote below)	Document reference (if appropriate)
Waste Neutralisation	BAT for Waste Treatment	EU 2018/1147 of 10 August 2018
	Chemical Waste: appropriate measures	www.gov.uk Published 18/11/21
	SGN 5.06	Issue 5 May 2013 (inc Addendum)

* Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control)

In all cases, describe the type of facility or operation you are applying for and provide site infrastructure plans, location plans and process flow diagrams or block diagrams to help describe the operations and processes undertaken. Give the document references you use for each plan, diagram and description.

Document reference: Technical description document - Appendix F

3a1 Does your permit (in Table 1.2 Operating Techniques or similar table in the permit) have references to any of your own documents or parts of documents submitted as part of a previous application for this site?

No ☐ Now go to 3b

Yes ☑ Please tell us in a separate document what document references are no longer valid or have been superseded and why

Please also tell us below the reference number you have given the document and send it in with your application

Document reference: None of the operating techniques are superseded

3 Operating techniques, continued

3b General requirements

Fill in a separate Table 4 for each installation.

Table 4 – General requirements

Name of the installation	ENRMF
If the technical guidance or your risk assessment shows that emissions of substances not controlled by emission limits are an important issue, send us your plan for managing them	Document reference or references N/A
Where the technical guidance or your risk assessment shows that odours are an important issue, send us your odour management plan	Document reference or references N/A
If the technical guidance or your risk assessment shows that noise or vibration are important issues, send us your noise or vibration management plan (or both)	Document reference or references N/A

Search for 'Risk assessment for your environmental permit' at www.gov.uk/government/organisations/environment-agency.

3c Types and amounts of raw materials

Fill in Table 5 for all schedule 1 activities. Fill in a separate table for each installation.

Table 5 – Types and amounts of raw materials

Name of the installation		Not applicable		
Capacity (See note 1 below)				
Schedule 1 activity	Description of raw material and composition	Maximum amount (tonnes) (See note 2 below)	Annual throughput (tonnes each year)	Description of the use of the raw material including any main hazards (include safety data sheets)

Notes

1 By 'capacity', we mean the total storage capacity (tonnes) or total treatment capacity (tonnes each day).

2 By 'maximum amount', we mean the maximum amount of raw materials on the site at any one time.

Use a separate sheet if you have a long list of raw materials, and send it to us with your application form. Please also provide the reference of this extra sheet.

Document reference

3d Information for specific sectors

For some of the sectors, we need more information to be able to set appropriate conditions in the permit. This is as well as the information you may provide in sections 5, 6 and 7. For those activities listed below, you must answer the questions in the related document.

Table 6 – Questions for specific sectors

Sector	Appendix
Combustion	See the questions in appendix 1
Chemicals	See the questions in appendix 2
Incinerating waste	See the questions in appendix 3
Landfill	See the questions in appendix 4

General information

4 Monitoring

4a Describe the measures you use for monitoring emissions by referring to each emission point in Table 2 above

You should also describe any environmental monitoring. Tell us:

- how often you use these measures
- the methods you use
- the procedures you follow to assess the measures

Document reference: No changes

4b Point source emissions to air only

Provide an assessment of the sampling locations used to measure point source emissions to air. The assessment must use M1 (search for 'M1 sampling requirements for stack emission monitoring' at www.gov.uk/government/organisations/environment-agency).

Document reference of the assessment: No changes

5 Environmental impact assessment

5a Have your proposals been the subject of an environmental impact assessment under Council Directive 85/337/EEC of 27 June 1985 [Environmental Impact Assessment] (EIA)?

No ☐ Now go to section 6

Yes ☑ Please provide a copy of the environmental statement and, if the procedure has been completed:

- a copy of the planning permission
- the committee report and decision on the EIA

Document reference of the copy: See section 1 of report reference AU/KCW/AW/5651/01/APP

6 Resource efficiency and climate change

If the site is a landfill, you only need to fill in this section if the application includes landfill gas engines.

6a Describe the basic measures for improving how energy efficient your activities are

Document reference of the description: N/A

6b Provide a breakdown of any changes to the energy your activities use up and create

Document reference of the breakdown: N/A

6c Have you entered into, or will you enter into, a climate change levy agreement?

No ☑ Describe the specific measures you use for improving your energy efficiency

Document reference of the description: AU/KCW/AW/5651/01 - Appendix G - BAT Assessment

Yes ☐ Please give the date you entered (or the date you expect to enter) into the agreement (DD/MM/YYYY)

Please also provide documents that prove you are taking part in the agreement.

Document reference of the proof

6d Explain and justify the raw and other materials, other substances and water that you will use

Document reference of the justification: N/A

6e Describe how you avoid producing waste in line with Council Directive 2008/98/EC on waste

If you produce waste, describe how you recover it. If it is technically and financially impossible to recover the waste, describe how you dispose of it while avoiding or reducing any effect it has on the environment.

Document reference of the description: N/A

7 How to contact us

If you need help filling in this form, please contact the person who sent it to you or contact us as shown below.

General enquiries: 03708 506 506 (Monday to Friday, 8am to 6pm)

Textphone: 03702 422 549 (Monday to Friday, 8am to 6pm)

Email: enquiries@environment-agency.gov.uk

Website: www.gov.uk/government/organisations/environment-agency

If you are happy with our service, please tell us. It helps us to identify good practice and encourages our staff. If you're not happy with our service, please tell us how we can improve it.

Please tell us if you need information in a different language or format (for example, in large print) so we can keep in touch with you more easily.

Feedback

(You don't have to answer this part of the form, but it will help us improve our forms if you do.)

We want to make our forms easy to fill in and our guidance notes easy to understand. Please use the space below to give us any comments you may have about this form or the guidance notes that came with it.

How long did it take you to fill in this form?

We will use your feedback to improve our forms and guidance notes, and to tell the Government how regulations could be made simpler.

Would you like a reply to your feedback?

Yes please ☐

No thank you ☐

For Environment Agency use only

Date received (DD/MM/YYYY)

Our reference number

Payment received?

No ☐

Yes ☐ Amount received

£

Plain English Campaign's Crystal Mark does not apply to appendices 1 to 4.

Appendix 1 – Specific questions for the combustion sector

1 Identify the type of fuel burned in your combustion units (including when your units are started up, shut down and run as normal). If your units are dual fuelled (that is, use two types of fuel), list both the fuels you use

Fill in a separate table for each installation.

Installation reference			
Type of fuel	When run as normal	When started up	When shut down
Coal			
Gas oil			
Heavy fuel oil			
Natural gas			
WID waste			
Biomass (see notes 1 and 2 below)			
Biomass (see notes 1 and 2 below)			
Biomass (see notes 1 and 2 below)			
Biomass (see notes 1 and 2 below)			
Biomass (see notes 1 and 2 below)			
Other			

Notes

1 Not covered by Industrial Emissions Directive 2010/75/EU.

2 'Biomass' is referred to in www.opsi.gov.uk/si/si2002/20020914.htm.

Give extra information if it helps to explain the fuel you use.

Document reference

2 Give the composition range of any fuels you are currently allowed to burn in your combustion plant

Fill in a separate table for each installation.

Fuel use and analysis					
Installation reference					
Parameter	Unit	Fuel 1	Fuel 2	Fuel 3	Fuel 4
Maximum percentage of gross thermal input	%				
Moisture	%				
Ash	% wt/wt dry				
Sulphur	% wt/wt dry				
Chlorine	% wt/wt dry				
Arsenic	% wt/wt dry				
Cadmium	% wt/wt dry				
Carbon	% wt/wt dry				
Chromium	% wt/wt dry				
Copper	% wt/wt dry				
Hydrogen	% wt/wt dry				
Lead	% wt/wt dry				
Mercury	% wt/wt dry				
Nickel	% wt/wt dry				
Nitrogen	% wt/wt dry				
Oxygen	% wt/wt dry				
Vanadium	mg/kg dry				
Zinc	mg/kg dry				
Net calorific value	MJ/kg				

Appendix 1 – Specific questions for the combustion sector, continued

3 If NOx factors are necessary for reporting purposes (that is, if you do not need to monitor emissions), please provide the factors associated with burning the relevant fuels

Fill in a separate table for each installation.

Installation reference	
Fuel	NOx factor (kgt^{-1})
Fuel 1	
Fuel 2	
Fuel 3	
Fuel 4	

Note: kgt^{-1} means kilograms of nitrogen oxides released for each tonne of fuel burned.

4 Will your combustion plant be subject to Chapter III of the Industrial Emissions Directive 2010/75/EU?

See Government Guidance.

No ☐ Now fill in part F

Yes ☐

5 What is your plant?

an existing one	☐	A plant licensed before 1 July 1987
a new one	☐	A plant licensed on or after 1 July 1987 but before 27 November 2002, or a plant for which an application was made before 27 November 2002 and which was put into operation before 27 November 2003
a new-new one	☐	A plant for which an application was made on or after 27 November 2002

6 If you run more than one type of plant or a number of the same type of plant on your installation, please list them in the table below

Fill in a separate table for each installation.

Installation reference	
Type of plant	Number within installation
Existing	
New	
New-new	
Gas turbine (group A)	
Gas turbine (group B)	

7 If you run an existing plant, have you submitted a declaration for the 'limited life derogation' set out in Article 33 of Chapter III of the Industrial Emissions Directive?

No ☐ Now go to section 9

Yes ☐

8 Have you subsequently withdrawn your declaration?

No ☐

Yes ☐

9 List the existing large combustion plants (LCPs) which have annual mass allowances under the National Emission Reduction Plan (NERP), and those with emission limit values (ELVs) under the LCPD

Installation reference	
LCPs under NERP	LCPs with ELVs

Appendix 1 – Specific questions for the combustion sector, continued

10 Do you meet the monitoring requirements of Chapter III of the Industrial Emissions Directive?

No ☐

Yes ☐ Document reference number

11a Are you substantially refurbishing an existing installation according to the meaning given in Article 14 of the Energy Efficiency Directive?

No ☐

Yes ☐ Now go to question 11b

11b Have you carried out a cost–benefit assessment (CBA) of opportunities for cogeneration (combined heat and power) or district heating under Article 14 of the Energy Efficiency Directive?

No ☐ Please provide supporting evidence of why a CBA is not required (for example, an agreement from us)

Document reference number of this evidence

Yes ☐ Please submit a copy of your CBA

Document reference number of the CBA

Appendix 2 – Specific questions for the chemical sector

1 Please provide a technical description of your activities

The description should be enough to allow us to understand:

- the process
- the main plant and equipment used for each process
- all reactions, including significant side reactions (that is, the chemistry of the process)
- the material mass flows (including by products and side streams) and the temperatures and pressures in major vessels
- the all emission control systems (both hardware and management systems), for situations which could involve releasing a significant amount of emissions – particularly the main reactions and how they are controlled
- a comparison of the indicative BATs and benchmark emission levels standards: technical guidance notes (TGNs); additional guidance 'The production of large volume organic chemicals' (EPR 4.01); 'Speciality organic chemicals sector' (EPR 4.02); 'Inorganic chemicals sector' (EPR 4.03); and best available techniques reference documents (BREFs) for the chemical sector

Document reference

2 If you are applying for a multi-purpose plant, do you have a multi-product protocol in place to control the changes?

No ☐

Yes ☐ Provide a copy of your protocol to accompany this application

Document reference

3 Does Chapter V of the Industrial Emissions Directive (IED) apply to your activities?

No ☐

Yes ☐ Fill in the following

3a List the activities which are controlled under the IED

Installation reference	
Activities	

3b Describe how the list of activities in question 3a above meets the requirements of the IED

Document reference

Appendix 3 – Specific questions for the waste incineration sector

If you are proposing to accept clinical waste please also fill in questions 1, 2 and 3 of appendix 4 above.

1a Do you run incineration plants as defined by Chapter IV of the Industrial Emissions Directive (IED)?

No ☐ You do not need to answer any other questions in this appendix

Yes ☐ IED applies

1b Are you subject to IED as

An incinerator? ☐

A co-incinerator? ☐

2 Do any of the installations contain more than one incineration line?

No ☐ Now go to question 4

Yes ☐

3 How many incineration lines are there within each installation?

Fill in a separate table for each installation.

Installation reference	
Number of incineration lines within the installation	
Reference identifiers for each line	

You must provide the information we ask for in questions 4, 5 and 6 below in separate documents. The information must at least include all the details set out in section 2 ('Key Issues') of S5.01 'Incineration of waste: additional guidance' (under the sub heading 'European legislation and your application for an EP Permit').

You must answer questions 7 to 13 on the form below.

4 Describe how the plant is designed, equipped and will be run to make sure it meets the requirements of IED, taking into account the categories of waste which will be incinerated

Document reference

5 Describe how the heat created during the incineration and co-incineration process is recovered as far as possible (for example, through combined heat and power, creating process steam or district heating)

Document reference

6 Describe how you will limit the amount and harmful effects of residues and describe how they will be recycled where this is appropriate

Document reference

For each line identified in question 3, answer questions 7 to 13 below

Question 3 identifier, if necessary

7 Do you want to take advantage of the Article 45 (1)(f) allowance (see below) if the particulates, CO or TOC continuous emission monitors (CEM) fail?

No ☐

Yes ☐ This allows 'abnormal operation' of the incineration plant under certain circumstances when the CEM for releases to air have failed. Annex VI, Part 3(2) sets maximum half hourly average release levels for particulates (150 mg/m^3), CO (normal ELV) and TOC (normal ELV) during abnormal operation

Describe the other system you use to show you keep to the requirements of Article 13(4) (for example, using another CEM, providing a portable CEM to insert if the main CEM fails, and so on)

Appendix 3 – Specific questions for the waste incineration sector, continued

8 Do you want to replace continuous HF emission monitoring with periodic hydrogen fluoride (HF) emission monitoring by relying on continuous hydrogen chloride (HCl) monitoring as allowed by IED Annex VI, Part 6 (2.3)?

Under this you do not have to continuously monitor emissions for hydrogen fluoride if you control hydrogen chloride and keep it to a level below the HCl ELVs.

No ☐

Yes ☐ Please give your reasons for doing this

9 Do you want to replace continuous water vapour monitoring with pre-analysis drying of exhaust gas samples, as allowed by IED Annex VI, Part 6 (2.4)?

Under this you do not have to continuously monitor the amount of water vapour in the air released if the sampled exhaust gas is dried before the emissions are analysed.

No ☐

Yes ☐ Please give your reasons for doing this

10 Do you want to replace continuous hydrogen chloride (HCl) emission monitoring with periodic HCl emission monitoring, as allowed by IED Annex VI, Part 6 (2.5), first paragraph?

Under this you do not have to continuously monitor emissions for hydrogen chloride if you can prove that the emissions from this pollutant will never be higher than the ELVs allowed.

No ☐

Yes ☐ Please give your reasons for doing this

Appendix 3 – Specific questions for the waste incineration sector, continued

11 Do you want to replace continuous HF emission monitoring with periodic HF emission monitoring, as allowed by IED Annex VI, Part 6 (2.5), first paragraph?

Under this you do not have to continuously monitor emissions for hydrogen fluoride if you can prove that the emissions from this pollutant will never be higher than the ELVs allowed.

No ☐

Yes ☐ Please give your reasons for doing this

12 Do you want to replace continuous SO_2 emission monitoring with periodic sulphur dioxide (SO_2) emission monitoring, as allowed by IED Annex VI, Part 6 (2.5), first paragraph?

Under this you do not have to continuously monitor emissions for sulphur dioxide if you can prove that the emissions from this pollutant will never be higher than the ELVs allowed.

No ☐

Yes ☐ Please give your reasons for doing this

13 If your plant uses fluidised bed technology, do you want to apply for a derogation of the CO WID ELV to a maximum of 100 mg/m^3 as an hourly average, as allowed by IED Annex VI, Part 3?

No ☐

Does not apply ☐

Yes ☐ Please give your reasons for doing this

Appendix 3 – Specific questions for the waste incineration sector, continued

14a Are you substantially refurbishing an existing installation according to the meaning given in Article 14 of the Energy Efficiency Directive?

No ☐

Yes ☐ Please go to question 14b

14b Have you carried out a cost–benefit assessment (CBA) of opportunities for cogeneration (combined heat and power) or district heating under Article 14 of the Energy Efficiency Directive?

No ☐ Please provide supporting evidence of why a CBA is not required (for example, an agreement from us)

Document reference number of this evidence

Yes ☐ Please submit a copy of your CBA

Document reference number of the CBA

Appendix 4 – Specific questions for the landfill sector

1 Provide your Environmental Setting and Installation Design (ESID) report

Document reference

2 Provide your hydrogeological risk assessment (HRA) for the site

Document reference

3 Provide your stability risk assessment (SRA) for the site

Document reference

4 Provide your landfill gas risk assessment (LFGRA) for the site

Document reference

We have developed templates for these four reports which can be found at www.gov.uk/government/collections/environmental-permitting-landfill-sector-technical-guidance.

5 Provide your proposed plan for closing the site and your procedures for looking after the site once it has closed

Document reference

Application for an environmental permit Part F1 – Charges and declarations

Environment Agency

Fill in this part for all applications for installations, waste operations, mining waste operations, water discharges, point source groundwater discharges and groundwater discharges onto land. Please check that this is the latest version of the form available from our website.

Please read through this form and the guidance notes that came with it.

The form can be:

1) **saved onto a computer and then filled in. Please note that the form follows a logic that means questions will open or stay closed depending on a previous answer. So you may not be able to enter text in some boxes.**
2) **printed off and filled in by hand. Please write clearly in the answer spaces.**

It will take less than two hours to fill in this part of the application form.

Contents

Each individual who is applying for their name to appear on the permit must complete the declaration in section 5. You will have to print a separate copy of the declaration page for each additional individual to complete.

1 Working out charges

You must fill in this section.

You have to submit an application fee with your application. You can find out the charge by searching for 'Environment Agency charging scheme and guidance: environmental permits' at www.gov.uk/government/organisations/environment-agency.

Please remember that the charges are revised on 1 April each year and that there is an annual subsistence charge to cover the costs we incur in the ongoing regulation of the permit.

Table 1 – Type of application (fill number of activity being applied for in each column)

Installation	Waste	Mining waste	Medium Combustion Plant (MCP)/Specified Generator (SG)	Water discharge/point source discharge to groundwater	Groundwater spreading onto land
Vary Stabilisation					
Add Neutralisation					

Table 2 – Charge type (A)

Charge activity reference	Charge activity description	What are you applying to do? E.g. new, minor variation, normal variation, substantial variation, surrender, low risk surrender, transfer	Amount
e.g. 1.17.3	e.g. Sect 5.2 landfill for hazardous waste	e.g. transfer	e.g. £5,561
1.16.1.2	S5.3(a)(ii) Stabilisation (haz)	Minor Variation	[redacted]
1.16.2.2	S5.4(a)(ii) Stabilisation (non haz)	Minor variation	[redacted]
1.16.1.2	S5.3(a)(ii) Neutralisation (disposal)	New activity (application)##	[redacted]
1.16.1.3	S5.3(a)(vi) Neutralisation (recovery)	New activity (application)	[redacted]
## 50% reduction applied	based on 8(3)(b) of Charging Scheme	activities reasonably associated	
Total A			[redacted]

1 Working out charges (you must fill in this section), continued

Table 3 – Additional assessment charges (B)

Part 1.19 Charges for plans and assessments			Tick appropriate
Reference	Plan or assessment	Charge	
1.19.1	Waste recovery plan	[redacted]	☐
1.19.2	Habitats assessment (except where the application activity is a flood risk activity)	[redacted]	☐
1.19.3	Fire prevention plan (except where the application activity is a farming installation)	[redacted]	☐
1.19.4	Pests management plan (except where the application activity is a farming installation)	[redacted]	☐
1.19.5	Emissions management plan (except where the application activity is a farming installation)	[redacted]	☐
1.19.6	Odour management plan (except where the application activity is a farming installation)	[redacted]	☐
1.19.7	Noise and vibration management plan (except where the application activity is a farming installation)	[redacted]	☐
1.19.8	Ammonia emissions risk assessment (intensive farming applications only)	[redacted]	☐
1.19.9	Dust and bio-aerosol management plan (intensive farming applications only)	[redacted]	☐
	Advertising	[redacted]	☐
Total B			

Total charges

Total A plus total B [redacted]

2 Payment

Tick below to show how you have paid.

Cheque ☐

Postal order ☐

Cash ☐ Tick below to confirm you are enclosing cash with the application

Credit or debit card ☐

Electronic transfer (for example, BACS) ☑

Remittance number [redacted]

Date paid (DD/MM/YYYY) 27/05/2021

How to pay

Paying by cheque, postal order or cash

Cheque details

Cheque made payable to

Cheque number

Amount £

You should make cheques or postal orders payable to 'Environment Agency' and make sure they have 'A/c Payee' written across them if it is not already printed on.

Please write the name of your company and application reference number on the back of your cheque or postal order. **We will not** accept cheques with a future date on them.

We do not recommend sending cash through the post. If you cannot avoid this, please use a recorded delivery postal service and enclose your application reference details. Please tick the box below to confirm you are enclosing cash.

I have enclosed cash with my application ☐

2 Payment, continued

Paying by credit or debit card

If you are paying by credit or debit card we can call you. We will destroy your card details once we have processed your payment. We can accept payments by Visa, MasterCard or Maestro card only.

Please call me to arrange payment by debit or debit card ☐

Paying by electronic transfer BACS reference

If you choose to pay by electronic transfer you will need to use the following information to make your payment.

Company name	Environment Agency
Company address	SSCL (Environment Agency), PO Box 797, Newport Gwent, NP10 8FZ
Bank	RBS/NatWest
Address	London Corporate Service Centre, CPB Services, 2nd Floor, 280 Bishopsgate, London EC2M 4RB
Sort code	60-70-80
Account number	10014411
Account name	EA RECEIPTS
Payment reference number	PSCAPPXXXXXYYY

You need to create your own reference number. It should begin with PSCAPP (to reflect that the application is for a permitted activity) and it should include the first five letters of the company name (replacing the X's in the above reference number) and a unique numerical identifier (replacing the Y's in the above reference number). The reference number that you supply will appear on our bank statements.

If you are making your payment from outside the United Kingdom, it must be in sterling. Our IBAN number is GB23NWK60708010014411 and our SWIFTBIC number is NWBKGB2L.

If you do not quote your reference number, there may be a delay in processing your payment and application.

Provide a unique reference number for the application, i.e. do not only use the company name only [redacted]

State who is paying (full name and whether this is the agent/ applicant/other) [redacted] - Augean South Limited

Fee paid £ [redacted]

Date payment sent (DD/MM/YYYY) 27/05/2021

Now read section 3 below

You should also email your payment details and reference number to ea_fsc_ar@gov.sscl.com.

3 Privacy notice

The Environment Agency runs the environmental permit application service.

We are the data controller for this service. A data controller determines how and why personal information is processed.

Our personal information charter explains:

- your rights
- what we do with your personal information

We're allowed to process your personal information because we have official authority as the environmental regulator. We need this information to carry out a task in the public interest that is set out in law. As the data controller, when you apply for an environmental permit, we have a legal obligation to process your personal data under the Environmental Permitting Regulations. The second lawful basis for processing your personal data is to comply with this legal obligation.

We need your personal information to process your environmental permit application. If you do not give us this information we cannot issue a permit to you. After we've issued a permit to you, we use your personal information:

- to check that you're complying with your permit
- during any potential enforcement action

What personal information we collect

If you're the individual applicant, director or company secretary of a company applying or a technically competent manager we need your:

- name
- date of birth

3 Privacy notice, continued

- address
- email address

If you're the agent, consultant, employee responsible for the activity or the employee responsible for billing and invoicing we need your:

- name
- address
- email address

If you're the applicant we need details of any:

- convictions
- bankruptcy

We also collect any questions or feedback you leave, including your email address if you contact us.

Your responsibility with other people's personal information

If you've included personal information about other people on your application, you must tell them. You must provide them with a copy of this privacy notice so that they know how their personal information will be used.

What we do with your personal information

We use your personal information to help us decide whether to issue you with a permit.

The information (except dates of birth) is available online on our consultation website during the consultation period. This website is available to everyone so your information may be seen outside the European Economic Area.

After consultation we put all the information (except dates of birth) you give us in your application on our public register.

If you can demonstrate that any information you send us is commercially or industrially confidential, we'll consider withholding that information from our public register.

If you think that the information you'll send us may be a threat to national security you must contact the Secretary Of State before you apply. You must still send us that information with your application. We will not include this information on our public register unless the Secretary of State decides it can be included.

See the environmental permitting guidance for guidance on national security.

We may use your email address to contact you for user research to improve our service. You don't have to take part in the research.

Where your personal information is processed and stored

We store and process your personal information on servers in the UK. We will not host your personal information outside the European Economic Area.

We do not use your personal information to make an automated decision or for automated profiling.

How long we keep your personal information

We keep your personal information while your permit is in use and for 7 years after you surrender your permit. If the permit is for a landfill site, we keep the data for 10 years after surrender.

Removing personal information from the public register

We will remove your personal information from the public register if:

- you withdraw your application
- we refuse your application and the time limit for appealing the decision has expired or an appeal is dismissed
- the information is no longer relevant for public participation purposes under the Environmental Permitting Regulations

Contact

Our Data Protection Team gives independent advice. They monitor how the Environment Agency uses your personal information.

If you have questions or concerns about how we process personal information, or to make a complaint or request relating to data protection, please contact:

Address: Data Protection Team
Environment Agency
Horizon House
Deanery Road
Bristol
BS1 5AH

3 Privacy notice, continued

Email: dataprotection@environment-agency.gov.uk

You can also make a complaint to the Information Commissioner's Office (ICO).

The ICO is the supervisory authority for data protection legislation. The ICO website has a full list of your rights under data protection legislation.

Now read section 4 below

4 Confidentiality and national security

Confidentiality

We will normally put all the information in your application on a public register of environmental information. However, we may not include certain information in the public register if this is in the interests of national security, or because the information is confidential.

You can ask for information to be made confidential by enclosing a letter with your application giving your reasons. If we agree with your request, we will tell you and not include the information in the public register. If we do not agree with your request, we will let you know how to appeal against our decision, or you can withdraw your application. You can find guidance on confidentiality in 'Environmental permitting guidance: core guidance', published by Defra and available via our website at www.gov.uk/government/organisations/environment-agency.

Only tick the box below if you wish to claim confidentiality for your application

Please treat the information in my application as confidential ☑

National security

You can tell the Secretary of State that you believe including information on a public register would not be in the interests of national security. You must enclose a letter with your application telling us that you have told the Secretary of State and you must still include the information in your application. We will not include the information in the public register unless the Secretary of State decides that it should be included.

You can find guidance on national security in 'Environmental permitting guidance: core guidance', published by Defra and available via our website at www.gov.uk/government/organisations/environment-agency.

You cannot apply for national security via this application.

Now fill in section 5

5 Declaration

If you knowingly or carelessly make a statement that is false or misleading to help you get an environmental permit (for yourself or anyone else), you may be committing an offence under the Environmental Permitting (England and Wales) Regulations 2016.

A relevant person should make the declaration (see the guidance notes on part F1). An agent acting on behalf of an applicant is NOT a relevant person.

Each individual (or individual trustee) who is applying for their name to appear on the permit must complete this declaration. You will have to print a separate copy of this page for each additional individual to complete.

If you are transferring all or part of your permit, both you and the person receiving the permit must make the declaration. You must fill in the declaration directly below; the person receiving the permit must fill in the declaration under the heading 'For transfers only'.

Note: we will issue a letter to both current and new holders to confirm the transfer. If you are changing address we will need to send this letter to your new address; therefore please tell us your new address in a separate letter.

If you are unable to trace one or more of the current permit holders please see below under the transfers declaration.

I declare that the information in this application is true to the best of my knowledge and belief. I understand that this application may be refused or approval withdrawn if I give false or incomplete information.

If you deliberately make a statement that is false or misleading in order to get approval you may be prosecuted.

I confirm that my standard facility will fully meet the rules that I have applied for (this only applies if the application includes standard facilities) ☐

Tick this box to confirm that you understand and agree with the declaration above, then fill in the details below (you do not have to provide a signature as well) ☑

Tick this box if you do not want us to use information from any ecological survey that you have supplied with your application (for further information please see the guidance notes on part F1) ☐

5 Declaration, continued

Name

Title (Mr, Mrs, Miss and so on) [redacted]

First name [redacted]

Last name [redacted]

on behalf of
(if relevant; for example, a company or organisation and so on) Augean South Limited

Position
(if relevant; for example, in a company or organisation and so on) Director of Environmental Planning

Today's date (DD/MM/YYYY) 27/05/2021

For transfers only – declaration for person receiving the permit

A relevant person should make the declaration (see the guidance notes on part F1). An agent acting on behalf of an applicant is NOT a relevant person.

I declare that the information in this application to transfer an environmental permit to me is true to the best of my knowledge and belief. I understand that this application may be refused or approval withdrawn if I give false or incomplete information.

Note: If you cannot trace a person or persons holding the permit you may be able to transfer the permit without their declaration as above. Please contact us to discuss this and supply evidence in your application to confirm you are unable to trace one or all of the permit holders.

If you deliberately make a statement that is false or misleading in order to get approval you may be prosecuted.

Tick this box to confirm that you understand and agree with the declaration above, then fill in the details below
(you do not have to provide a signature as well) ☐

Name

Title (Mr, Mrs, Miss and so on)

First name

Last name

on behalf of
(if relevant; for example, a company or organisation and so on)

Position
(if relevant; for example, in a company or organisation and so on)

Today's date (DD/MM/YYYY)

Now go to section 6

6 Application checklist

You must fill in this section.

If your application is not complete we will return it to you. If you aren't sure about what you need to send, speak to us before you submit your application.

You must do the following:

Complete legibly all parts of this form that are relevant to you and your activities ☑

Identify relevant supporting information in the form and send it with the application ☑

List all the documents you are sending in the table below. If necessary, continue on a separate sheet. This separate sheet also needs to have a reference number and you should include it in the table below ☑

For new permits or any changes to the site plan, provide a plan that meets the standards given in the guidance note on part F1 ☑

Provide a supporting letter for any claim that information is confidential ☑

Get the declaration completed by a relevant person (not an agent) ☑

Send the correct fee ☑

6 Application checklist, continued

Question reference	Document title	Document reference
Form C2 Q1a	Pre-application discussions	AU/KCW/AW/5651/01 - Appendix A
Form C2 Q3b	Technical ability - COTC	AU/KCW/AW/5651/01 - Appendix E - COTC
Form C2 Q3d	Management systems	AU/KCW/AW/5651/01 - Appendix D - EMS
Form C2 Q5a	Site Plans	AU/KCW/AW/5651/01 - Drawings
Form C2 Q5c	Non technical summary	AU/KCW/AW/5651/01 - Appendix C - NTS
Form C2 Q6	Environmental Risk Assessment	AU/KCW/AW/5646/01 - Appendix H - ERA
Form C3 Q5a	Environmental Impact Assessment	AU/KCW/AW/5646/01 - Section 1
	Technical description document - Neutralisation	AU/KCW/AW/5651/01 - Appendix F
	Best Available Techniques Assessment	AU/KCW/AW/5651/01 - Appendix G
	Storage & processing capacity assessment	AU/KCW/AW/5646/01 - Appendix H - ERA
Form F1 Q4	Confidentiality	Cover letter to application dated 27 May 2021

7 How to contact us

If you need help filling in this form, please contact the person who sent it to you or contact us as shown below.

General enquiries: 03708 506 506 (Monday to Friday, 8am to 6pm)

Textphone: 03702 422549 (Monday to Friday, 8am to 6pm)

Email: enquiries@environment-agency.gov.uk

Website: www.gov.uk/government/organisations/environment-agency

If you are happy with our service, please tell us. It helps us to identify good practice and encourages our staff. If you're not happy with our service, or you would like us to review a decision we have made, please let us know. More information on how to do this is available at: https://www.gov.uk/government/organisations/environment-agency/about/complaints-procedure.

Please tell us if you need information in a different language or format (for example, in large print) so we can keep in touch with you more easily.

8 Where to send your application

For how many copies to send see the guidance note on part F1.

Please send your filled in application form to:

For water discharges by email to PSC-WaterQuality@environment-agency.gov.uk

For waste and installations by email to PSC@environment-agency.gov.uk

Or

Permitting Support, NPS Sheffield
Quadrant 2
99 Parkway Avenue
Parkway Business Park
Sheffield
S9 4WF

Do you want all information to be sent to you by email?

Please tick this box if you wish to have all communication about this application sent via email (we will use the details provided in part A) ☑

Feedback

(You don't have to answer this part of the form, but it will help us improve our forms if you do.)

We want to make our forms easy to fill in and our guidance notes easy to understand. Please use the space below to give us any comments you may have about this form or the guidance notes that came with it.

How long did it take you to fill in this form?

We will use your feedback to improve our forms and guidance notes, and to tell the Government how regulations could be made simpler.

Would you like a reply to your feedback?

Yes please ☐

No thank you ☐

For Environment Agency use only

Date received (DD/MM/YYYY)

Our reference number

Payment received?

No ☐

Yes ☐ Amount received

£

APPENDIX C

NON TECHNICAL SUMMARY

An application to vary environmental permit number EPR/ YP3138XB for the waste treatment and recovery facility operated by Augean South Limited

Non-technical summary

1.1 Augean South Limited (Augean) operate a waste treatment and recovery facility under Environmental Permit number EPR/YP3138XB (the permit) at East Northants Resource Management Facility (ENRMF) (the site) for the treatment of hazardous waste and non-hazardous waste by soil washing, waste stabilisation and bioremediation (the waste treatment facility). The site is centred approximately at National Grid Reference (NGR) TF 006 001.

1.2 The following changes are proposed in respect of the operation of the waste treatment facility:

- Addition of a new process at this site for the neutralisation of hazardous waste and non-hazardous waste for the recovery or disposal of the treatment output. The proposed waste neutralisation process and the list of wastes which may be treated for disposal or recovery are consistent with the process currently undertaken by Augean Treatment Limited at Port Clarence Waste Recovery Park, Stockton on Tees under Environmental Permit Number EPR/YP3234XR/V007. The activity therefore comprises a process approved previously by the Environment Agency and a process for which Augean has operational experience.

- An overall increase from 150,000 tonnes to 250,000 tonnes for the combined activity specific annual limit for the stabilisation process and for the solidification/stabilisation process.

- An increase in the maximum quantity of waste to be stored at any one time in the dredging waste temporary storage area (DWTSA) from 5,000m^3 to 12,000m^3.

1.3 There are no changes to the general principles of the site management and the surface water containment design, the principles of the waste acceptance and process operations including the types of storage and processing plant and site monitoring.

1.4 The facilities at ENRMF, including the treatment facility, are an acknowledged part of the nationally significant infrastructure for the management of hazardous waste and are the subject of a Development Consent Order (DCO) which was granted in July 2013 and amended in June 2018. The DCO for the existing treatment activities extends to 2026. In order to secure continuity of its operations beyond 2026, Augean is preparing to submit an application in 2021 for a new DCO which will include the proposed increased throughput of the treatment facility.

1.5 The waste treatment area is located in the northern part of the treatment facility permit boundary within the footprint of the hazardous waste landfill site operated by Augean under a separate Environmental Permit. The waste treatment facility is surrounded to the east, south and west by the landfill permit boundary. The site setting is generally rural with the majority of the land surrounding the wider ENRMF site comprising open farmland or woodland. The closest properties to the waste treatment facility are the properties at Westhay Cottages located approximately 500m to the east of the waste treatment facility. Westhay Farm is located approximately 500m east of the waste treatment facility.

1.6 There are no National Parks, Areas of Outstanding National Beauty, Special Areas of Conservation, Special Protected Areas, Ramsar Sites or Marine Conservation Zones within 5km of the waste treatment facility. To the west of the waste treatment facility lies woodland known as Fineshade Wood part of which is known as The Assarts and which is a Local Wildlife Site. Collyweston Great Wood is located to the north of the waste treatment facility. To the north east of the waste treatment facility, beyond Collyweston Great Wood and east of Stamford Road is an area of woodland known as Easton Hornstocks. Parts of the Collyweston Great Wood and Easton Hornstocks comprise a Site of Special Scientific Interest (SSSI) and a National Nature Reserve. Collyweston Quarry Local Geological Site is located approximately 800m north west of the waste treatment facility at its closest point.

1.7 Detailed waste acceptance procedures are in place for the currently permitted site to minimise the risk that unacceptable waste materials will be accepted at the site including procedures for the rejection of non-conforming loads. The receipt, acceptance, handling and storage of waste materials are the subject of procedures under which the site is operated currently.

1.8 Augean has in place a management system to support the operation of the installation under the Environmental Permit. The site will continue to be operated under an Environmental Management System (EMS) that is certified to ISO14001. The management system identifies roles and responsibilities relevant to the operation of the installation and provides procedures that must be followed under normal operating conditions and specific procedures to deal with abnormal operating conditions or in the event of an incident. The management system has been developed with reference to relevant guidance produced by the Environment Agency to support the operation of this type of regulated facility under an Environmental Permit.

1.9 Augean is committed to training its staff so that they are technically competent to undertake the waste operations and uses the formal Chartered Institution of Wastes management/Waste Management Industry Training and Advisory Board (CIWM/WAMITAB) scheme for these purposes. The training standards set out in the CIWM/WAMITAB scheme, as applicable to the operation of hazardous waste treatment facility, are adopted for training purposes.

1.10 In order to demonstrate that the site can be operated in accordance with the requirements of relevant legislation, guidance and the conditions of the permit an environmental risk assessment has been undertaken to evaluate the potential risks from the proposed changes in the activities to human health and the environment. The risk assessment demonstrates that the proposed changes the subject of the application can be undertaken without affecting adversely the surrounding environment.

1.11 A storage and processing capacity assessment has been undertaken which demonstrates that there will be sufficient storage capacity in the silos, bays, bunkers and storage tanks at the site and sufficient processing capacity at the site to accommodate the increase in the overall annual throughput from 150,000 tonnes to 250,000 tonnes.

1.12 A Best Available Techniques (BAT) review has been undertaken in respect of the proposed new waste neutralisation process and a technical description document for the waste neutralisation process has been prepared. The technical description document and the BAT review demonstrate that the waste neutralisation process and directly associated new plant and techniques comprise BAT.

APPENDIX D

SUMMARY OF THE MANAGEMENT SYSTEM

INTEGRATED MANAGEMENT SYSTEM

Our Integrated Management System (IMS) is the framework of processes and procedures used to ensure we can fulfill all tasks required to achieve our objectives. Occupational health and safety, environmental and quality issues are fundamental to the business success of the Company. It is Company policy that our health and safety, environmental, and quality, systems are integrated to facilitate best practice in all facets of our business. A map of our IMS can be found in Appendix A of this document.

Our IMS is based on the requirements of our permits at each site; ISO 14001:2015 the International Standard for environmental management systems; ISO 9001:2015 the International Standard for quality management systems; ISO 45001:2018 for Occupational Health and Safety Management systems and PAS99:2012 Publicly Available Specification (PAS) of common management system requirements as a framework for integration. The procedures and documents within our IMS surpass the requirement of a Health and Safety at Work policy as required by The Health and Safety at Work etc Act 1974.

ISO 14001: specifies the requirements for an environmental management system (EMS), which provides a framework for Augean to control the environmental impacts of its activities, products, and services, and continually improve its' environmental performance. This international standard applies to those environmental aspects which Augean can control and over which it can be expected to have an influence. It does not state specific environmental performance criteria. Augean's implementation of ISO 14001 demonstrates that the company uses a recognised EMS standard which is a stipulation of the company's environmental permits issued by the EA or SEPA.

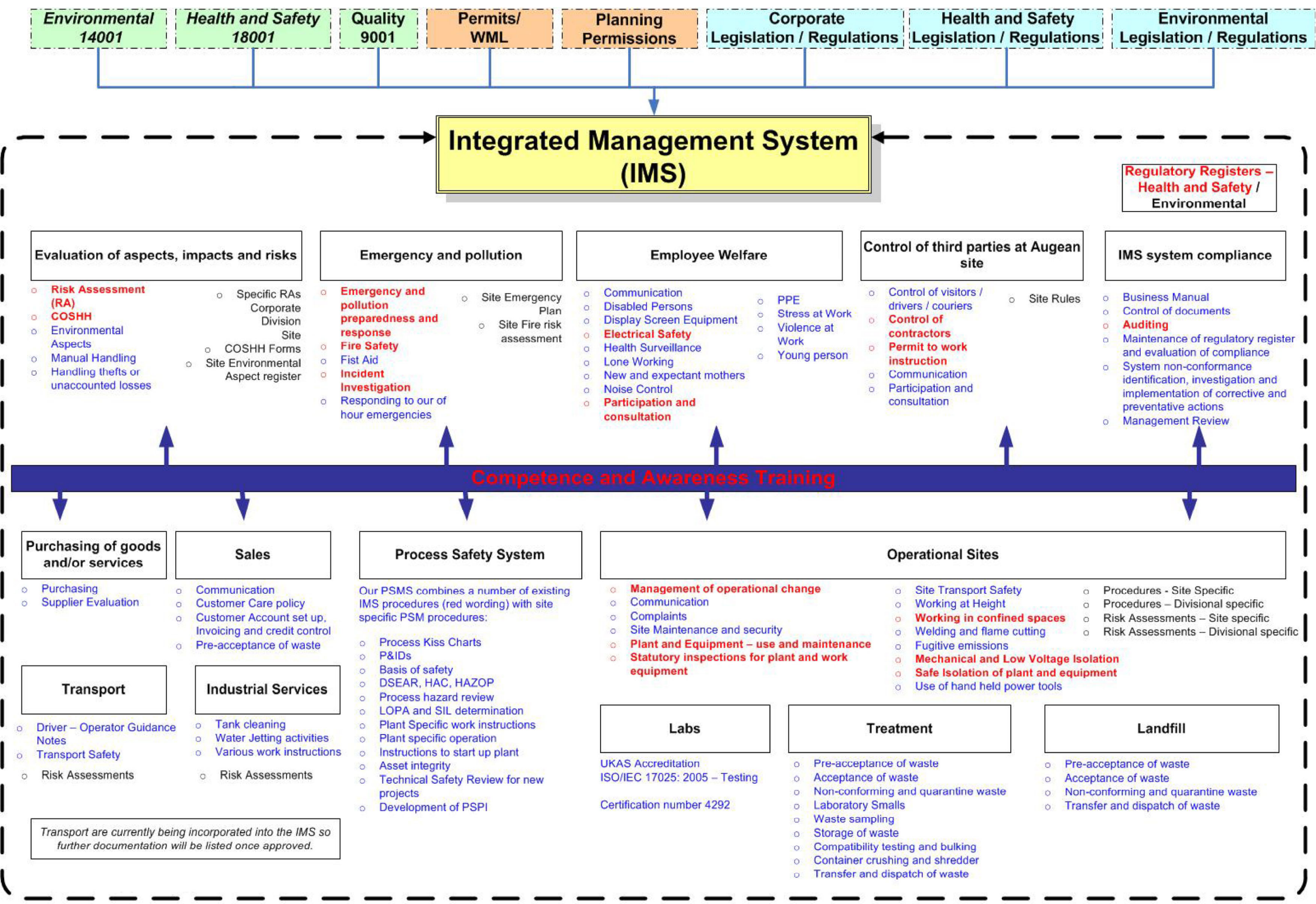
ISO 9001: sets out the requirements of a quality management system and is based on a number of (quality management) principles including a strong customer focus, the motivation and implication of top management, the process approach and continual improvement. The standard requires all documentation to be controlled and have a date of issue and version number to ensure that a procedure or work instruction that is being followed for example, is the latest, or current, version which in turn supports ISO 45001.

ISO 45001: By meeting the requirements of this standard, Augean can demonstrate that Occupational Health and Safety (OH&S) risks are being managed properly through the development and implementation of procedures; work instructions; risk assessments; and training as required by the underpinning legislation. An additional benefit to the Company is a reduction in the risk of business disruption, injury to its' personnel and others working on Augean's behalf, and a reduction in possible fines as the potential for accidents and incidents is significantly reduced.

RELEVANT IMS PROCEDURES

Project	Reference
Acceptance of waste	ECP02
Accessing the Silo	ST P01
Action Tracking Management System (ATMS)	CPP51
Asbestos Policy	BM04
Auditing	CPP05
Authorisation and Competence to Operate Mobile Plant	CPP42
Booking Confirmation (Guide)	IG 12
Business Manual	BM01
Carriage of Samples	CPP41
Communication	CPP13
Complaints	CPP14
Confined Space Entry - Working in	OPP04
Consultants Conduct	
Control of Contractors and Agency Staff	CPP17
Control of Documents	CPP03
Control of Visitors	CPP16
COSHH	CPP08
Covid-19 Management Plan	CPP49
Customer Account Set Up, invoicing and credit control	CPP35
Customer Care Policy	CPP12
Disabled Persons	CPP31
Display Screen Equipment	CPP24
Driving at Work	CPP38
Electrical safety	CPP25
Emergencies - responding to out of hours	CPP39
Emergency and Pollution Preparedness and Response	CPP04
Emergency Plan	KC06
Environmental - Regulatory Register	BM03
Environmental Aspects and Impacts Register	BMS05
Environmental Aspects Identification and Assessment	CPP02
Fire Safety	CPP21
First Aid	CPP22
Fixed Schedule Maintenance	WI 051
Fugitive emission control	ECP 04
Full Quotations (Guide)	IG 11
Hand Arm Vibration Risk Assessment	CPP45
Handling thefts or unaccounted losses	CPP37
Hazard Identification (HAZID) and Environmental Impact Identification (ENVID)	CPP50
Health and Safety - Regulatory Register	BM02
Health Surveillance	CPP23
Incident Investigation	CPP20
Inspections for Plant and Work Equipment	OPP02
Interim Soils Process	KC WI SP01
Legionella Control - Written Scheme	KC02
Lone Working	CPP32
Maintenance of regulatory register and evaluation of compliance	CPP01

Management of Change - overarching	CPP11
Management of change - permanent	WI 001
Management of Change - Temporary	WI 002
Management Review	CPP06
Manual Handling	CPP26
Mechanical and Low Voltage Isolation	OPP06
Method, Environment, People, Equipment and Materials (MEPEM)	WI 037
New and expectant mothers	CPP33
Noise Control	CPP28
Nonconforming waste Loads, quarantine and rejection – Landfill	ECP03
Non-Conforming waste, quarantine and rejection - Treatment	TTP 03
Non-Conforming Works and Improvement Procedure	CPP46
Participation and Consultation	CPP15
Permit to work	CPP19
Personal Protective Equipment	CPP27
Plant 3 Operating Manual	KC WI STP 01
Plant maintenance - use and maintenance	OPP01
Preacceptance of waste	ECP 01
Purchasing and Evaluation of Suppliers	CPP36
Risk Assessment	CPP07
Safe Isolation of Plant and Equipment	OPP05
Sales Order Process	CPP18
Sample reception and management	CPP48
Sampling of Waste	IG01
Sampling Procedure	CPP47
Site Maintenance and security	OPP03
Site Rules	KC01
Stockpile and Internal Movement for Landfill	STP03
Storage	TTP 04
Stress at Work	CPP34
System non-conformance identification, investigation and implementation of corrective and preventative actions	CPP10
Training - Competence and Awareness	CPP09
Transfer and Dispatch of waste	OPP07
Use of handheld power tools	OPP11
Violence at Work	CPP29
Waste Storage for stabilisation	STP02
Welding and flame cutting	OPP08
Working at Height	OPP09
Workplace Transport Safety	OPP10
Young persons	CPP30


Environmental 14001
Health and Safety 18001
Quality 9001
Permits/ WML
Planning Permissions
Corporate Legislation / Regulations
Health and Safety Legislation / Regulations
Environmental Legislation / Regulations
Integrated Management System (IMS)
Regulatory Registers – Health and Safety / Environmental
Evaluation of aspects, impacts and risks
Risk Assessment (RA)
COSHH
Environmental Aspects
Manual Handling
Handling thefts or unaccounted losses
Specific RAs Corporate Division Site
COSHH Forms
Site Environmental Aspect register
Emergency and pollution
Emergency and pollution preparedness and response
Fire Safety
Fist Aid
Incident Investigation
Responding to our of hour emergencies
Site Emergency Plan
Site Fire risk assessment
Employee Welfare
Communication
Disabled Persons
Display Screen Equipment
Electrical Safety
Health Surveillance
Lone Working
New and expectant mothers
Noise Control
Participation and consultation
PPE
Stress at Work
Violence at Work
Young person
Control of third parties at Augean site
Control of visitors / drivers / couriers
Control of contractors
Permit to work instruction
Communication
Participation and consultation
Site Rules
IMS system compliance
Business Manual
Control of documents
Auditing
Maintenance of regulatory register and evaluation of compliance
System non-conformance identification, investigation and implementation of corrective and preventative actions
Management Review
Competence and Awareness Training
Purchasing of goods and/or services
Purchasing
Supplier Evaluation
Sales
Communication
Customer Care policy
Customer Account set up, Invoicing and credit control
Pre-acceptance of waste
Process Safety System
Our PSMS combines a number of existing IMS procedures (red wording) with site specific PSM procedures:
Process Kiss Charts
P&IDs
Basis of safety
DSEAR, HAC, HAZOP
Process hazard review
LOPA and SIL determination
Plant Specific work instructions
Plant specific operation
Instructions to start up plant
Asset integrity
Technical Safety Review for new projects
Development of PSPI
Operational Sites
Management of operational change
Communication
Complaints
Site Maintenance and security
Plant and Equipment – use and maintenance
Statutory inspections for plant and work equipment
Site Transport Safety
Working at Height
Working in confined spaces
Welding and flame cutting
Fugitive emissions
Mechanical and Low Voltage Isolation
Safe Isolation of plant and equipment
Use of hand held power tools
Procedures - Site Specific
Procedures – Divisional specific
Risk Assessments – Site specific
Risk Assessments – Divisional specific
Transport
Driver – Operator Guidance Notes
Transport Safety
Risk Assessments
Industrial Services
Tank cleaning
Water Jetting activities
Various work instructions
Risk Assessments
Transport are currently being incorporated into the IMS so further documentation will be listed once approved.
Labs
UKAS Accreditation
ISO/IEC 17025: 2005 – Testing
Certification number 4292
Treatment
Pre-acceptance of waste
Acceptance of waste
Non-conforming and quarantine waste
Laboratory Smalls
Waste sampling
Storage of waste
Compatibility testing and bulking
Container crushing and shredder
Transfer and dispatch of waste
Landfill
Pre-acceptance of waste
Acceptance of waste
Non-conforming and quarantine waste
Transfer and dispatch of waste

APPENDIX E

CERTIFICATES OF TECHNICAL COMPETENCE

APPENDIX F

TECHNICAL DESCRIPTION OF THE WASTE NEUTRALISATION PROCESS

AN APPLICATION TO VARY ENVIRONMENTAL PERMIT NUMBER EPR/YP3138XB FOR THE WASTE TREATMENT FACILITY OPERATED BY AUGEAN SOUTH LIMITED AT EAST NORTHANTS RESOURCE MANAGEMENT FACILITY

TECHNICAL DESCRIPTION OF THE WASTE NEUTRALISATION PROCESS

Report reference: AU/KCW/AW/5651/01/TD
May 2021

Technical advisers on environmental issues

Baddesley Colliery Offices, Main Road, Baxterley, Atherstone, Warwickshire, CV9 2LE
Tel. (01827) 717891 Fax. (01827) 718507

CONTENTS

TABLES

FIGURES

APPENDICES

1. Introduction

1.1 MJCA is commissioned by Augean South Limited (Augean) to prepare an application to vary Environmental Permit number EPR/YP3138XB (the permit) for the Waste Treatment Facility operated by Augean at East Northants Resource Management Facility (ENRMF), Stamford Road, Peterborough, PE8 6XX.

1.2 This document comprises a technical description of the proposed waste neutralisation process.

1.3 An enhanced pre-application advice meeting was held with the Environment Agency on 19 November 2020 to discuss the scope of the variation application and formal pre-application advice was provided by the Environment Agency in a letter dated 23 November 2020. Copies of the correspondence associated with the pre-application advice are presented at Appendix A of the application to vary the permit. This technical description document has been prepared with reference to the letter dated 23 November 2020 in which the Environment Agency advised that the following details would be required to support the application to vary the permit:

- Risk Assessment - report reference AU/KCW/AW/5651/01/ERA (Appendix H)
- BAT Assessment - report reference AU/KCW/AW/5651/01/BAT (Appendix G)
- Process flow information – Section 3, Figure A and Appendix A of this report
- Process equipment – Section 3 and Figure A of this report
- Acid tank secondary containment details - Section 3 of this report
- Reaction information - Section 3 of this report
- Waste types - Section 3 and Table A and Table B of this report
- Outputs - Section 4 of this report
- Potential destinations for recovery - Section 4 of this report
- Acids types and mixing ratios - Section 3 of this report
- pH and temperature control - Section 3 of this report
- Controls for the recovery of waste and disposal of waste – inputs and outputs - Sections 3 and 4 and Appendix A of this report.

2. The proposed activities

2.1 Augean undertakes a range of waste treatment processes as authorised by the permit at ENRMF focussing on the treatment of difficult to manage wastes largely comprising hazardous wastes. One of the major treatment processes currently authorised at the site is the stabilisation and solidification of contaminated bulk wastes such as soils, dredgings and filtercakes via the treatment plant. This process has been operating under the permit for over 10 years. The objective of the processes is to minimise the rate of contaminant migration to the environment, to reduce the level of toxicity of contaminants and/or to solidify the waste, in order to alter or improve the characteristics of the waste so that it can be recovered for use at a suitably authorised facility or disposed. The treatment objective for a particular waste can encompass a reduction in the waste toxicity and/or mobility, a beneficial change in its physical nature and/or an improvement in the engineering properties of the treated material. The activities comprising stabilisation of hazardous waste for disposal (activity reference AR2), stabilisation of non-hazardous waste for disposal (AR4), solidification/stabilisation of hazardous waste for recovery (AR3) and solidification/stabilisation of non-hazardous waste for recovery (AR17) already are permitted to be undertaken at the site as specified in Table S1.1 of the permit.

2.2 It is proposed that a waste treatment process already authorised and undertaken by Augean at the waste treatment facility at Port Clarence Waste Recovery Park (PC WRP[1]) is introduced at the ENRMF site. The waste treatment process comprises the neutralisation of hazardous waste and non-hazardous waste. The proposed waste neutralisation process at ENRMF will be consistent with the process currently undertaken by Augean at PC WRP. The waste neutralisation process therefore comprises a process approved previously by the Environment Agency and a process for which Augean has operational experience.

2.3 Further details of the waste neutralisation process, including the input waste types, process equipment, process controls and output management are presented in subsequent sections of this technical description document.

[1] Augean Treatment Limited Environmental Permit Number EPR/YP3234XR/V007 for PC WRP, Stockton on Tees. Activity reference AR4 and AR38.

2.4 The wastes treated in the waste neutralisation process will comprise the treatment of both hazardous and non-hazardous wastes and the process output will be recovered at a suitability authorised facility or disposed. For the purpose of this report the destination for the output from the waste treatment process will be referred to as the receiving facility. Irrespective of whether the receiving facility will recover or dispose the output from the waste treatment process, the receiving facility will have a specification for the material which can be accepted. For example, for disposal at a hazardous waste landfill site the specification will comprise the hazardous waste acceptance criteria (WAC)[2] and for a recovery activity the receiving facility will have a specification which may for example require the waste to be non-hazardous and may require certain metal concentrations to be below certain thresholds. Examples of potential receiving facilities are presented later in this report as examples for reference purposes only.

2.5 Consistent with the permit for PC WRP and consistent generally with the pre-application advice the activity references, descriptions of the activities and relevant D and R codes for the waste neutralisation process will be as shown in the table below:

Activity listed in Schedule 1 of EPR[3]	**Description of activity**	**D / R code**
S5.3 A(1)(a)(vi)	Neutralisation of **hazardous** waste for **recovery**	R5
S5.3 A(1)(a)(ii)	Neutralisation of **hazardous** waste for **disposal**	D9
Waste Operation	Neutralisation of **non-hazardous** waste for **recovery**	R5
S5.4 A(1)(a)(ii)	Neutralisation of **non-hazardous** waste for **disposal**	D9

[2] Or other site specific WAC specified in the permit for the landfill site

[3] The Environmental Permitting (England and Wales) Regulations 2016 UK SI No. 1154

3. Waste Neutralisation Process

3.1 It is proposed that Air Pollution Control Residues (APCR) and other such wastes are subject to neutralisation generating a hazardous or non-hazardous waste output for recovery or disposal at a suitably permitted facility.

3.2 The wastes that can be processed are listed in Table A (hazardous wastes) and Table B (non-hazardous wastes) of this report[4]. The waste types specified in Table A and in Table B are identical to the waste types specified in Table S2.14 and Table S2.15 respectively of the waste treatment facility operated by Augean at PC WRP[5]. Non-hazardous wastes are included as they may still exhibit properties that would benefit from treatment by neutralisation to facilitate secondary processing at the receiving facility.

3.3 The waste listed in Table A and B fall into one of the three following categories:

- Bulk waste (solid highly alkaline/acidic material) (such as APCR)
- Liquid (acid or alkali) necessary to adjust residual alkalinity/acidity to levels suitable for acceptance at the receiving facility
- Granular material

3.4 A wide range of liquid waste codes have been included in Table A and Table B. These codes have been selected carefully based on Augean's experience of handling such wastes including at PC WRP. Although the description of the waste type (e.g. mother liquors 07 02 04*) does not specify whether the waste is an acid or an alkali, these waste types can have significant acidity or alkalinity of value to the neutralisation process. The waste acceptance process will be used to determine whether any individual waste stream is suitable for the specific treatment process being considered.

[4] Although it is considered unnecessary to specify the hazardous wastes and non-hazardous wastes in separate tables it is understood that this is the approach taken by the Environment Agency for the PC WRP permit.

[5] Environmental Permit Number EPR/YP3234XR/V007.

3.5 The outputs from the treatment process typically require the addition and inclusion of granular materials in order to meet the physical specification of the materials for use at the receiving recovery facility.

3.6 All outputs will need to meet the acceptance criteria of the receiving facility. All of the waste types specified in Table A and Table B are potentially suitable for recovery but the nature and specific types of waste inputs used for any specific recovery output will be selected so that the output from the treatment process will meet the specification of the receiving recovery facility. In the event that the output does not meet the specification for recovery at the receiving facility it will be necessary for the output to meet the waste acceptance criteria for the disposal facility, for example the hazardous waste WAC for disposal at a hazardous waste landfill site or the waste must be classified as non-hazardous waste for disposal at a non-hazardous waste landfill site.

3.7 No component will be added for the sole purpose of diluting contaminants. In accordance with best practice for all treatment activities three fundamental steps are taken to achieve appropriate control of the treatment process and outputs

(i) adequately characterising the input waste

(ii) ensuring that the input waste and treatment activity are suitable for the intended recovery or disposal activity

(iii) ensuring operational control of the treatment process including inputs, reaction monitoring and having clear end-point objectives irrespective of whether the output is destined for recovery or disposal

3.8 A process flow diagram illustrating the controls already in place at the site in respect of the currently permitted activities is presented at Appendix A to this report. The process flow controls will be applied also to the waste neutralisation process to ensure that the necessary steps throughout the whole process from the initial waste treatment enquiry through to the despatch of a suitably treated and coded residue from the facility. Further details of the controls in place, which should be read in conjunction with the flow diagram at Appendix A, are presented below.

- Pre-acceptance: All waste to be potentially accepted at the site must undergo suitable analysis to determine acceptability under the permit, safety for acceptance, suitability for neutralisation, identification of the nature of the processing necessary and whether the waste will be recovered or disposed.
- On agreement that the waste will be accepted for treatment at the facility, the Duty of Care applies for the transfer of the waste to the site.
- The waste is subject to compliance checking on arrival.
- Further physical and chemical checking may be undertaken on site to confirm the material is as expected and is suitable for the intended treatment process, to design targeted treatment batches to meet the specification necessary for acceptance at the recovery facility or disposal facility and to optimise process efficiency.
- The on-site processes are the subject of regulatory requirements and permit conditions which in particular include:
  - EWC codes specific to the process
  - Confirmation that the objective of the treatment process is specified and achieved
  - Process limitations for the plant
- The efficiency of the process in terms of optimum use of waste resources or raw materials such as cement if necessary is driven by the specification for the output required by the recovery facility or disposal facility.
- Testing to demonstrate that the process output meets the specification for the designated permitted recovery facility or disposal facility
- Approval by the recovery or disposal facility that the material can be accepted
- Duty of care for the transfer of the output material to the recovery facility or disposal facility
- Acceptance processes of the recovery facility or disposal facility.

3.9 Consistent with the tank storage area at PC WRP, liquid acids and alkalis will be stored in storage tanks, drums or IBCs constructed from materials which are compatible with and resistant to the stored liquids. The storage tanks will be bunded to provide secondary containment with sufficient capacity to contain 110% of the content of the tanks and the wider site surfacing comprises a concrete surface with sealed drainage to provide tertiary containment to the tanks and secondary containment for drums and IBCs**.** The design and construction of the treatment facility at PC WRP was the subject of a HAZOP (Hazard and Operability) study to identify potential hazards and inform the design and layout of the plant. A similar HAZOP study will be undertaken in respect of the proposals for the construction of the storage tank and treatment infrastructure at ENRMF relevant to the waste neutralisation process. Storage of solid wastes, including APCR which is already authorised to be

handled at the site for use in the stabilisation and solidification process, will be consistent with the storage arrangements currently employed at the site including, depending on the nature of the material, storage in silos, bays or bunkers.

3.10 Liquid acids (or alkalis depending on the nature of the waste being treated and the output objective) stored in tanks, drums or IBCs will be mixed with APCR and/or similar wastes in an enclosed mixing vessel at carefully controlled ratios to adjust the pH. Liquids will be added using dosing pumps and solid wastes will be added by a screw conveyor fed using mobile plant or from a silo or bag handling unit. Consistent with the process undertaken at PC WRP the process will be controlled using a programmable logic controller (PLC) which will enable the key process variables including pH and temperature to be monitored during the relevant stages of the waste input and treatment process. A simplified schematic of the process flow is presented on Figure A. The objective will be to produce a neutralised or part neutralised output in order to meet the specification of the receiving facility. If the specification for the receiving permitted facility requires other parameters to be controlled, for example maximum concentrations of specified metals, further control measures would be applied such as controls on the input and therefore output concentrations of metals as necessary.

3.11 An activity specific limit of 250,000 tonnes per annum is proposed for the waste neutralisation process.

4. Outputs and potential destination for recovery

4.1 As described earlier in this report, the output from the waste neutralisation process will be recovered at a suitability authorised facility or disposed. Where an output is to be recovered it will need to meet the acceptance criteria of the receiving facility. Each treatment process intended to produce an output which will be used at a specific recovery facility will be the subject of a Process Statement. An example Process Statement relevant to the activity for the solidification/stabilisation of waste is presented at Appendix B. The solidification/stabilisation of waste for the purpose of recovery already is authorised under the ENRMF treatment permit.

4.2 Further examples of recovery processes where outputs from the ENRMF treatment facility including outputs from the waste neutralisation process could be sent for recovery are presented at Appendix C.

4.3 The inputs to the process will be controlled to achieve outputs which meet the physical and chemical specification as defined by the relevant recovery facility. The prepared material could be used, as in the example of the Wellbeck Colliery Waste Facility, to produce materials for use in restoration projects.

4.4 It will be necessary to control input wastes to ensure that specifications for the acceptability of the output materials are not exceeded. For the Wellbeck example chloride, sulphate and TPH are critical to the acceptability of the output for use in recovery.

4.5 The examples provided in this report demonstrate that feasible recovery outlets are available for the output from the treatment processes at ENRMF treatment facility including the waste neutralisation process. The Process Statement and examples presented in this report should not comprise specified operating techniques of the ENRMF permit as the specification and parameters will vary and will relate to the particular recovered end use of the material at each permitted site at which the material is used.

TABLES

Table A

Permitted waste types (hazardous wastes) for the waste neutralisation process

The List of Wastes (LoW) specified in Table A is identical to the LoW specified in Table S2.14 of Environmental Permit Number EPR/YP3234XR/V007 for Port Clarence Waste Recovery Park [1]

LoW Code	Waste Description
01	WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS
01 05	drilling muds and other drilling wastes
01 05 06*	drilling muds and other drilling wastes containing hazardous substances
01 05 07*	barite-containing drilling muds and wastes other than those mentioned in 01 05 05 and 01 05 06
06	WASTES FROM INORGANIC CHEMICAL PROCESSES
06 01	wastes from the manufacture, formulation, supply and use (MFSU) of acids
06 01 01*	sulphuric acid and sulphurous acid
06 01 02*	hydrochloric acid
06 01 04*	phosphoric and phosphorous acid
06 01 06*	other acids
06 05	sludges from on-site effluent treatment
06 05 02*	sludges from on-site effluent treatment containing hazardous substances
06 07	wastes from the MFSU of halogens and halogen chemical processes
06 07 04*	solutions and acids, for example contact acid
07	WASTES FROM ORGANIC CHEMICAL PROCESSES
07 01	wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals
07 01 01*	aqueous washing liquids and mother liquors
07 01 04*	other organic solvents, washing liquids and mother liquors
07 01 08*	other still bottoms and reaction residues
07 01 11*	sludges from on-site effluent treatment containing hazardous substances
07 02	wastes from the MFSU of plastics, synthetic rubber and man-made fibres
07 02 01*	aqueous washing liquids and mother liquors
07 02 04*	other organic solvents, washing liquids and mother liquors
07 02 08*	other still bottoms and reaction residues
07 02 11*	sludges from on-site effluent treatment containing hazardous substances
07 02 14*	wastes from additives containing hazardous substances
07 05	wastes from the MFSU of pharmaceuticals
07 05 01*	aqueous washing liquids and mother liquors
07 05 04*	other organic solvents, washing liquids and mother liquors
07 05 08*	other still bottoms and reaction residues
07 06	wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics
07 06 01*	aqueous washing liquids and mother liquors
07 06 04*	other organic solvents, washing liquids and mother liquors
07 06 08*	other still bottoms and reaction residues
07 06 11*	sludges from on-site effluent treatment containing hazardous substances
07 07	wastes from the MFSU of fine chemicals and chemical products not otherwise specified
07 07 01*	aqueous washing liquids and mother liquors
07 07 04*	other organic solvents, washing liquids and mother liquors
07 07 08*	other still bottoms and reaction residues

[1] Augean Treatment Limited Environmental Permit Number EPR/YP3234XR/V007, Stockton on Tees. Activity reference AR4 and AR38.

LoW Code	Waste Description
07 07 11*	sludges from on-site effluent treatment containing hazardous substances
10	WASTES FROM THERMAL PROCESSES
10 01	wastes from power stations and other combustion plants (except 19)
10 01 09*	sulphuric acid
10 01 14*	bottom ash, slag and boiler dust from co-incineration containing hazardous substances
10 01 16*	fly ash from co-incineration containing hazardous substances
10 01 18*	wastes from gas cleaning containing hazardous substances
10 01 20*	sludges from on-site effluent treatment containing hazardous substances
10 01 22*	aqueous sludges from boiler cleansing containing hazardous substances
10 03	wastes from aluminium thermal metallurgy
10 03 21*	other particulates and dust (including ball-mill dust) containing hazardous substances
10 09	wastes from casting of ferrous pieces
10 09 11*	other particulates containing hazardous substances
10 09 13*	waste binder containing hazardous substances
10 10	wastes from casting of non-ferrous pieces
10 10 11*	other particulates containing hazardous substances
10 10 13*	waste binder containing hazardous substances
10 11	wastes from manufacture of glass and glass products
10 11 11*	waste glass in small particles and glass powder containing hazardous substances
10 11 13*	glass polishing and grinding sludge containing hazardous substances
10 13	wastes from manufacture of cement, lime and plaster and articles and products made from them
10 13 12*	solid wastes from gas treatment containing hazardous substances
11	WASTES FROM CHEMICAL SURFACE TREATMENT AND COATING OF METALS AND OTHER MATERIALS; NON-FERROUS HYDRO-METALLURGY
11 01	wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphatising, alkaline degreasing, anodising)
11 01 05*	pickling acids
11 01 06*	acids not otherwise specified
11 01 07*	pickling bases
11 01 08*	phosphatising sludges
11 01 11*	aqueous rinsing liquids containing hazardous substances
11 01 98*	other wastes containing hazardous substances
16	WASTES NOT OTHERWISE SPECIFIED IN THE LIST
16 06	batteries and accumulators
16 06 06*	separately collected electrolyte from batteries and accumulators (except electrolyte from lead-acid batteries)
16 07	wastes from transport tank, storage tank and barrel cleaning (except 05 and 13)
16 07 09*	wastes containing other hazardous substances
16 08	spent catalysts
16 08 06*	spent liquids used as catalysts
16 10	aqueous liquid wastes destined for off-site treatment
16 10 01*	aqueous liquid wastes containing hazardous substances
16 10 03*	aqueous concentrates containing hazardous substances
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)
17 01	concrete, bricks, tiles and ceramics
17 01 06*	mixtures of, or separate fractions of concrete, bricks, tiles and ceramics containing hazardous substances
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 03*	soil and stones containing hazardous substances
17 05 05*	dredging spoil containing hazardous substances

Table A

LoW Code	Waste Description
17 05 07*	track ballast containing hazardous substances
17 05 11*	sludges from on-site effluent treatment containing hazardous substances
18	WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (except kitchen and restaurant wastes not arising from immediate health care)
18 02	wastes from research, diagnosis, treatment or prevention of disease involving animals
18 02 05*	chemicals consisting of or containing hazardous substances
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE
19 01	wastes from incineration or pyrolysis of waste
19 01 06*	aqueous liquid wastes from gas treatment and other aqueous liquid wastes
19 01 07*	solid wastes from gas treatment
19 01 11*	bottom ash and slag containing hazardous substances
19 01 13*	fly ash containing hazardous substances
19 01 15*	boiler dust containing hazardous substances
19 02	wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)
19 02 04*	premixed wastes composed of at least one hazardous waste
19 02 05*	sludges from physico/chemical treatment containing hazardous substances
19 02 11*	other wastes containing hazardous substances
19 03	stabilised/solidified wastes
19 03 04*	wastes marked as hazardous, partly stabilised
19 03 06*	wastes marked as hazardous, solidified
19 07	landfill leachate
19 07 02	landfill leachate containing hazardous substances
19 08	wastes from waste water treatment plants not otherwise specified
19 08 13*	sludges containing hazardous substances from other treatment of industrial waste water
19 11	wastes from oil regeneration
19 11 03*	aqueous liquid wastes
19 11 05*	sludges from on-site effluent treatment containing hazardous substances
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 11*	other wastes (including mixtures of materials) from mechanical treatment of waste containing hazardous substances
19 13	wastes from soil and groundwater remediation
19 13 01*	solid wastes from soil remediation containing hazardous substances
19 13 03*	sludges from soil remediation containing hazardous substances
19 13 05*	sludges from groundwater remediation containing hazardous substances
19 13 07*	aqueous liquid wastes and aqueous concentrates from groundwater remediation containing hazardous substances
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01	separately collected fractions (except 15 01)
20 01 14*	acids
20 01 15*	alkalines

Table A

Table B

Permitted waste types (non-hazardous wastes) for the waste neutralisation process

The List of Wastes (LoW) specified in Table B is identical to the LoW specified in Table S2.15 of Environmental Permit Number EPR/YP3234XR/V007 for Port Clarence Waste Recovery Park [1]

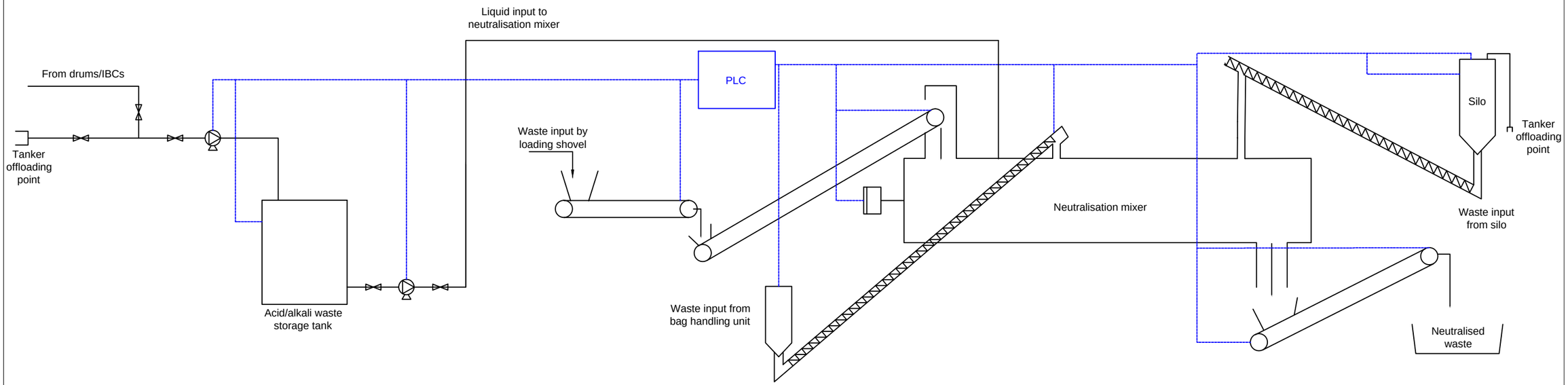
LoW Code	Waste Description
01	WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS
01 05	drilling muds and other drilling wastes
01 05 04	freshwater drilling muds and wastes
01 05 08	chloride-containing drilling muds and wastes other than those mentioned in 01 05 05 and 01 05 06
02	WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING
02 01	wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing
02 01 01	sludges from washing and cleaning
02 02	wastes from the preparation and processing of meat, fish and other foods of animal origin
02 02 01	sludges from washing and cleaning
02 02 04	sludges from on-site effluent treatment
02 03	wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation
02 03 01	sludges from washing, cleaning, peeling, centrifuging and separation
02 03 05	sludges from on-site effluent treatment
02 04	wastes from sugar processing
02 04 03	sludges from on-site effluent treatment
02 06	wastes from the baking and confectionery industry
02 06 03	sludges from on-site effluent treatment
06	WASTES FROM INORGANIC CHEMICAL PROCESSES
06 05	sludges from on-site effluent treatment
06 05 03	sludges from on-site effluent treatment other than those mentioned in 06 05 02
07	WASTES FROM ORGANIC CHEMICAL PROCESSES
07 01	wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals
07 01 12	sludges from on-site effluent treatment other than those mentioned in 07 01 11
07 02	wastes from the MFSU of plastics, synthetic rubber and man-made fibres
07 02 12	sludges from on-site effluent treatment other than those mentioned in 07 02 11
07 02 15	wastes from additives other than those mentioned in 07 02 14
07 05	wastes from the MFSU of pharmaceuticals
07 05 12	sludges from on-site effluent treatment other than those mentioned in 07 05 11
07 06	wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics
07 06 12	sludges from on-site effluent treatment other than those mentioned in 07 06 11
07 07	wastes from the MFSU of fine chemicals and chemical products not otherwise specified
07 07 12	sludges from on-site effluent treatment other than those mentioned in 07 07 11
10	WASTES FROM THERMAL PROCESSES
10 01	wastes from power stations and other combustion plants (except 19)
10 01 01	bottom ash, slag and boiler dust (excluding boiler dust mentioned in 10 01 04)
10 01 05	calcium-based reaction wastes from flue-gas desulphurisation in solid form
10 01 07	calcium-based reaction wastes from flue-gas desulphurisation in sludge form

[1] Augean Treatment Limited Environmental Permit Number EPR/YP3234XR/V007, Stockton on Tees. Activity reference AR4 and AR38.

LoW Code	Waste Description
10 01 15	bottom ash, slag and boiler dust from co-incineration other than those mentioned in 10 01 14
10 01 17	fly ash from co-incineration other than those mentioned in 10 01 16
10 01 19	wastes from gas cleaning other than those mentioned in 10 01 05, 10 01 07 and 10 01 18
10 01 21	sludges from on-site effluent treatment other than those mentioned in 10 01 20
10 01 23	aqueous sludges from boiler cleansing other than those mentioned in 10 01 22
10 01 26	wastes from cooling-water treatment
10 02	wastes from the iron and steel industry
10 02 12	wastes from cooling-water treatment other than those mentioned in 10 02 11
10 03	wastes from aluminium thermal metallurgy
10 03 22	other particulates and dust (including ball-mill dust) other than those mentioned in 10 03 21
10 03 28	wastes from cooling-water treatment other than those mentioned in 10 03 27
10 04	wastes from lead thermal metallurgy
10 04 10	wastes from cooling-water treatment other than those mentioned in 10 04 09
10 05	wastes from zinc thermal metallurgy
10 05 09	wastes from cooling-water treatment other than those mentioned in 10 05 08
10 06	wastes from copper thermal metallurgy
10 06 10	wastes from cooling-water treatment other than those mentioned in 10 06 09
10 07	wastes from silver, gold and platinum thermal metallurgy
10 07 08	wastes from cooling-water treatment other than those mentioned in 10 07 07
10 08	wastes from other non-ferrous thermal metallurgy
10 08 20	wastes from cooling-water treatment other than those mentioned in 10 08 19
10 09	wastes from casting of ferrous pieces
10 09 14	waste binders other than those mentioned in 10 09 13
10 10	wastes from casting of non-ferrous pieces
10 10 14	waste binders other than those mentioned in 10 10 13
10 11	wastes from manufacture of glass and glass products
10 11 12	waste glass other than those mentioned in 10 11 11
10 11 14	glass polishing and grinding sludge other than those mentioned in 10 11 13
10 12	wastes from manufacture of ceramic goods, bricks, tiles and construction products
10 12 03	particulates and dust
10 13	wastes from manufacture of cement, lime and plaster and articles and products made from them
10 13 04	wastes from calcination and hydration of lime
10 13 06	particulates and dust (except 10 13 12 and 10 13 13)
10 13 11	wastes from cement-based composite materials other than those mentioned in 10 13 09 and 10 13 10
10 13 13	solid wastes from gas treatment other than those mentioned in 10 13 12
10 13 14	waste concrete and concrete sludge
11	WASTES FROM CHEMICAL SURFACE TREATMENT AND COATING OF METALS AND OTHER MATERIALS; NON-FERROUS HYDRO-METALLURGY
11 01	wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphatising, alkaline degreasing, anodising)
11 01 12	aqueous rinsing liquids other than those mentioned in 11 01 11
16	WASTES NOT OTHERWISE SPECIFIED IN THE LIST
16 10	aqueous liquid wastes destined for off-site treatment
16 10 02	aqueous liquid wastes other than those mentioned in 16 10 01
16 10 04	aqueous concentrates other than those mentioned in 16 10 03
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)
17 01	concrete, bricks, tiles and ceramics
17 01 01	concrete
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 04	soil and stones other than those mentioned in 17 05 03

LoW Code	Waste Description
17 05 06	dredging spoil other than those mentioned in 17 05 05
17 05 08	track ballast other than those mentioned in 17 05 07
18	WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (except kitchen and restaurant wastes not arising from immediate health care)
18 02	wastes from research, diagnosis, treatment or prevention of disease involving animals
18 02 06	chemicals other than those mentioned in 18 02 05
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE
19 01	wastes from incineration or pyrolysis of waste
19 01 12	bottom ash and slag other than those mentioned in 19 01 1 1
19 02	wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)
19 02 03	premixed wastes composed only of non-hazardous wastes
19 02 06	sludges from physico/chemical treatment other than those mentioned in 19 02 05
19 03	stabilised/solidified wastes
19 03 05	stabilised wastes other than those mentioned in 19 03 04
19 03 07	solidified wastes other than those mentioned in 19 03 06
19 04	vitrified waste and wastes from vitrification
19 04 02	fly ash and other flue gas treatment wastes
19 07	landfill leachate
19 07 03	landfill leachate other than those mentioned in 19 07 02
19 08	wastes from waste water treatment plants not otherwise specified
19 08 05	sludges from treatment of urban waste water
19 08 14	sludges from other treatment of industrial waste water other than those mentioned in 19 08 13
19 09	wastes from the preparation of water intended for human consumption or water for industrial use
19 11	wastes from oil regeneration
19 11 06	sludges from on-site effluent treatment other than those mentioned in 19 11 05
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
19 13	wastes from soil and groundwater remediation
19 13 02	soils wastes from soil remediation other than those mentioned in 19 13 01
19 13 04	sludges from soil remediation other than those mentioned in 19 13 03
19 13 06	sludges from groundwater remediation other than those mentioned in 19 13 05
19 13 07	aqueous liquid wastes and aqueous concentrates from groundwater remediation containing hazardous substances
19 13 08	aqueous liquid wastes and aqueous concentrates from groundwater remediation other than those mentioned in 19 13 07

FIGURES



Key / Notes

Belt conveyor

Screw conveyor

PLC control

Rev	Status	Drn	App	Chk	Date
	Final	KR	AW	LH	20/05/21

Site
EAST NORTHANTS RESOURCE MANAGEMENT FACILITY

Client
Augean SOUTH LTD

Title
Indicative flow diagram for the waste neutralisation process

Figure A

Scale
NTS@A3

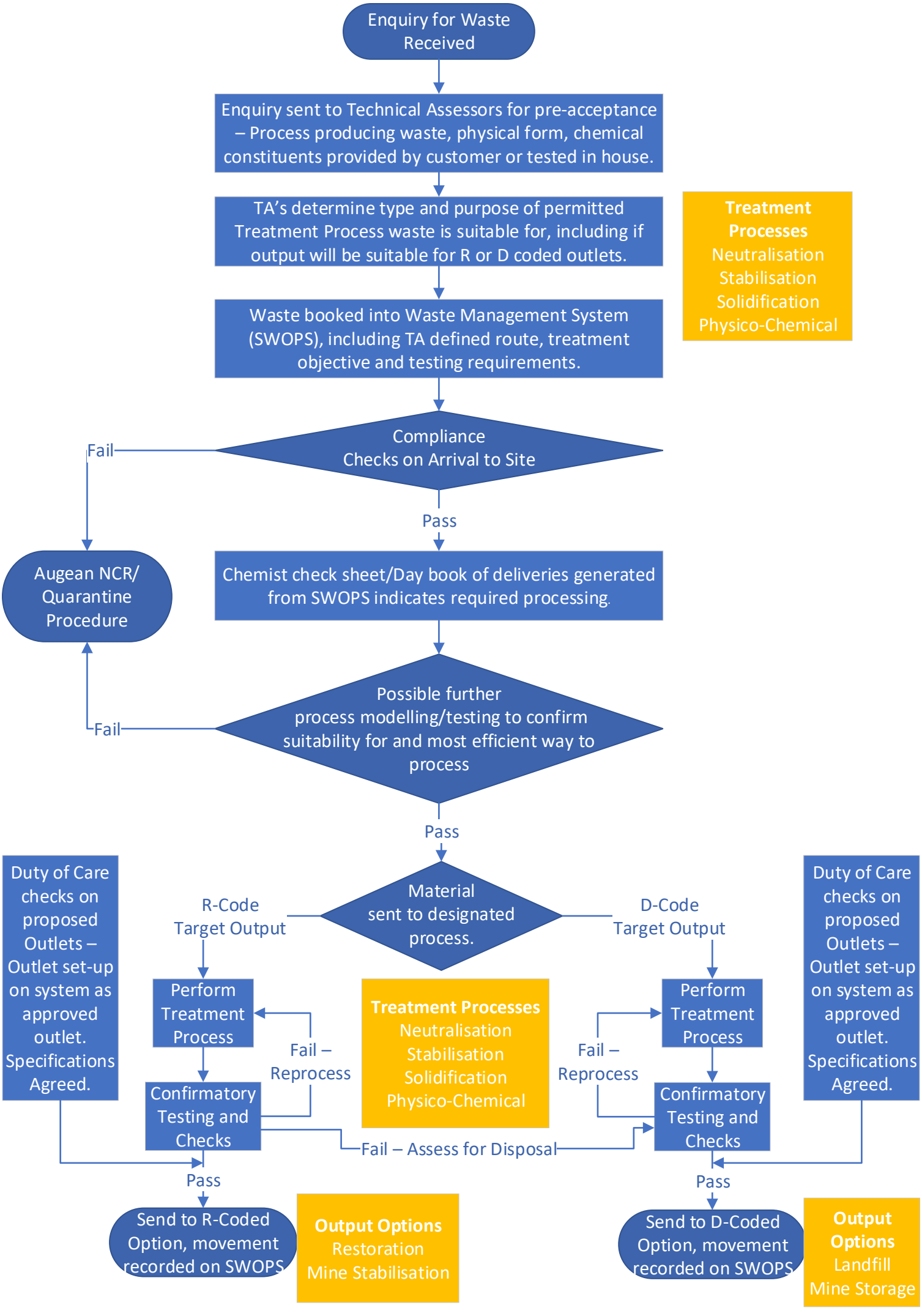
Drawing Ref
AU/KCW/05-21/22417

MJCA
Technical advisers on environmental issues
Baddesley Colliery Offices,
Main Road, Baxterley, Atherstone
Warwickshire, CV9 2LE.
Telephone : 01827 717891
Fax : 01827 718507

APPENDICES

APPENDIX A

PROCESS FLOW


Enquiry for Waste Received
Enquiry sent to Technical Assessors for pre-acceptance – Process producing waste, physical form, chemical constituents provided by customer or tested in house.
TA's determine type and purpose of permitted Treatment Process waste is suitable for, including if output will be suitable for R or D coded outlets.
Treatment Processes
Neutralisation
Stabilisation
Solidification
Physico-Chemical
Waste booked into Waste Management System (SWOPS), including TA defined route, treatment objective and testing requirements.
Compliance Checks on Arrival to Site
Fail
Pass
Augean NCR/ Quarantine Procedure
Chemist check sheet/Day book of deliveries generated from SWOPS indicates required processing.
Possible further process modelling/testing to confirm suitability for and most efficient way to process
Fail
Pass
Material sent to designated process.
R-Code Target Output
D-Code Target Output
Duty of Care checks on proposed Outlets – Outlet set-up on system as approved outlet. Specifications Agreed.
Perform Treatment Process
Fail – Reprocess
Confirmatory Testing and Checks
Treatment Processes
Neutralisation
Stabilisation
Solidification
Physico-Chemical
Perform Treatment Process
Fail – Reprocess
Confirmatory Testing and Checks
Duty of Care checks on proposed Outlets – Outlet set-up on system as approved outlet. Specifications Agreed.
Fail – Assess for Disposal
Pass
Pass
Send to R-Coded Option, movement recorded on SWOPS
Output Options
Restoration
Mine Stabilisation
Send to D-Coded Option, movement recorded on SWOPS
Output Options
Landfill
Mine Storage

APPENDIX B

EXAMPLE OF A PROCESS STATEMENT [COMMERCIALLY CONFIDENTIAL]

APPENDIX C

EXAMPLES OF RECOVERY PROCESSES [COMMERCIALLY CONFIDENTIAL]

APPENDIX G

BEST AVAILABLE TECHNIQUES (BAT) ASSESSMENT FOR THE WASTE NEUTRALISATION PROCESS

Best Available Techniques (BAT) review of the process for the neutralisation of hazardous waste and non-hazardous waste to be operated by Augean South Limited at East Northants Resource Management Facility (ENRMF), Stamford Road, Peterborough

1. This review has been prepared based on Environment Agency (EA) guidance *Best available techniques: environmental permits*[1] and the enhanced pre-application advice provided by the EA in a letter dated 23 November 2020.

2. EA technical guidance for regulated industry sectors[2] (the EA technical guidance) identifies that new guidance Chemical waste: appropriate measures for permitted facilities[3] (the EA Appropriate Measures guidance) applies to new chemical waste facilities applying for permits from 18 November 2020.

3. The EA Appropriate Measures guidance states in section 1.2 how appropriate measures should be implemented at new and existing facilities:

> *"For new facilities the appropriate measures must be in place before operations start…*
>
> *Through permit reviews, the Environment Agency will assess the current operating techniques of existing facilities against the relevant appropriate measures."*

4. The EA technical guidance states:

> *"Chemical waste sites that were permitted before 18 November 2020 need to continue to use the Sector Guidance Note S5.06: recovery and disposal of hazardous and non-hazardous waste until their permits are varied".*

The EA guidance for Sector Guidance Note (SGN) S5.06[4] states:

> *"For existing waste installations, operators will need to make sure that the BAT conclusions are met in full by August 2022."*

5. As the waste neutralisation process will use some new plant at an existing waste installation a Best Available Techniques (BAT) review in respect of the waste neutralisation process has been undertaken. The review demonstrates that the waste neutralisation process and directly associated new plant and techniques comprise BAT.

[1] https://www.gov.uk/guidance/best-available-techniques-environmental-permits Last accessed 24 May 2021.
[2] https://www.gov.uk/government/collections/technical-guidance-for-regulated-industry-sectors-environmental-permitting Last accessed 24 May 2021.
[3] https://www.gov.uk/guidance/chemical-waste-appropriate-measures-for-permitted-facilities . Last accessed 24 May 2021.
[4] https://www.gov.uk/government/publications/sector-guidance-note-s506-recovery-and-disposal-of-hazardous-and-non-hazardous-waste Last accessed 24 May 2021.

6. Consistent with the EA Appropriate Measures guidance and the EA guidance for SGN S5.06 it is unnecessary to consider at this point BAT in respect of the existing waste activities, plant and techniques at the site or the proposed changes associated with the waste stabilisation process and the waste solidification/stabilisation process which are limited to an increase in waste throughput.

BAT review of the waste neutralisation process

(i) The waste neutralisation process comprises a physico-chemical waste treatment process. As described in the technical description document (Appendix F) the process comprises the neutralisation of hazardous waste and non-hazardous waste. The BAT Conclusions for waste treatment[5] which are relevant to the waste neutralisation process are reproduced in the table below and comprise the general BAT conclusions (BAT 1 to BAT 24) and BAT conclusions for the physico-chemical treatment of solid and/or pasty waste (BAT 40, 41) and BAT conclusions for the treatment of water based liquid waste (BAT 52, 53).

(ii) The relevance of the criteria specified in the BAT conclusions is related to the nature, scale and complexity of the waste neutralisation process. If any of the BAT criteria are considered not relevant this has been identified in the table. This BAT assessment should be read in conjunction with the technical description document for the waste neutralisation process which is provided at Appendix F to the permit variation application.

(iii) The EA Appropriate Measures guidance has also been reviewed as part of the assessment of BAT for the waste neutralisation process. As the EA Appropriate Measures guidance was published to implement the BAT Conclusions for waste treatment, the review is presented below with reference to the lead document, namely the BAT Conclusions document.

BAT Conclusion	Details to confirm that the process comprises BAT
1. General BAT Conclusions	
1.1 Overall environmental performance	
BAT 1 Environmental Management System	Augean South Limited (Augean) has implemented an Environmental Management System (EMS) at the site in accordance with the current Environmental Permit (the permit). The EMS is externally certified to ISO 14001 and the management system which includes the procedures relevant to the waste neutralisation process are subject to regular internal and external audits and reviews. The procedures take into account all the items listed in BAT 1.
BAT 2 Waste Acceptance	The existing waste pre-acceptance and acceptance procedures are included in the EMS implemented at the site and will be applied to all wastes accepted for processing in the waste neutralisation process. The procedures include aspects such as waste pre-acceptance, waste acceptance, waste verification and rejection, waste compatibility, waste characterisation and classification, waste segregation and waste tracking. Waste acceptance is undertaken by a suitably qualified Site Chemist. The example process flow diagram presented at Appendix A of the technical description document provides further details of the steps followed in respect of waste acceptance.

[5] COMMISSION IMPLEMENTING DECISION (EU) 2018/1147 of 10 August 2018 establishing best available techniques (BAT) conclusions for waste treatment, under Directive 2010/75/EU of the European Parliament and of the Council

BAT Conclusion	Details to confirm that the process comprises BAT
	All waste which is being considered for acceptance at the site must undergo suitable analysis and assessment to determine acceptability under the permit, safety for acceptance, suitability for processing, the nature of the processing necessary and whether the waste will be recovered or disposed. All waste is subject to compliance checking on arrival. Further physical and chemical checking may be undertaken on site to confirm the material is suitable for the intended use, to design targeted treatment batches to meet the specifications necessary for acceptance at the recovery facility or disposal facility and optimise process efficiency.
BAT 3 Emissions to water and air BAT Conclusion 3 is relevant to maintaining an inventory of waste water and waste gas streams to facilitate the reduction of emissions to water and to air and the technique comprises a component of the EMS (BAT 1)	Under the applicability heading for BAT3 it is stated: "*The scope (e.g. level of detail) and nature of the inventory will generally be related to the nature, scale and complexity of the installation, and the range of environmental impacts it may have".* As there are no direct discharges to waste water associated with the waste neutralisation process it is unnecessary to maintain an inventory of waste water. As there are no point source emissions to air associated with the waste neutralisation process it is unnecessary to maintain an inventory of waste gas streams.
BAT 4 Storage of waste The relevant aspects of BAT 4 relate to the provision of an optimised storage location, adequate storage capacity and safe storage operations.	The BAT conclusion for optimised storage location states: "*the storage is located as far as technically and economically possible from sensitive receptors…*" As shown on Figure 2, (drawing reference AU/KCW/12-20/22147) included with this application, the closest residential receptors are located approximately 500m from the treatment permit boundary. The treatment facility currently treats wastes similar to those which will be managed in the proposed waste neutralisation process and has been operating safely at this location for many years. The waste neutralisation process which is proposed to be undertaken at ENRMF treatment facility is already authorised and undertaken by Augean at their waste treatment facility at Port Clarence Waste Recovery Park (PC WRP[6]). The proposed waste neutralisation process at

[6] Augean Treatment Limited Environmental Permit Number EPR/YP3234XR/V007 for PC WRP, Stockton on Tees. Activity reference AR4 and AR38.

BAT Conclusion	Details to confirm that the process comprises BAT
	ENRMF will be consistent with the process currently undertaken by Augean at PC WRP. The planning and construction of the treatment facility at PC WRP was the subject of a HAZOP (Hazard and Operability) study to identify potential hazards and inform the design and layout of the plant. A similar HAZOP study will be undertaken in respect of the proposals for construction of the required treatment infrastructure at ENRMF relevant to the waste neutralisation process. Storage of solid wastes, including Air Pollution Control Residues (APCR) which is already authorised to be handled at the ENRMF site for use in the stabilisation process, will be consistent with the storage arrangements currently employed at the site including (depending on the nature of the material) storage in silos, bays or bunkers. Consistent with the tank farm at PC WRP, acids and alkalis will be stored in storage tanks, drums or IBCs constructed from materials which are compatible with and resistant to the stored liquids. The storage tanks will be bunded to provide secondary containment with sufficient capacity to contain 110% of the content of the tanks and the wider site surfacing comprises a concrete surface with sealed drainage to provide tertiary containment to tanks and secondary containment to drums and IBCs. Storage and treatment vessels are provided with instrumentation connected to alarms and trip switches to provide overfill protection. The storage areas and containers for incoming wastes have been suitably sized based on the proposed throughput of the activity. The quantity of waste held in the storage areas is monitored during regular site walkover surveys. Consistent with waste storage practices employed at the wider site over many years, wastes will be segregated as necessary. Consistent with the description presented in BAT 4 it is considered that this comprises an optimised storage location away from sensitive receptors and with no direct pathway to watercourses.
BAT 5 Handling and transfer of waste	All relevant staff employed at the site are suitably trained to handle waste including in respect of measures to prevent, detect and mitigate spills and will be trained to operate the plant associated with the waste neutralisation process. Relevant operational procedures are in place for the handling and transfer of waste. Training records are retained as part of the site EMS.

BAT Conclusion	Details to confirm that the process comprises BAT
	Current site procedures include appropriate measures for the control and competent supervision of the transfer of wastes from drums and tankers as well as the use and application of appropriate equipment and safety measures.
1. 2 Monitoring	
BAT 6 and BAT 7 Monitoring of emissions to water	As there are no direct discharges to waste water associated with the waste neutralisation process it is unnecessary to monitor process parameters relevant to emissions to water such as waste water flow, pH, temperature and conductivity (BAT 6) or to monitor emissions to water (BAT 7).
BAT 8 Monitoring of channelled emissions to air	**Channelled emissions** are defined in Section 6 of the waste treatment BREF[7] as "*Emissions of pollutants into the environment through any kind of duct, pipe, stack, etc. This also includes emissions from open-top biofilters*." **Diffuse emissions** are defined in Section 6 of the waste treatment BREF as "*Non-channelled emissions (e.g. of dust, organic compounds, odour) which can result from 'area' sources (e.g. **tanks**) or 'point' sources (e.g. pipe flanges). This also includes emissions from open-air windrow composting*". Based on the definitions presented above, there are no channelled emissions to air. It is therefore unnecessary to monitor emissions to air.
BAT 9 Monitoring of diffuse emissions of organic compounds to air	BAT 9 states: "*BAT is to monitor diffuse emissions of organic compounds to air from the regeneration of spent solvents, the decontamination of equipment containing POPs with solvents, and the physico-chemical treatment of solvents for the recovery of their calorific value, at least once per year using one or a combination of the techniques given below*". As none of these activities are undertaken in the waste neutralisation process it is unnecessary to give further consideration to BAT 9.
BAT 10 Odour monitoring	Under the applicability heading for BAT10 it is stated: "*The applicability is restricted to cases where an odour nuisance at sensitive receptors is expected and/or has been substantiated".* The acceptance procedures at the site will prevent putrescible or malodourous wastes from being accepted for the waste neutralisation process. Wastes will undergo a technical assessment, which includes an assessment of odour potential, prior to being considered acceptable for the process. Notwithstanding that odour nuisance from the waste neutralisation process is not expected, regular sniff testing will be undertaken at the site in accordance with existing procedures and will include checks of the waste neutralisation process, as described in

[7] Best Available Techniques (BAT) Reference Document for Waste Treatment. Industrial Emissions Directive 2010/75/EU (Integrated Pollution Prevention and Control). EUR 29362EN. 2018

BAT Conclusion	Details to confirm that the process comprises BAT
	the odour management plan which is implemented at ENRMF including the treatment facility and the adjacent landfill site.
BAT 11 Annual consumption of water, energy and raw materials and annual generation of residues and waste water.	The annual consumption of water, energy and raw materials will continue to be recorded across all treatment activities including the new waste neutralisation process in a manner similar to the recording of these parameters currently at the site to satisfy the reporting requirements specified in the permit. Records of the annual generation of residues from the waste neutralisation process will be maintained and documented as part of the site EMS and included in the quarterly waste returns for the site which record the quantity of waste removed from the site following treatment.
1.3 Emissions to air	
BAT 12 Odour management plan	Under the applicability heading for BAT12 it is stated: "*The applicability is restricted to cases where an odour nuisance at sensitive receptors is expected and/or has been substantiated".* An Odour Management Plan (OMP) is implemented currently at ENRMF which includes the treatment facility and the landfill site. The OMP includes a protocol for odour monitoring by sniff testing and a protocol for investigating and responding to odour complaints. The waste acceptance process implemented at the site is designed to prevent odorous wastes from being accepted for treatment.
BAT 13 Odour reduction	BAT 13 refers to reduction of odour emissions relevant to open systems (e.g. compost windrows) or in relation to activities in which the waste in the process is being aerobically treated. It is unnecessary to give further consideration to BAT 13 for the waste neutralisation process.
BAT 14 Reduce diffuse emissions to air	The waste neutralisation process which is proposed to be undertaken at ENRMF treatment facility is already authorised and undertaken by Augean at the waste treatment facility at PC WRP[8]. The proposed waste neutralisation process at ENRMF will be consistent with the process currently undertaken by Augean at PC WRP. The planning and construction of the treatment facility at PC WRP was the subject of a HAZOP study to identify potential hazards and inform the design and layout of the plant. A similar HAZOP study will be undertaken in respect of the proposals for construction of the required treatment infrastructure at ENRMF relevant to the waste neutralisation process. The HAZOP includes aspects such as the materials of construction and specification of the tanks, vessels, pumps, valves and seals to minimise the potential for diffuse emissions to air.

[8] Augean Treatment Limited Environmental Permit Number EPR/YP3234XR/V007 for PC WRP, Stockton on Tees. Activity reference AR4 and AR38.

BAT Conclusion	Details to confirm that the process comprises BAT
	BAT 14 specifies that BAT14d is especially relevant to diffuse emissions to air. BAT 14d refers to containment of diffuse emissions. Storage of solid wastes, including APCR which is already authorised to be handled at the site for use in the stabilisation process, will be consistent with the storage arrangements currently employed at the site including (depending on the nature of the material) storage in silos, bays or bunkers. The bays and bunkers will provide a wind barrier to diffuse emissions. Waste materials with the potential to release particulate matter during transfer to the neutralisation vessel will be transferred via an enclosed screw conveyor to minimise the potential for diffuse emissions of particulate matter to air. Where waste materials are stored in bays and bunkers and where waste materials are handled by mobile plant, dust suppression using water sprays will be employed where necessary to minimise the potential for diffuse emissions of particulate matter to air. When handling waste materials with the potential to release particulate matter, drop heights will be minimised. Site speed limits are enforced at the site to minimise the potential for resuspension of particulate matter from site surfacing. The concrete site surfacing will be cleaned and dampened with water when necessary to minimise the potential for dust and particulate matter to build up on the site surfacing and comprise a source of particulate matter. Areas of the site in which waste is stored and treated will be regularly cleaned, including the plant used in the waste neutralisation process. Consistent with the tank farm at PC WRP, acids and alkalis will be stored in storage tanks, drums or IBCs. Abatement comprising a wet scrubber will be employed on liquid storage tank vents to abate fugitive emissions of volatile organic compounds, gaseous acidic compounds and gaseous alkaline compounds. This is consistent with the abatement employed for the liquid waste storage tanks associated with the waste neutralisation process already authorised and undertaken by Augean at PC WRP. The tanks, vessels, pumps, valves and pipework will be subject to regular inspections and routine planned preventative maintenance.
BAT 15 and BAT 16 Flaring	As there is no flare associated with or necessary for the waste neutralisation process it is unnecessary to give further consideration to BAT 15 and BAT 16.

BAT Conclusion	Details to confirm that the process comprises BAT
1.4 Noise and vibrations	
BAT 17 Noise and vibration management plan	Under the applicability heading for BAT17 it is stated: "*The applicability is restricted to cases where a noise or vibration nuisance at sensitive receptors is expected and/or has been substantiated".* The waste handling activities to be undertaken in the waste neutralisation process generally are similar to the activities undertaken for the currently permitted waste treatment processes for example loading and unloading of waste using mobile plant, transfer of solid, liquid and sludge wastes between tankers, storage vessels and tanks and mixing vessels. The facilities at ENRMF are an acknowledged part of the nationally significant infrastructure for the management of hazardous waste and are the subject of a Development Consent Order (DCO) which was granted in July 2013 and amended in June 2018. Augean is preparing to submit an application for a new DCO. An assessment of the noise impact of the proposed site wide operations, including the changes proposed at the waste treatment facility has been carried out in support of the application for a DCO. The results of the assessment demonstrate that there will be no significant or unacceptable adverse impacts at noise-sensitive premises in the vicinity as a result of the proposed operations. Current operations at the site do not cause unacceptable levels of noise hence currently the waste treatment facility does not operate to a formal Noise Management Plan. As noise or vibration nuisance at sensitive receptors is not expected it is unnecessary to give further consideration to BAT 17.
BAT 18 Noise and vibration reduction	The waste neutralisation process will employ where relevant, a combination of the techniques specified in BAT 18 to reduce noise and vibration emissions including; BAT18a – locating the equipment and operations distant (500m) from the closest residential receptors, BAT 18b - implementing operational procedures for inspection and maintenance of equipment, employing experienced, trained staff to operate the equipment, by restricting operations to day time hours and by operating of plant and machinery in a noise-sensitive manner.
1.5 Emissions to water	
BAT 19 Water consumption	Water is used at the waste treatment facility to condition wastes, for example APCR, to generate a suitable consistency to facilitate handling. In order to reduce water consumption at the waste treatment facility water regularly is substituted by landfill leachate from the adjacent landfill site. The use of landfill leachate as a substitute for water is authorised under the treatment plant permit.

BAT Conclusion	Details to confirm that the process comprises BAT
	Incoming wastes will be stored in tanks, IBCs, drums, silos, bays or bunkers. The wastes stored in tanks, IBCs, drums and silos will not come into contact with rainwater hence will not generate rainfall run-off. Where incoming waste or the output from the treatment process is stored in bays or bunkers the waste will be stored on a concrete surface with a sealed drainage system to capture rainfall run-off hence minimise the potential for waste at the site to contaminate soil and water. Rainfall run-off will be recycled in the waste treatment process where suitable. The site surfacing, storage tanks and silos, storage areas and drainage system will continue to be subject to periodic inspections to confirm the integrity of the containment.
BAT 20 Waste water treatment	As there are no direct discharges to waste water associated with the waste neutralisation process it is unnecessary to give further consideration to BAT 20.
1.6 Emissions from accidents and incidents	
BAT 21 The prevention and limitation of the environmental consequences of accidents and incidents.	An Accident Management Plan is currently implemented at the site under the site EMS in order to prevent and limit the environmental consequences of accidents and incidents. Security measures are employed at the site to prevent unauthorised entry to the site. Procedures are implemented at the site in respect of containment of spillages. The waste neutralisation process and associated storage area are provided with a concrete surface with a sealed drainage system. The Accident Management Plan includes procedures to record accidents, incidents and the findings of inspections and includes procedures to identify and respond to incidents and accidents.
1.7 Material efficiency	
BAT 22 Material efficiency	BAT is to substitute materials with waste. The description includes the statement *"Waste is used instead of other materials for the treatment of wastes (e.g. waste alkalis or waste acids are used for pH adjustment, fly ashes are used as binders"*. The permit currently authorises a number of recovery activities in which waste is used to substitute other materials, for example APCR waste is used as a lime based reagent to achieve waste stabilisation. The APCR provides an effective alternative to the use of other raw material reagents comprising lime or cement. In addition, leachate from the adjacent landfill or collected rainfall run-off is used as a substitute to the use of mains water for waste conditioning or hydration. The waste neutralisation process substitutes materials with waste including the use of waste alkalis or waste acids for pH adjustment.

BAT Conclusion	Details to confirm that the process comprises BAT
	Consistent with the description presented in BAT 22 it is considered that substitution of materials with waste in the waste neutralisation process comprises BAT.
1.8 Energy efficiency	
BAT 23 Energy efficiency	The plant and equipment specified for use in the waste neutralisation process will be designed and specified to operate in an energy efficient manner. The annual energy consumption will be recorded for the waste neutralisation process in a manner similar to the recording of energy consumption for the currently permitted treatment activities to satisfy the reporting requirements specified in the permit and in order to optimise energy efficiency at the site. As explained in the comments on BAT 22 the waste neutralisation process substitutes materials with waste including the use of alkaline or acidic wastes for pH adjustment. From a broader energy efficiency perspective, the use of waste to substitute raw materials provides a significant saving in energy usage by saving the emissions that would have been generated in extracting, processing and transporting the raw materials which have been substituted by the use of wastes.
1.9 Reuse of packaging	
BAT 24 Residues management plan	BAT is to maximise the reuse of packaging, as part of the residues management plan. Where feasible and safe to do so, packaging (drums, containers, IBCs) are reused for containing waste, when they are in good condition and sufficiently clean, depending on a compatibility check between the substances contained in the materials during consecutive uses. If necessary, packaging is sent for appropriate treatment prior to reuse (e.g. reconditioning, cleaning). If there is an unacceptable risk of contamination of the waste posed by the reuse of packaging then the packaging will not be reused or will be dispatched for rehabilitation off site. Options for reuse will be looked at company wide. Any non-reusable packaging will be managed using waste hierarchy principles.
2. GENERAL BAT CONCLUSIONS FOR THE MECHANICAL TREATMENT OF WASTE	
Not applicable to the waste neutralisation process (BAT 25 – BAT 32)	
3. BAT CONCLUSIONS FOR THE BIOLOGICAL TREATMENT OF WASTE	
Not applicable to the waste neutralisation process (BAT 33 – BAT 39)	

BAT Conclusion	Details to confirm that the process comprises BAT
4. BAT CONCLUSIONS FOR THE PHYSICO-CHEMICAL TREATMENT OF SOLID AND/OR PASTY WASTE	
4.1.1 Overall environmental performance	
BAT 40 Monitor waste input	The example process flow diagram presented at Appendix A of the technical description document provides further details of the steps followed in respect of waste acceptance including the monitoring of waste input. All waste to be potentially accepted at the site, including solid waste, sludges and pasty waste must undergo suitable analysis to determine acceptability under the permit, safety for acceptance, suitability for processing, the nature of the processing necessary and whether the intention is to recover or dispose of the waste. All waste is subject to compliance checking on arrival. Further physical and chemical checking may be undertaken on site to confirm the material is suitable for the intended treatment and subsequent use (if being subject to recovery), to design targeted treatment batches to meet the specifications necessary for acceptance at the recovery facility or disposal facility and optimise process efficiency. Further details in respect of waste acceptance are provided with the comments under BAT 2.
BAT 41	BAT is to apply BAT 14d and where there are channelled emissions to air to use one or a combination of the techniques adsorption, biofilter, fabric filter, wet scrubbing. Details demonstrating how the site activities follow BAT14d are presented above. As there are no channelled emissions to air it is unnecessary to give further consideration to BAT 41.
The remaining aspects in Section 4 comprising re-refining waste oil (4.2 and 4.5), treatment of waste with a calorific value (4.3 and 4.5), the regeneration of spent solvents (4.4 and 4.5), thermal treatment of activated carbon, waste catalysts and contaminated soil (4.6), soil washing (4.7) and decontamination of PCB containing equipment (4.8), BAT 42 – BAT 51 are not applicable to the waste neutralisation process.	

BAT Conclusion	Details to confirm that the process comprises BAT
5. BAT CONCLUSIONS FOR THE TREATMENT OF WATER BASED LIQUID WASTE	
5.1 Overall environmental performance	
BAT 52 Monitor waste input	The example process flow diagram presented at Appendix A to the technical description document provides further details of the steps followed in respect of waste acceptance including the monitoring of waste input. All waste which is being considered for acceptance at the site, including liquid waste and acids and alkalis, must undergo suitable analysis to determine acceptability under the permit, safety for acceptance, suitability for processing, the nature of the processing necessary and whether the waste will be recovered or disposed. All waste is subject to compliance checking on arrival. Further physical and chemical checking may be undertaken on site to confirm the material is suitable for the intended use, to design targeted treatment batches to meet the specifications necessary for acceptance at the recovery facility or disposal facility and optimise process efficiency. Further details in respect of waste acceptance are provided under BAT 2.
5.2 Emissions to air	
BAT 53 Emissions to air	BAT is to apply BAT 14d and where there are channelled emissions to air to use one or a combination of the techniques adsorption, biofilter, thermal oxidation, wet scrubbing. Details demonstrating how the site activities follow BAT14d are presented above. As explained under BAT 8, as there are no channelled emissions to air it is unnecessary to give further consideration to BAT 53. Although there are no channelled emissions to air associated with the storage and treatment of waste liquids, abatement comprising a wet scrubber will be employed on liquid storage tank vents and the vent on the mixing vessel to abate fugitive emissions of volatile organic compounds, gaseous acidic compounds and gaseous alkaline compounds. The liquid scrubbing medium will be specified and selected based on the contents of the storage tank or mixing vessel (eg alkaline scrubber for gaseous acidic compounds, acid scrubber for gaseous alkaline compounds). This is consistent with the abatement employed for the liquid waste storage tanks and mixing vessel for the waste neutralisation process already authorised and undertaken by Augean at the waste treatment facility at PC WRP.

APPENDIX H

ENVIRONMENTAL RISK ASSESSMENT

AN APPLICATION TO VARY ENVIRONMENTAL PERMIT NUMBER EPR/YP3138XB FOR THE WASTE TREATMENT FACILITY OPERATED BY AUGEAN SOUTH LIMITED AT EAST NORTHANTS RESOURCE MANAGEMENT FACILITY

NUISANCE AND AMENITY ENVIRONMENTAL RISK ASSESSMENT (ERA)

Report reference: AU/KCW/AW/5651/01/ERA
May 2021

Technical advisers on environmental issues

Baddesley Colliery Offices, Main Road, Baxterley, Atherstone, Warwickshire, CV9 2LE
Tel. (01827) 717891 Fax. (01827) 718507

CONTENTS

TABLES

FIGURES

1. Introduction

1.1 This document comprises the nuisance and amenity Environmental Risk Assessment (ERA) report which has been prepared in support of the application to vary Environmental Permit number EPR/YP3138XB (the permit) for the waste treatment facility (the site) operated by Augean South Limited (Augean) at East Northants Resource Management Facility (ENRMF). The boundary of the treatment facility permit is shown in green on Figure ERA1. There are no proposals to amend the treatment facility permit boundary as part of the application to vary the permit.

1.2 The following changes are proposed in respect of the treatment facility:

A. Addition of a new process at this site for the neutralisation of hazardous waste and non-hazardous waste.

B. An increase from 150,000 tonnes to 250,000 tonnes for the activity specific overall annual limit for the stabilisation process and for the solidification/stabilisation process.

C. An increase in the maximum quantity of waste to be stored at any one time in the dredging waste temporary storage area (DWTSA) from 5,000m^3 to 12,000m^3.

1.3 An enhanced pre-application advice meeting was held with the Environment Agency on 19 November 2020 to discuss the scope of the main aspects of the variation application. Copies of the correspondence associated with the pre-application advice are presented at Appendix A of the application to vary the permit. This ERA has been prepared with reference to the letter dated 23 November 2020 in which the Environment Agency advised that the following details would be required to support the application to vary the permit:

A. Waste neutralisation activity

   i. An environmental risk assessment which should follow the methodology set out in 'Risk assessments for your environmental permit'

B. Proposed increase in annual throughput to the stabilisation activity and solidification/stabilisation activity

   i. A worst case tonnage risk assessment for each activity

ii. An assessment of the impact on emissions

iii. A storage capacity assessment

iv. A processing capacity assessment

The ERA has been prepared in support of the application based on the risk screening matrix provided in Table ERA 1 and is presented in Table ERA 2. The ERA is relevant to the new activity comprising waste neutralisation, the increase in annual throughput to the stabilisation activity and solidification/stabilisation activity and the proposals to increase the maximum volume of waste that may be stored in the DWTSA. Table ERA 2 addresses the requirements of Ai, Bi and Bii above. The storage (Biii) and processing (Biv) capacity assessment for the increased throughput for the stabilisation activity and solidification/stabilisation activity are presented in Section 2 of this report.

1.4 In the ERA consideration is given to potential receptors and pathways for impacts based on an understanding of the environment surrounding the site. The assessment of the risks associated with the operation of the site is based on a knowledge of the current site operations which have been undertaken for over 10 years, the information on the operation of the site described in the application to vary the permit and the accompanying technical reports and the general principles of Environment Agency guidance “Risk assessments for your environmental permit” first published on the GOV.UK website on 1 February 2016 and last updated on 25 March 2021.

1.5 This risk assessment takes into consideration receptors within 500m of the waste treatment facility and statutory designated nature and heritage conservation sites within 2km of the waste treatment facility. The receptors located within 500m of the waste treatment facility are shown on Figure ERA 1. The statutory designated nature and heritage conservation sites within 2km of the waste treatment facility are shown on Figure ERA 2.

1.6 The waste treatment area is located in the northern part of the treatment facility permit boundary within the footprint of the hazardous waste landfill site operated by Augean under Environmental Permit number EPR/TP3430GW. A separate application to vary Environmental Permit number EPR/TP3430GW to increase the area of the existing permitted landfill site was submitted to the Environment Agency on 7 May 2021. The proposed increased boundary of Environmental Permit number EPR/TP3430GW is

shown in blue on Figure ERA 1 for reference. As shown on Figure ERA 1 the waste treatment facility is surrounded to the east, south and west by the existing and proposed landfill permit boundary. The site setting is generally rural with the majority of the land surrounding the treatment site comprising open farmland or woodland. The closest properties to the waste treatment facility are the properties at Westhay Cottages located approximately 500m to the east of the waste treatment facility. Westhay Farm is located approximately 500m east of the waste treatment facility.

1.7 Based on the information available on the DEFRA MAGIC website[1] there are no National Parks, Areas of Outstanding National Beauty, Special Areas of Conservation, Special Protected Areas, Ramsar Sites or Marine Conservation Zones within 5km of the waste treatment facility.

1.8 To the west of the waste treatment facility lies woodland known as Fineshade Wood part of which is known as The Assarts and which is a Local Wildlife Site (Figure ERA 1 and Figure ERA 2). Collyweston Great Wood is located to the north of the waste treatment facility as shown on Figure ERA 1 and Figure ERA 2. To the north east of the waste treatment facility, beyond Collyweston Great Wood and east of Stamford Road is an area of woodland known as Easton Hornstocks. Parts of the Collyweston Great Wood and Easton Hornstocks comprise a Site of Special Scientific Interest (SSSI) and a National Nature Reserve. Collyweston Quarry Local Geological Site is located approximately 800m north west of the waste treatment facility at its closest point.

1.9 There are no listed buildings or scheduled monuments within 500m of the waste treatment facility.

1.10 The Public Rights of Way (PRoW) in the vicinity of the site are shown on Figure ERA 1. No PRoW cross the waste treatment facility or are located within 300m of the waste treatment facility. The closest right of way is Footpath MX15 which is approximately 375m to the west of the boundary of the waste treatment facility at its closest point. Footpath MX15 runs in a north westerly and south westerly direction through The Assarts woodland (part of Fineshade Wood) and connects into the wider PRoW network.

[1] Reviewed on 4 May 2021.

1.11 The runway at RAF Wittering (Figure ERA 2), which comprises an operational training airfield, is located approximately 2.3km to the north east of the waste treatment facility.

1.12 A wind rose for the period 2000 to 2019 prepared by ADM Limited based on data from the Meteorological Office located at RAF Wittering Airfield is presented on Figure ERA 1. The wind rose shows that the prevailing wind is from the west or west south west.

Accidents

1.13 Environment Agency guidance 'Risk assessments for your environmental permit' identifies that the risk assessment must take into consideration the risk of accidents at the site, for example spillages during the transfer of substances, overfilling of vessels, plant or equipment failure, inadequate bunding etc. A technical description of the proposed waste neutralisation process and a Best Available Techniques review are presented in the reports at Appendix F and Appendix G respectively of the application report. The proposed waste neutralisation process for the ENRMF treatment facility is already authorised and operated by Augean at their waste treatment facility at Port Clarence Waste Recovery Park in Teesside (PC WRP[2]). The proposed waste neutralisation process at ENRMF will be consistent with the process currently operated by Augean at PC WRP. The planning and construction of the treatment facility at PC WRP was the subject of a HAZOP (Hazard and Operability) study to identify potential hazards, to investigate the potential for and consequences of accidents and to inform the design and layout of the plant. The HAZOP includes investigation of failure modes including uncontrolled releases (spills) and overfilling or overheating of storage tanks. The HAZOP study reviews in detail the construction materials of the various tanks, pipework and vessels specified to contain the substances to be handled in the process. A similar HAZOP study will be undertaken in respect of the proposals for the storage tanks and treatment infrastructure at ENRMF relevant to the waste neutralisation process.

[2] Augean Treatment Limited Environmental Permit Number EPR/YP3234XR/V007 for PC WRP, Stockton on Tees. Activity reference AR4 and AR38.

2. Storage and processing capacity assessment for the stabilisation activity and solidification/stabilisation activity

2.1 Table S1.1 of the permit specifies the following activities relevant to the stabilisation and solidification/stabilisation of waste:

Activity Ref	Description
AR2	Stabilisation process for **hazardous** waste **disposal**
AR4	Stabilisation process for **non-hazardous** waste **disposal**
AR3	Solidification/Stabilisation process for **hazardous** waste **recovery**
AR17	Solidification/Stabilisation of **non-hazardous** waste for **recovery**

2.2 Although these processes comprise separate listed activities[3] in the permit the treatment processes for stabilisation and solidification/stabilisation essentially are the same and the associated plant and infrastructure is the same. The distinction in the permit relates to the input waste types (hazardous or non hazardous) and the fate of the output from the treatment process (recovery or disposal). The reaction components comprise a binder (for example APCR), a granular material (for example dredgings, soil) and a liquid (for example water, landfill leachate) to catalyse the binder. The materials are stored in silos, tanks and bunkers depending on the consistency of the materials and are processed in mixing vessels. The objective of the treatment process is to minimise the rate of contaminant migration to the environment thus to stabilise the waste, to reduce the level of toxicity of contaminants and/or to solidify the waste, in order to alter or improve the characteristics of the waste so that it can be recovered at a suitably authorised facility or disposed of in a landfill site. Irrespective of whether the receiving facility will recover or dispose of the output from the waste treatment process, the receiving facility will have in place a specification for the acceptability of the material. For example, for disposal at a hazardous waste landfill site the specification will comprise the hazardous waste acceptance criteria (WAC)[4] and for recovery the receiving facility will have a specification which may for example require the waste to be classified as non-hazardous and may require certain total or leachable metal concentrations to be below certain thresholds. The specification will be specific to each disposal or recovery activity.

[3] AR17 is a waste operation.
[4] Or other site specific WAC specified in the permit for the landfill site

2.3 The permit currently specifies in Table S2.3 a limit of 150,000 tonnes per year for the stabilisation activity (AR2 and AR4), specifies in Table S2.8 a limit of 150,000 tonnes per year for the solidification/stabilisation activity for hazardous waste (AR3) and specifies in Table S2.9 a limit of 150,000 tonnes per year for the solidification/stabilisation activity for non-hazardous waste (AR17).

2.4 It is proposed that a total annual limit of 250,000 tonnes is specified across activity references AR2, AR3, AR4 and AR17 and that the 250,000 tonne limit will be applicable individually to any of the four activities AR2, AR3, AR4, AR17. Application of an activity specific limit will provide flexibility for the operator depending on the nature and suitability of the input materials and the availability of the recovery and disposal outlets.

2.5 In order to conduct a storage and processing capacity assessment it is necessary to compare the currently permitted tonnage and the proposed tonnage. The current activity specific limit for each of the activity references is 150,000 tonnes per year.

2.6 Treatment of 150,000 tonnes of waste per year corresponds to approximately 2,885 tonnes per week. Treatment of 250,000 tonnes of waste per year corresponds to approximately 4,800 tonnes per week.

2.7 Based on a 5 day working week and a ten hour working shift, a weekly throughput of 4,800 tonnes corresponds to a processing throughput of approximately 96 tonnes per hour. Based on the experience of operating the stabilisation process for over ten years at the site a processing throughput of 96 tonnes per hour is a reasonable assumption

2.8 As described above the reaction components typically comprise a binder, a granular material and a liquid. Binders typically are stored in silos or in bulk bags, granular material typically is stored in bays or bunkers and liquid, including leachate pumped from the adjacent landfill site, is stored in storage tanks. Although the quantity of liquid necessary to activate the binder will vary depending on the nature and moisture content of the binder a typical ratio of liquid to binder for the purpose of this storage capacity assessment is 3 binder: 1 liquid. Although the ratio of activated binder to granular material depends on the consistency of the granular material (e.g. whether it is a dry filter cake or a wet dredged silt material) a typical ratio of activated binder to granular material for the purpose of this storage and processing capacity

assessment is 2 activated binder: 1 granular material. The overall composition of the reaction mixture could therefore be 50% binder, 33% granular material and 17% liquid. A breakdown of the components used in the treatment process is presented in the table below for the purpose of comparison of the storage requirements at the current and proposed throughput based on the assumption that it will be necessary to hold sufficient feedstock for two days of continuous processing.

Annual throughput	Two day throughput	Typical storage requirement for two days of processing[5] (tonnes)		
tonnes	tonnes	Binder	Granular material	Liquid
150,000	822	411	271	140
250,000	1,370	685	452	233

2.9 Based on the estimated tonnages presented in the table above there will be sufficient storage capacity in the silos, bays, bunkers and storage tanks at the site to accommodate the increase in annual throughput from 150,000 tonnes to 250,000 tonnes.

2.10 The tonnages specified in the table above have been estimated based on typical components in the reaction mixture and based on a typical mixture composition. For the purpose of the permit, the calculated tonnages are provided for reference and do not comprise storage limits.

2.11 Based on the information presented in Section 2 of this report it is considered that the storage capacity and treatment capacity at ENRMF waste treatment facility is sufficient to accommodate an increase in annual throughput from 150,000 tonnes to 250,000 tonnes for the stabilisation activity and solidification/stabilisation activity. An assessment of the risks associated with the increase in throughput including those associated with storage is presented in Table ERA 2.

[5] Based on the typical reaction mixture described in paragraph 2.8.

3. Conclusion

3.1 The ERA that has been completed to support the application demonstrates that the proposed changes to the waste treatment facility comprising the addition of a new process for the neutralisation of waste, an increase in the activity specific annual limit for the stabilisation process and for the solidification/stabilisation process and an increase in the maximum volume of waste that may be stored in the DWTSA has a low or very low risk of adverse impact on the surrounding environment including sites of heritage or nature conservation interest.

3.2 The storage and processing capacity assessment for the stabilisation activity and solidification/stabilisation activity demonstrates that there is sufficient storage capacity and treatment capacity at the site to accommodate the activity specific increase in throughput from 150,000 tonnes per annum to 250,000 tonnes per annum.

Table ERA 1 Risk screening matrix (waste treatment installation)

RISK TYPE	ODOUR		NOISE AND VIBRATION		FUGITIVE EMISSIONS								
					PARTICULATE MATTER				LITTER		BIRDS, VERMIN AND INSECTS		MUD ON THE ROAD
GENERIC HAZARDS / GENERIC RECEPTORS[1]	Waste storage and treatment	Waste delivery	Waste delivery	Waste storage and treatment	Waste delivery	Waste storage and treatment	Restored surfaces	Access routes	Waste delivery	Waste storage and treatment	Waste delivery	Waste storage and treatment	Vehicle Movements
DOMESTIC DWELLING													
SCHOOLS AND COLLEGES													
HOSPITALS													
OFFICES/COMMERCIALPREMISES	x	x	x	x	x	x	x	x					
INDUSTRIAL PREMISES	x	x	x	x	x	x	x	x					
PUBLIC FOOTPATH OR BRIDLEWAY	x	x	x	x	x	x	x	x					
HIGHWAYS OR ROADS													x
PARKS AND PUBLIC OPEN SPACES	x	x	x	x	x	x	x	x					
FARMLAND WITH LIVESTOCK													
FARMLAND ARABLE			x	x	x	x	x	x					
PRIORITY HABITAT			x	x	x	x	x	x					
NATURE SITE OF LOCAL IMPORTANCE (e.g. LNR, LWS,)			x	x	x	x	x	x					

Table ERA 1 Risk screening matrix (waste treatment installation)

RISK TYPE	ODOUR		NOISE AND VIBRATION		FUGITIVE EMISSIONS								
					PARTICULATE MATTER				LITTER		BIRDS, VERMIN AND INSECTS		MUD ON THE ROAD
GENERIC HAZARDS / GENERIC RECEPTORS[1]	Waste storage and treatment	Waste delivery	Waste delivery	Waste storage and treatment	Waste delivery	Waste storage and treatment	Restored surfaces	Access routes	Waste delivery	Waste storage and treatment	Waste delivery	Waste storage and treatment	Vehicle Movements
SITE OF SPECIAL SCIENTIFIC INTEREST (within 2km)			x	x	x	x	x	x					
SPECIAL AREA OF CONSERVATION (within 2km)													
SPECIAL PROTECTION AREA (within 2km)													
LISTED BUILDINGS (within 500m)													
SCHEDULED MONUMENT (within 500m)													
AIRPORT													
RAILWAY													
SURFACE WATER					x	x	x	x					

x = generic receptor type present and generic hazard considered as part of this assessment

[1] All generic receptors within 500m of the waste treatment facility have been identified unless an alternative distance has been identified

Table ERA 2 Assessment of nuisance and amenity risks associated with the waste neutralisation process and the increase in annual throughput to the stabilisation activity and solidification/stabilisation activity at ENRMF treatment facility

What do you do that can harm and what could be harmed			Assessing the risk			Managing the risk	
Hazard	Receptor (see Figures ERA 1 & ERA2)	Pathway	Probability of exposure	Consequence	What is the overall risk	Risk management	What is the residual risk
What has the potential to cause harm	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	How likely is this contact?	What is the harm that can be caused?	What is the risk? The balance of probability and consequence	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	What is the risk that still remains?
Odorous wastes received, stored and processed at the site	Local human population	Air	Low	Nuisance, loss of amenity	Low	The closest residential receptors to the waste treatment facility (WTF) are approximately 500m from the permit boundary. As the wastes which are received at the site for processing in the Waste Neutralisation Process (WNP) contain minimal quantities of putrescible material it is unlikely that significant odorous emissions will be generated by the biodegradation of organic matter in these wastes. Acid and alkali liquid wastes are stored in enclosed storage tanks and/or containers, APCR and other solid wastes are not inherently odorous and are stored in silos or bags and filter cakes/dredgings/soil type wastes destined for the WNP are stored in bunkers or bays or in the DWTSA. Wastes are typically stored for a short time only. The WNP is undertaken in an enclosed vessel. The outputs from the treatment process are stored in bunkers or bays. The tanks, vessels, pumps, valves and pipework associated with the WNP will be subject to regular inspections and routine planned preventative maintenance to minimise the potential for leaks or fugitive emissions which may give rise to odour.	Very low

Table ERA 2 Assessment of nuisance and amenity risks associated with the waste neutralisation process and the increase in annual throughput to the stabilisation activity and solidification/stabilisation activity at ENRMF treatment facility

What do you do that can harm and what could be harmed			Assessing the risk			Managing the risk	
Hazard	Receptor (see Figures ERA 1 & ERA2)	Pathway	Probability of exposure	Consequence	What is the overall risk	Risk management	What is the residual risk
What has the potential to cause harm	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	How likely is this contact?	What is the harm that can be caused?	What is the risk? The balance of probability and consequence	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	What is the risk that still remains?
						Abatement comprising a wet scrubber will be employed on the vents of liquid storage tanks used for the storage of acid wastes and alkali wastes to abate fugitive emissions which may have the potential to release odorous emissions. Sprays are installed along the northern boundary and part of the eastern boundary. The sprays have the potential to be employed for odour suppression as well as to minimise dust emissions if necessary. There are no proposals to change the range of waste types authorised to be treated in the Waste Stabilisation Process (WSP) or the Waste Solidification/Stabilisation Process (WSSP). The changes are limited to an increase in the annual waste throughput limit from 150,000 to 250,000 tonnes and an increase in the volume of waste that may be stored in the DWTSA. As the solid wastes which are received at the site for processing in the WSP and WSSP contain minimal quantities of putrescible material it is unlikely that significant odorous emissions will be generated by the biodegradation of organic matter in these wastes. The wastes which are treated are not inherently odorous.	

Table ERA 2 Assessment of nuisance and amenity risks associated with the waste neutralisation process and the increase in annual throughput to the stabilisation activity and solidification/stabilisation activity at ENRMF treatment facility

What do you do that can harm and what could be harmed			Assessing the risk			Managing the risk	
Hazard	Receptor (see Figures ERA 1 & ERA2)	Pathway	Probability of exposure	Consequence	What is the overall risk	Risk management	What is the residual risk
What has the potential to cause harm	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	How likely is this contact?	What is the harm that can be caused?	What is the risk? The balance of probability and consequence	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	What is the risk that still remains?
						An Odour Management Plan (OMP) is implemented currently at ENRMF including the landfill site. The OMP includes a protocol for odour monitoring by sniff testing and a protocol for investigating and responding to odour complaints. Augean implement an odour assessment as part of their pre-acceptance waste checks and waste with significant odour potential will not be accepted for delivery to the site. Based on the proposed continuation of the current controls implemented at the site, and based on the nature of the current and proposed wastes accepted at the site it is considered that there will be no significant impacts associated with odour generated as a result of the proposed changes.	
Mobile plant, static plant and vehicles including waste delivery and treatment	Local human population	Air	Low	Nuisance from noise	Low	The closest residential receptors to the WTF are approximately 500m from the permit boundary. The waste handling activities to be undertaken in the WNP generally are similar to the activities undertaken for the currently permitted waste treatment processes for example loading and unloading of waste using mobile plant, transfer of solid, liquid and	Very Low

Table ERA 2 Assessment of nuisance and amenity risks associated with the waste neutralisation process and the increase in annual throughput to the stabilisation activity and solidification/stabilisation activity at ENRMF treatment facility

What do you do that can harm and what could be harmed			Assessing the risk			Managing the risk	
Hazard	Receptor (see Figures ERA 1 & ERA2)	Pathway	Probability of exposure	Consequence	What is the overall risk	Risk management	What is the residual risk
What has the potential to cause harm	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	How likely is this contact?	What is the harm that can be caused?	What is the risk? The balance of probability and consequence	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	What is the risk that still remains?
						sludge wastes between tankers, storage vessels and tanks and mixing vessels. Although the application to vary the permit includes an increase in the maximum quantity of waste that may be handled for each of the individual waste treatment processes there will be no increase in the overall waste throughput across all waste treatment activities. The current waste treatment processes have been undertaken at the site for many years and during this time there have been no noise complaints received in respect of the ENRMF treatment facility. An assessment of the noise impact of the proposed operations, including the changes proposed at the WTF has been carried out in support of the application for a Development Consent Order (DCO). The results of the assessment demonstrate that there will be no significant or unacceptable adverse impacts at noise-sensitive premises in the vicinity as a result of the proposed operations. The following noise and vibration control measures will continue to be implemented at	

Table ERA 2 Assessment of nuisance and amenity risks associated with the waste neutralisation process and the increase in annual throughput to the stabilisation activity and solidification/stabilisation activity at ENRMF treatment facility

What do you do that can harm and what could be harmed			Assessing the risk			Managing the risk	
Hazard	Receptor (see Figures ERA 1 & ERA2)	Pathway	Probability of exposure	Consequence	What is the overall risk	Risk management	What is the residual risk
What has the potential to cause harm	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	How likely is this contact?	What is the harm that can be caused?	What is the risk? The balance of probability and consequence	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	What is the risk that still remains?
						the site to minimise any potential noise impacts: • The permitted operating hours of the site are strictly adhered to and effectively communicated to all site staff and subcontractors • Plant and machinery are regularly well maintained, serviced in accordance with manufacturers' instructions and where appropriate fitted with exhaust silencers • New site based vehicles will be equipped with white sound reversing alarms and strobe lights • The site surfacing in the WTF is maintained to minimise the potential for defects such as pot-holes • Unnecessary horn usage and revving of engines is avoided • Equipment is switched off or throttled-down when not required • Drop heights of materials are minimised where possible • Plant and vehicles are started up sequentially rather than all together. Based on the proposed continuation of the current controls implemented at the site and	

Table ERA 2 Assessment of nuisance and amenity risks associated with the waste neutralisation process and the increase in annual throughput to the stabilisation activity and solidification/stabilisation activity at ENRMF treatment facility

What do you do that can harm and what could be harmed			Assessing the risk			Managing the risk	
Hazard	Receptor (see Figures ERA 1 & ERA2)	Pathway	Probability of exposure	Consequence	What is the overall risk	Risk management	What is the residual risk
What has the potential to cause harm	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	How likely is this contact?	What is the harm that can be caused?	What is the risk? The balance of probability and consequence	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	What is the risk that still remains?
						based on the similarity of the proposed activities to those currently permitted it is considered that there will be no significant impacts associated with noise generated as a result of the proposed changes.	
Particulates, waste delivery, storage and treatment	Local human population / properties / farmland arable / public highway / water bodies	Air	Low	Deposition of particulate matter	Low	The closest residential receptors to the WTF are approximately 500m from the permit boundary. A dust management and monitoring plan is implemented through the site management system and will be updated to include the proposed changes. The solid waste types that will be handled in the WNP are similar in nature to the waste types currently authorised to be accepted for treatment at the WTF. Storage of solid wastes, including APCR which is already authorised to be handled at the site for use in the stabilisation process, will be consistent with the storage arrangements currently employed at the site including (depending on the nature of the material) storage in silos, bays or bunkers or in the DWTSA. Silos are fitted with bag filters as part of the silo protection system. The bag filters are designed to capture particulate matter during	Low

Table ERA 2 Assessment of nuisance and amenity risks associated with the waste neutralisation process and the increase in annual throughput to the stabilisation activity and solidification/stabilisation activity at ENRMF treatment facility

What do you do that can harm and what could be harmed			Assessing the risk			Managing the risk	
Hazard	Receptor (see Figures ERA 1 & ERA2)	Pathway	Probability of exposure	Consequence	What is the overall risk	Risk management	What is the residual risk
What has the potential to cause harm	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	How likely is this contact?	What is the harm that can be caused?	What is the risk? The balance of probability and consequence	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	What is the risk that still remains?
						the discharge process and prevent pressure build up in the silo. The bays and bunkers will provide a wind barrier to diffuse emissions. Wastes stored in the DWTSA generally are wet or damp hence are not considered a potential source of particulate matter emissions. Waste materials with the potential to release particulate matter during transfer to the neutralisation vessel will be transferred via an enclosed screw conveyor to minimise the potential for diffuse emissions of particulate matter to air. Where waste materials are stored in bays and bunkers and where waste materials are handled by mobile plant, dust suppression using water sprays will be employed where necessary to minimise the potential for diffuse emissions of particulate matter to air. When handling waste materials with the potential to release particulate matter, drop heights will be minimised. Site speed limits are enforced at the site to minimise the potential for resuspension of particulate matter from site surfacing. The concrete site surfacing will be cleaned and dampened with water when necessary to minimise the potential for dust and particulate matter to build up on the site surfacing and comprise a source of	

Table ERA 2 Assessment of nuisance and amenity risks associated with the waste neutralisation process and the increase in annual throughput to the stabilisation activity and solidification/stabilisation activity at ENRMF treatment facility

What do you do that can harm and what could be harmed			Assessing the risk			Managing the risk	
Hazard	Receptor (see Figures ERA 1 & ERA2)	Pathway	Probability of exposure	Consequence	What is the overall risk	Risk management	What is the residual risk
What has the potential to cause harm	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	How likely is this contact?	What is the harm that can be caused?	What is the risk? The balance of probability and consequence	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	What is the risk that still remains?
						particulate matter. Areas of the site in which waste is stored and treated will be regularly cleaned, including the plant used in the WNP. The tanks, vessels, pumps, valves and pipework will be subject to regular inspections and routine planned preventative maintenance. Based on the proposed continuation of the current controls implemented at the site, and based on the similarity of the proposed activities to those currently permitted it is considered that there will be no significant impacts associated with particulate matter emissions generated as a result of the proposed changes.	
Litter [Screened out in Table ERA 1]	Local human population and animal habitats	Air transport and deposition	Very low	Nuisance, loss of amenity and harm to animal health	Very low	Consistent with the waste types received currently at the WTF the waste types to be accepted for the WNP will not generate significant quantities of litter. Waste types such as paper, plastic and cardboard are not and will not be accepted.	Negligible

Table ERA 2 Assessment of nuisance and amenity risks associated with the waste neutralisation process and the increase in annual throughput to the stabilisation activity and solidification/stabilisation activity at ENRMF treatment facility

What do you do that can harm and what could be harmed			Assessing the risk			Managing the risk	
Hazard	Receptor (see Figures ERA 1 & ERA2)	Pathway	Probability of exposure	Consequence	What is the overall risk	Risk management	What is the residual risk
What has the potential to cause harm	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	How likely is this contact?	What is the harm that can be caused?	What is the risk? The balance of probability and consequence	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	What is the risk that still remains?
Birds, vermin and insects. [Screened out in Table ERA 1]	Local human population	Air transport and over land	Low	Harm to human health. Nuisance, loss of amenity.	Low	Consistent with the waste types received currently at the WTF the waste types to be accepted for the WNP are not considered to be attractive to gulls and corvids.	Very low
Mud and debris deposited on the public highway	Public highway	Vehicle movements	Low	Mud on the public highway	Low	Access to the WTF will continue to be via the existing access to the wider ENRMF site from Stamford Road. The wheel cleaning facilities will continue to be used for all HGVs visiting the site before leaving the site onto the public highway. The access road from the wheel wash to the highway is hard surfaced which minimises the potential for mud and debris to be tracked onto the road network. Drainage to be installed across the site access will minimise the potential for silt laden runoff to run onto the highway. The access road will be cleaned regularly by a road sweeper and maintained in good condition and the surface of Stamford Road will continue to be cleaned regularly using a road sweeper. Based on the wheel cleaning facilities and the proposed cleaning and maintenance regime the risk of nuisance associated with mud and debris on the local road network is low.	Low

Table ERA 2 Assessment of nuisance and amenity risks associated with the waste neutralisation process and the increase in annual throughput to the stabilisation activity and solidification/stabilisation activity at ENRMF treatment facility

What do you do that can harm and what could be harmed			Assessing the risk			Managing the risk	
Hazard	Receptor (see Figures ERA 1 & ERA2)	Pathway	Probability of exposure	Consequence	What is the overall risk	Risk management	What is the residual risk
What has the potential to cause harm	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	How likely is this contact?	What is the harm that can be caused?	What is the risk? The balance of probability and consequence	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	What is the risk that still remains?
ACCIDENTS – based on the examples presented in Risk assessments for your environmental permit - GOV.UK (www.gov.uk)							
Spillages whilst transferring substances, for example loading or unloading vessels Overfilling vessels Plant or equipment failure Spillage of waste from the DWTSA	Water resources	Run off or infiltration to ground	Medium	Contamination of water resources	Medium	The WNP which is proposed to be operated at ENRMF treatment facility is already authorised and undertaken by Augean at its waste treatment facility at PC WRP[6]. The proposed WNP at ENRMF will be consistent with the process currently undertaken by Augean at PC WRP. The design and construction of the treatment facility at PC WRP was the subject of a HAZOP (Hazard and Operability) study to identify potential hazards, to investigate the potential for and consequences of accidents and inform the design and layout of the plant. The HAZOP includes investigation of failure modes including uncontrolled releases (spills), overfilling or overheating of storage tanks and reviews in detail the materials of construction of the various tanks, pipework and vessels specified to contain the substances to be handled in the process. A similar HAZOP study will be undertaken in respect of the proposals for construction of	Low

[6] Augean Treatment Limited Environmental Permit Number EPR/YP3234XR/V007 for PC WRP, Stockton on Tees. Activity reference AR4 and AR38.

Table ERA 2 Assessment of nuisance and amenity risks associated with the waste neutralisation process and the increase in annual throughput to the stabilisation activity and solidification/stabilisation activity at ENRMF treatment facility

What do you do that can harm and what could be harmed			Assessing the risk			Managing the risk	
Hazard	Receptor (see Figures ERA 1 & ERA2)	Pathway	Probability of exposure	Consequence	What is the overall risk	Risk management	What is the residual risk
What has the potential to cause harm	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	How likely is this contact?	What is the harm that can be caused?	What is the risk? The balance of probability and consequence	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	What is the risk that still remains?
						the storage tank and treatment infrastructure at ENRMF relevant to the WNP. Storage and treatment vessels will be provided with instrumentation connected to alarms and trips to provide overfill protection. Consistent with the tank storage at PC WRP, acids and alkalis will be stored in storage tanks, drums or IBCs constructed from materials which are compatible with and resistant to the stored liquids. The storage tanks will be bunded to provide secondary containment with sufficient capacity to contain 110% of the content of the tanks and the WTF site surfacing comprises a concrete surface with sealed drainage to provide tertiary containment. The current DWTSA was constructed to a design and specification approved by the Environment Agency which includes a number of engineering control measures to minimise the potential for release of waste or contaminants including a lining system and a perimeter bund constructed around the DWTSA. The construction of the extension to the DWTSA, including the engineering control	

Table ERA 2 Assessment of nuisance and amenity risks associated with the waste neutralisation process and the increase in annual throughput to the stabilisation activity and solidification/stabilisation activity at ENRMF treatment facility

What do you do that can harm and what could be harmed			Assessing the risk			Managing the risk	
Hazard	Receptor (see Figures ERA 1 & ERA2)	Pathway	Probability of exposure	Consequence	What is the overall risk	Risk management	What is the residual risk
What has the potential to cause harm	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	How likely is this contact?	What is the harm that can be caused?	What is the risk? The balance of probability and consequence	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	What is the risk that still remains?
						measures will be consistent with the current DWTSA. Full details of the construction of the extension of the DWTSA will be the subject of Construction Quality Assurance (CQA). An Accident Management Plan (AMP) is implemented currently at the site under the site EMS in order to prevent and limit the environmental consequences of accidents and incidents. Procedures are implemented at the site in respect of containment of spillages. The WNP and associated storage area are provided with a concrete surface with a sealed drainage system. The AMP includes procedures to record accidents, incidents and the findings of inspections and includes procedures to identify and respond to incidents and accidents. The AMP will be updated to incorporate the findings of the HAZOP study.	
Waste stored on site	Local human population gaining unauthorised access to the site	Direct physical contact	Low	Bodily injury	Low	Security measures are in place at the site to minimise the potential for unauthorised access including either a 1.8m high fence or a thorny hedge around the entire site boundary for the wider ENRMF site.	Very low
Flooding	Water resources	Run off or infiltration to ground	Low	Accumulation of debris and or contamination of	Low	The wider site including the WTF is located in Flood Zone 1 which is defined as land having	Low

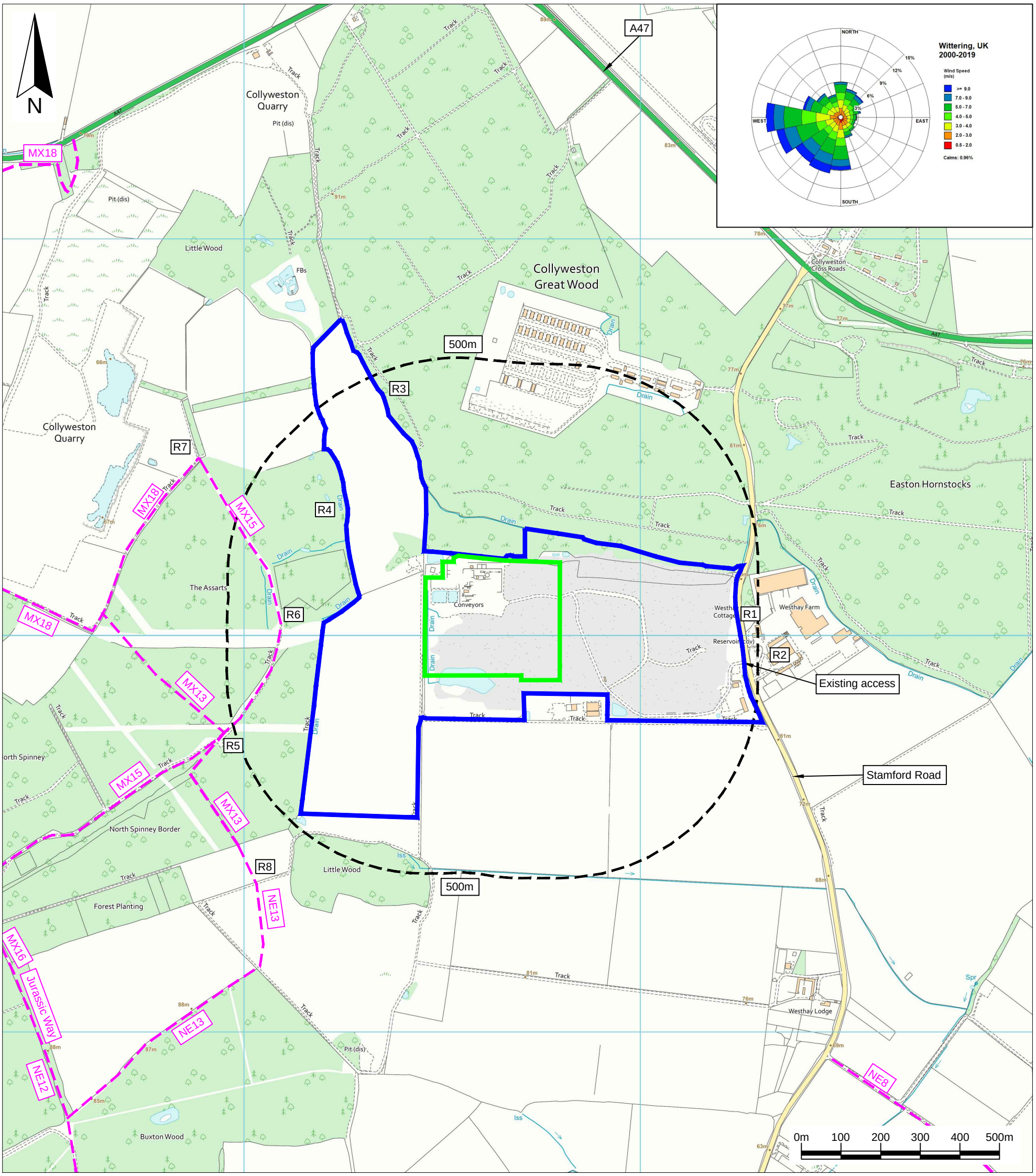
Table ERA 2 Assessment of nuisance and amenity risks associated with the waste neutralisation process and the increase in annual throughput to the stabilisation activity and solidification/stabilisation activity at ENRMF treatment facility

What do you do that can harm and what could be harmed			Assessing the risk			Managing the risk	
Hazard	Receptor (see Figures ERA 1 & ERA2)	Pathway	Probability of exposure	Consequence	What is the overall risk	Risk management	What is the residual risk
What has the potential to cause harm	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	How likely is this contact?	What is the harm that can be caused?	What is the risk? The balance of probability and consequence	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	What is the risk that still remains?
				roads, buildings, gardens or natural habitats downstream		less than a 1 in 1,000 annual probability of river or sea flooding. The WNP and associated storage area are provided with a concrete surface with a sealed drainage system.	
Accidental release of fuel	Water resources	Infiltration to ground	Medium	Contamination of water resources	Medium	All tanks used to store oil or diesel are double skinned or bunded and subject to a planned preventative maintenance programme. All associated pipework and valves are contained in the outer skin or bund. The volume of liquid in storage tanks is inspected regularly and recorded with the remaining capacity calculated and identified to relevant personnel to prevent overfilling. Procedures are implemented at the site for storage of fuel and liquids at the site and procedures are implemented for the refuelling of vehicles. Spillage kits are available and site personnel are trained in their use.	Low

Table ERA 2 Assessment of nuisance and amenity risks associated with the waste neutralisation process and the increase in annual throughput to the stabilisation activity and solidification/stabilisation activity at ENRMF treatment facility

What do you do that can harm and what could be harmed			Assessing the risk			Managing the risk	
Hazard	Receptor (see Figures ERA 1 & ERA2)	Pathway	Probability of exposure	Consequence	What is the overall risk	Risk management	What is the residual risk
What has the potential to cause harm	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	How likely is this contact?	What is the harm that can be caused?	What is the risk? The balance of probability and consequence	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	What is the risk that still remains?
NATURE CONSERVATION AND HERITAGE SITES							
Waste operations may cause harm to and deterioration of nature conservation sites.	Protected sites - European sites and SSSIs Wildlife sites of regional or local importance and protected habitat	Air or run off	Medium	Harm to protected site through toxic contamination, nutrient enrichment, smothering, disturbance, predation, noise.	Low	Extensive surveys have been carried out to establish the nature of the ecological environment at and around the site in support of the DCO application proposed to be submitted in July 2021 for the proposed changes to the activities at ENRMF. An assessment of the potential ecological impacts which may be associated with the proposed development including the proposed changes at the WTF has been undertaken. The assessment outlines the potential impacts and summarises the proposed avoidance, reduction and mitigation measures to help minimise these potential effects. Implementation of these measures together with the measures described in the other relevant sections of this ERA will be protective also of the nature conservation sites.	Low
Waste operations may cause harm to and deterioration of heritage conservation sites.	Designated heritage sites – Scheduled Monuments and Listed Buildings	Direct physical contact	Very low	Movement of vehicles and the deposition of particulate matter	Very low	There are no heritage conservation sites within 500m of the WTF. It is considered that due to the distance between the site and local heritage conservation sites there is a negligible risk of the site operations having a negative impact on heritage conservation sites.	Negligible

FIGURES



Key / Notes

- Approximate boundary of Environmental Permit number EPR/YP3138XB
- Proposed boundary of Environmental Permit EPR/TP3430GW/V006
- Approximately 500m distance from the Environmental Permit boundary
- Public rights of way
- R1 Receptor

Reference	Name or description	Type of receptor
R1	Properties at Westhay Cottages	Domestic dwellings
R2	Westhay Farm	Domestic dwellings
R3	Collyweston Great Wood and Easton Hornstocks NNR and SSSI	Sensitive habitat
R4	Fineshade Woods Local Wildlife Site	Sensitive habitat
R5	Footpath MX13	Leisure
R6	Footpath MX15	Leisure
R7	Footpath MX18	Leisure
R8	Footpath NE13	Leisure

Note:
Public rights of way taken from the Northamptonshire County Council Interactive Mapping http://maps.northamptonshire.gov.uk

Rev	Status	Drn	App	Chk	Date
	Final	KR	AW	LH	14/05/21

Site: EAST NORTHANTS RESOURCE MANAGEMENT FACILITY

Client: Augean South Ltd

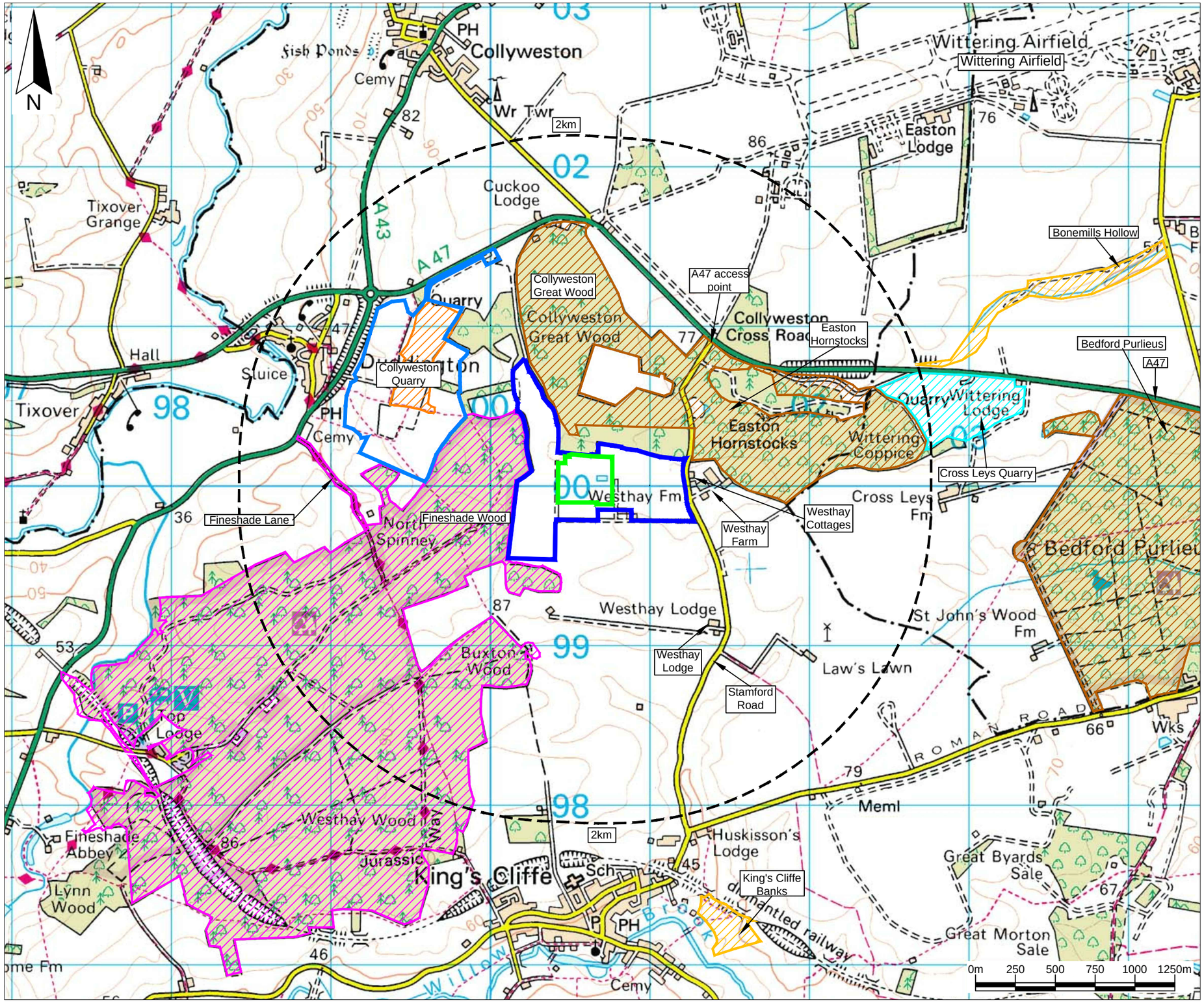
Title: Environmental site setting

Figure ERA 1

Scale: 1:10,000@A3

Drawing Ref: AU/KCW/05-21/22418

MJCA
Technical advisers on environmental issues
Baddesley Colliery Offices,
Main Road, Baxterley, Atherstone,
Warwickshire, CV9 2LE.
Telephone : 01827 717891
Fax : 01827 718507



Key / Notes

- Approximate boundary of Environmental Permit number EPR/YP3138XB
- Proposed boundary of Environmental Permit EPR/TP3430GW/V006
- Approximate 2km distance from the boundary of the Environmental Permit boundary
- Approximate boundary of Collyweston Quarry
- Approximate location of a Site of Special Scientific Interest (SSSI)
- Approximate location of a Site of Special Scientific Interest (SSSI) and a National Nature Reserve (NNR)
- Approximate location of a Local Wildlife Site
- Approximate location of a Regionally Important Geological Site
- Approximate location of a Local Geological site

Rev	Status	Drn	App	Chk	Date
	Final	KR	AW	LH	14/05/21

Site: EAST NORTHANTS RESOURCE MANAGEMENT FACILITY

Client: Augean SOUTH LTD

Title: Designated sites in the vicinity of the waste treatment facility

Figure ERA 2

Scale: 1:25,000@A3

Drawing Ref: AU/KCW/05-21/22419

MJCA
Technical advisers on environmental issues
Baddesley Colliery Offices, Main Road, Baxterley, Atherstone, Warwickshire, CV9 2LE.
Telephone : 01827 717891
Fax : 01827 718507