Mabbett®
Planning | Design | Environment | Engineering | Safety

See a Difference.

Project No: 315994

Technical Standards – BAT Assessment

Prepared for:

Aquaforce Special Waste Ltd

Unit 4a, Sprint Industrial Estate
Four Ashes
Wolverhampton, U.K.
WV10 7ED

Contents Amendment Record

This report has been issued and amended as follows:

Revision	Description	Date	Author	Reviewer	Approver
1.0	Final version for submission	29/07/2024	SD	KB	KB

Acknowledgement

This report has been prepared for the sole and exclusive use of Aqua Force Special Waste Ltd (Aqua Force) in accordance with the scope of work presented in Mabbett & Associates Ltd (Mabbett) Letter Agreement (315994/KB/030724/1.0), dated 03 July 2024. This report is based on information and data collected by Mabbett. Should any of the information be incorrect, incomplete, or subject to change, Mabbett may wish to revise the report accordingly.

This report has been prepared by the following Mabbett personnel:

MABBETT & ASSOCIATES LTD

Scott Durning, MEng, AMIChemE
Environmental Engineer

This report has been reviewed and approved by the following Mabbett personnel:

MABBETT & ASSOCIATES LTD

Kate Brady, BSc, MSc
Principal Environmental Consultant

Table of Contents

Section 1.0: Introduction 1

1.1 Background 1

Section 2.0: Assessment Against “COMMISSION IMPLEMENTING DECISION (EU) 2018/ 1147” 4

2.1 BAT 1 4

2.2 BAT 2 5
- 2.2.1 Waste Characterisation and Pre-Acceptance Procedures 5
- 2.2.2 Waste Acceptance Procedures 5
- 2.2.3 Waste Tracking System and Inventory 5
- 2.2.4 Output Quality Management System 5
- 2.2.5 Waste Segregation 5
- 2.2.6 Waste Compatibility Prior to Mixing or Blending of Waste 6
- 2.2.7 Solid Waste Sorting 6

2.3 BAT 3 6

2.4 BAT 4 7
- 2.4.1 Optimised Storage Location 7
- 2.4.2 Adequate Storage Capacity 7
- 2.4.3 Safe Storage Operation 8
- 2.4.4 Separate Area for Storage and Handling of Packaged Hazardous Waste 8

2.5 BAT 5 8

2.6 BAT 6 & 7 8

2.7 BAT 8 8

2.8 BAT 9 9

2.9 BAT 10 9

2.10 BAT 11 9

2.11 BAT 12 9

2.12 BAT 13 9

2.13 BAT 14 10

2.14 BAT 15 & 16 11

2.15 BAT 17 11

2.16 BAT 18 11

2.17 BAT 19 12

2.18 BAT 20 12

2.19 BAT 21 12

2.20 BAT 22 12

2.21 BAT 23 12

2.22 BAT 24 12

2.23 BAT 25 13

2.24 BAT 26 13

2.25 BAT 27 13

2.26 BAT 28 13

2.27 BAT 29 13

2.28 BAT 30 13

2.29 BAT 31 14
2.30 BAT 32 14
2.31 BATs 33 – 35 14
2.32 BAT 36 & 37 14
2.33 BAT 38 14
2.34 BAT 39 14
2.35 BAT 40 14
2.36 BAT 41 14
2.37 BATs 42 – 44 15
2.38 BAT 45 15
2.39 BAT 46 & 47 15
2.40 BAT 48 & 49 15
2.41 BAT 50 15
2.42 BAT 51 15
2.43 BAT 52 15
2.44 BAT 53 16

Section 3.0: Assessment Against "Waste Electrical and Electronic Equipment (WEEE): Appropriate Measures for Permitted Facilities" 17

3.1 General Management Appropriate Measures 17
3.1.1 Management System 17
3.1.2 Staff Competence 18
3.1.3 Accident Management Plan 18
3.1.4 Accident Prevention Measures 19
3.1.5 Contingency Plan and Procedures 22
3.1.6 Plant Decommissioning 23

3.2 Waste Pre-acceptance, Acceptance and Tracking Appropriate Measures 24
3.2.1 Waste Pre-acceptance 24
3.2.2 Waste Acceptance 24
3.2.3 Waste Tracking 25

3.3 Waste Storage, Segregation and Handling Appropriate Measures 27
3.3.1 General Waste Storage 27
3.3.2 Additional Storage Requirements for Specific Categories of WEEE 29

3.4 Waste Treatment 30
3.4.1 Preparing WEEE for Reuse 30
3.4.2 General Waste Treatment 31
3.4.3 Treatment of WEEE Containing BFRs and POPs 35
3.4.4 Process Monitoring 36
3.4.5 Treatment of Gas Discharge Lamps 37
3.4.6 Treatment of Cathode Ray Tube (CRT) Equipment 37
3.4.7 Treatment of FPD Equipment 37
3.4.8 Treatment of SMW 37
3.4.9 Treatment of IT, Telecommunications and Business Equipment. 37
3.4.10 Treatment of LDA 37
3.4.11 Treatment of Photovoltaic Panels 37
3.4.12 Post-shredding Treatments 37
3.4.13 Record Keeping for All Treatment Residues 37

3.5 Emissions Control 37
3.5.1 Point Source Emissions to Air 37

3.5.2 Fugitive Emissions to Air (Including Odour) 37
3.5.3 Emissions of Noise and Vibration 41
3.5.4 Point Source Emissions to Water and Sewer 42
3.5.5 Fugitive Emissions to Land and Water 42

3.6 Emissions Monitoring and Limits 45
3.6.1 Point Source Emissions to Air 45
3.6.2 Point Source Emissions to Water or Sewer 45

3.7 Process Efficiency 45
3.7.1 Energy Efficiency 45
3.7.2 Raw Materials 45
3.7.3 Water Use 46
3.7.4 Waste Minimisation, Recovery and Disposal 46

Section 4.0: Assessment Against “Waste Temperature Exchange Equipment: Appropriate Measures for Permitted Facilities” 47

4.1 General Management Appropriate Measures 47
4.1.1 Plant Commissioning Requirements 47
4.1.2 Other Accident Prevention Measures 47

4.2 Waste Pre-acceptance, Acceptance and Tracking Appropriate Measures 47
4.2.1 Waste Pre-acceptance 47
4.2.2 Waste Acceptance 48
4.2.3 Waste Tracking 48

4.3 Waste Storage and Handling Appropriate Measures 48

4.4 Waste Treatment Appropriate Measures 50
4.4.1 Stage 1 Treatment (Degassing) 52
4.4.2 Stage 2 Treatment (Destruction) 53

4.5 Process Monitoring Appropriate Measures 54
4.5.1 Refrigerant Recovery 55
4.5.2 Blowing Agent Recovery 56
4.5.3 Residual Materials 57

4.6 Emission Monitoring and Limits Appropriate Measures 57
4.6.1 Point Source Emissions to Air 57

Section 5.0: Assessment Against “Treating Metal Waste in Shredders: Appropriate Measures for Permitted Facilities” 58

5.1 General Management Appropriate Measures 58
5.1.1 Management System 58
5.1.2 Staff Competence 59
5.1.3 Accident Management Plan 59
5.1.4 Accident Prevention Measures 60
5.1.5 Contingency Plan and Procedures 63
5.1.6 Plant Decommissioning 64

5.2 Waste Pre-acceptance, Acceptance and Tracking Appropriate Measures 65
5.2.1 Waste Pre-acceptance 65
5.2.2 Waste Acceptance and Tracking 65
5.2.3 Waste Tracking 66

5.3 Waste Storage, Segregation and Handling Appropriate Measures 68
5.3.1 Storage Locations 68
5.3.2 Storage Duration and Capacity 68
5.3.3 Dangerous Substances and Explosive Atmospheres Regulation 2002 (DSEAR) 69
5.3.4 Battery Storage 69

5.4 Waste Treatment Appropriate Measures 70
5.4.1 General Waste Treatment 70

5.4.2 Metal Shredding Plant and Downstream Processes 71
5.4.3 POPs 72
5.4.4 Antimony Trioxide 72
5.4.5 Minimising Diffuse Emissions from the Process 72
5.4.6 Record Keeping for All Treatment Residues 73

5.5 Emissions Control Appropriate Measures 73
5.5.1 Point Source Emissions to Air 73
5.5.2 Fugitive Emissions to Air (Including Odour) 73
5.5.3 Emissions of Noise and Vibration 76
5.5.4 Point Source Emissions to Water and Sewer 77
5.5.5 Fugitive Emissions to Land and Water 77

5.6 Emissions Limits, Monitoring and Appropriate Measures 79
5.6.1 Emissions to Air 80
5.6.2 Emissions Limits and Monitoring Requirements 80
5.6.3 Emissions to Water or Sewer 80

5.7 Process Efficiency Appropriate Measures 80
5.7.1 Energy Efficiency 80
5.7.2 Raw Materials 81
5.7.3 Water Use 81
5.7.4 Waste Minimisation, Recovery and Disposal 81

Section 6.0: Assessment Against “Chemical Waste: Appropriate Measures for Permitted Facilities” 82

6.1 General Management Appropriate Measures 82
6.1.1 Management System 82
6.1.2 Staff Competence 83
6.1.3 Accident Management Plan 83
6.1.4 Accident Prevention Measures 84
6.1.5 Contingency Plan and Procedures 88
6.1.6 Plant Decommissioning 89

6.2 Waste Pre-acceptance, Acceptance and Tracking Appropriate Measures 89
6.2.1 Waste Pre-acceptance 89
6.2.2 Waste Acceptance 90
6.2.3 Waste Tracking 92

6.3 Waste Storage, Segregation and Handling Appropriate Measures 94

6.4 Waste Treatment Appropriate Measures 101
6.4.1 General Waste Treatment 101
6.4.2 Aerosol Canister Treatment 104
6.4.3 Record Keeping for All Treatment Residues 104

6.5 Emissions Control Appropriate Measures 105
6.5.1 Point Source Emissions to Air 105
6.5.2 Fugitive Emissions to Air (Including Odour) 105
6.5.3 Emissions of Noise and Vibration 108
6.5.4 Point Source Emissions to Water and Sewer 109
6.5.5 Fugitive Emissions to Land and Water 109

6.6 Emissions Monitoring and Limits Appropriate Measures 111
6.6.1 Emissions to Air 112
6.6.2 Emissions to Water or Sewer 112

6.7 Process Efficiency Appropriate Measures 112
6.7.1 Energy Efficiency 112
6.7.2 Raw Materials 112
6.7.3 Water Use 113
6.7.4 Waste Minimisation, Recovery and Disposal 113

Appendix 1 114

Appendix 2 115

Section 1.0: Introduction

Aqua Force Special Waste Ltd (Aqua Force) '**the Operator'**, has instructed Mabbett & Associates Ltd to prepare an application for submission to the Environment Agency (EA), for a Substantial Variation to their Environmental Permit (Ref.: EPR/XP3992FV and herein referred to as the 'Permit') for activities regulated by the Environmental Permitting (England and Wales) Regulations 2016 (EPR) at Unit 4a Sprint Industrial Estate, Station Road, Four Ashes, Wolverhampton, WV10 7DB (**the Site**).

The following document, and associated attachments and appendices, comprise the responses to the Request for Further Information (RFI) issued by the Environment Agency (EA). An agreed response date of 29th July 2024 has been established.

The EA requested the following:

"In relation to the proposed changes, confirm site operations will conform the relevant technical standards to;

1. *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 - (notified under document C(2018) 5070) (europa.eu)*
2. *Waste electrical and electronic equipment (WEEE): appropriate measures for permitted facilities - Guidance - GOV.UK (www.gov.uk)*
3. *Waste temperature exchange equipment: appropriate measures for permitted facilities - Guidance - GOV.UK (www.gov.uk)*
4. *Treating metal waste in shredders: appropriate measures for permitted facilities - Guidance - GOV.UK (www.gov.uk)*
5. *Chemical waste: appropriate measures for permitted facilities - Guidance - GOV.UK (www.gov.uk)*
6. *Guidance note; A BAT assessment in line with the Waste Treatment BAT Conclusions 2019 demonstrating that BAT has been applied to the new treatment technology, must follow the BAT document structure, stating how each point is achieved.*
7. *Our appropriate measures (AM) guidance notes for waste treatment sets out the technical guidance we expect for permitted waste sites to operate to. It applies, in addition to any BAT conclusions for waste treatment for Installations.*
8. *Technical guidance for regulated industry sectors: environmental permitting - GOV.UK (www.gov.uk)"*

The sections of this document provide responses to the list of BAT Conclusions documents and Appropriate Measures, (Technical Standards 1-8 listed in the EA RFI above).

This Assessment refers to information and documents available as part of the Permit application and Environmental Management System (EMS) for the Site. The EMS is considered to be a live document. At the time of writing, reference to the EMS refers to CE-FA-1921-RP01-EMS-Final v2. The EMS will be updated as required during the lifetime of the permit.

Appendix ref	Title	Section
1	ISO certification	
2	2023 REPI	

1.1 Background

The Site falls under the Environmental Permitting (England and Wales) Regulations 2016, the Site is classed as an Installation as it falls under Schedule 1, Chapter 5 by virtue of:

- Section 5.3, Part A (1) (a) 'Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving one or more of the following activities:

  (ii) physico-chemical treatment

  (iv) repackaging

- Section 5.6 Part A (1) (a) 'Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes.

The Site's Environmental Permit (Schedule 1, Table S1.1) lists the Activities and Directly Associated Activities undertaken by the Site. Activities are listed as A1 to A12 of which A8 to A12 are the Directly Associated Activities on Site, all Activities can be seen in Table 1 below:

Table 1 Permitted activities

Activity	Description
A1 – Treatment of Waste Refrigeration Equipment	Treatment of refrigeration units consisting of sorting, separation, grading, shredding, baling, compacting, crushing, granulation, cutting, condensing, and degassing.
A2 – WEEE Treatment other than waste refrigeration equipment	Mechanical treatment of hazardous WEEE consisting of sorting, separation, shredding, screening, grading, baling, shearing, compacting, crushing, granulation or cutting for the purpose of recovery of constituent parts and materials.
A3 – Waste Plant Treatment	Treatment of paint containers consisting of shredding and crushing of paint containers for recovery.
A4 – Waste Repackaging	Bulking and repackaging of liquid wastes from into intermediate bulk containers for disposal off site.
A5 – Aerosol Waste Treatment	Treatment of aerosol wastes consisting of sorting, dismantling, separation, shredding, screening, baling, compacting, crushing, granulation, or of waste into different components for recovery.
A6 – Airbag Waste Treatment	Treatment of airbags consisting of sorting and dismantling in bespoke dismantling chamber followed by sorting of waste into different components for recovery.
A7 – Storage of Hazardous Waste	Storage of refrigeration units, WEEE and hazardous waste.
Directly Associated Activity	**Description**
A8 - Steam Boiler	For use as a fuel source in relation to activity A1: the treatment of waste refrigeration equipment
A9 - Manual pre-treatment of paints	The manual separation of hazardous solvent-based paints from non-hazardous water-based paints
A10 - Storage of processed materials excluding the temporary storage of hazardous waste under Section 5.6 A(1)(a)	Storage of recovered fractions and shredder residue following treatment and the storage of processed materials prior to despatch off-Site for recovery

Activity	Description
A11 - Collection and disposal of process condensate water	Collection of the condensate water from the steam stripping of the charcoal absorbers into two decant tanks for re-use within the facility or despatch off-Site for disposal
A12 - Treatment and storage of non-hazardous waste for the purpose of disposal or recovery	The treatment consists solely of manual sorting, separation, screening, baling, shredding, compaction or crushing of non-hazardous waste into different components for disposal or recovery. Note, there will be no treatment of batteries

Environmental Permit (EPR/XP3992FV) was issued on 09 February 2009 to authorise the facility to treat and recover WEEE waste and to recover, transfer and treat hazardous waste. The current permit replaced a waste licence issued on 30 July 2002.

The purpose of the permit variation application is to:

- Increase the maximum waste throughput from 24,999 tonnes per annum (tpa) to 29,999 tpa;
- Increase the permit boundary;
- Amend Activity A2 WEEE treatment to:
    - Add additional (WEEE) waste codes; and
    - Include treatment of non-hazardous WEEE waste in description.
- Amend Activity A12 Treatment of non-hazardous waste, to include additional non-hazardous waste codes.

An attritor plant will be installed in the newly acquired building to facilitate in the treatment of non-hazardous waste containers such as plastics and cans. It has a capacity of separating 10 m^3 of material and comprises of a metal drum in which materials are fed into via two screw conveyors. It is considered that the attritor plant comprises an extension of the already permitted non-hazardous waste treatment activity.

Since submission of the application in 2023, the Operator is no longer seeking to add drum washing to the permit.

A full breakdown of all waste codes to be added as part of this permit variation can be seen in Appendix 20 of EMS

Section 2.0: Assessment Against "COMMISSION IMPLEMENTING DECISION (EU) 2018/ 1147"

The following section assesses compliance against "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" as requested by the EA.

2.1 BAT 1

An Environmental Management System (EMS) has been prepared to support Aquaforce's application to vary the permit.

The Operator is committed to include the following features within the Site's EMS:

- Commitment of the management, including senior management;
- Definition, by the management, of an environmental policy that includes the continuous improvement of the environmental performance of the installation;
- Planning and establishing the necessary procedures, objectives and targets, in conjunction with financial planning and investment;
- Implementation of procedures paying particular attention to:
    - Structure and responsibility,
    - Recruitment, training, awareness and competence,
    - Communication,
    - Employee involvement,
    - Documentation,
    - Effective process control,
    - Maintenance programmes,
    - Emergency preparedness and response,
    - Safeguarding compliance in line with the Site's environmental permit;
- Checking performance and taking corrective action, paying particular attention to:
    - Monitoring and measurement,
    - Corrective and preventive action,
    - Maintenance of records,
    - Independent (where practicable) internal or external auditing in order to determine whether or not the EMS conforms to planned arrangements and has been properly implemented and maintained;
- Review, by senior management, of the EMS and its continuing suitability, adequacy and effectiveness;
- Following the development of cleaner technologies;
- Consideration for the environmental impacts from the eventual decommissioning of the plant at the stage of designing a new plant, and throughout its operating life;
- Application of sectoral benchmarking on a regular basis;
- Waste stream management;
- An inventory of waste water and waste gas streams;
- Residues management plan;

- Accident management plan;
- Odour management plan;
- Dust management plan;
- Site infrastructure plan;
- Site condition report;
- Fire prevention plan

2.2 BAT 2

2.2.1 Waste Characterisation and Pre-Acceptance Procedures

The site has developed a waste pre-acceptance procedure, in line with Sector Guidance Note S5.06. The pre-acceptance procedure is contained within the EMS (Appendix 2 of this report).

2.2.2 Waste Acceptance Procedures

The site has developed a Waste Acceptance Procedure, in line with Sector Guidance Note S5.06. This procedure forms part of the EMS (Appendix 2 of this report). A site storage plan with hazard designation is included as part of the waste acceptance procedure, this plan has been updated to incorporate the proposed changes to the site storage layout and will form part of the EMS.

2.2.3 Waste Tracking System and Inventory

The site's Waste Acceptance Procedure contains information regarding the waste tracking system and inventory in place at the site. The Waste Acceptance Procedure forms part of the EMS and will be kept up-to-date, as required.

Copies of Waste Transfer Notes, Consignment Notes, Season Tickets, Pre-Acceptance Declaration Documentation and all records required in accordance with the Environmental Permit will be kept in the Site office. Where at all possible, records will be electronic.

2.2.4 Output Quality Management System

The treated output material from the WTEE waste treatment plant goes through extensive monitoring procedures as seen in the Working Plan which forms part of the EMS to ensure the expectations of output material are met and is suitable for its intended disposal or recovery.

The waste output from the proposed attritor system, which will be used to treat non-hazardous packaged paints, will go through analysis to identify its composition and weight, ensuring the expectations of output material are met and is suitable for its intended disposal or recovery. The same process will be used for the treatment of non-hazardous and hazardous waste in the paint and aerosol plant.

The Operator have a quality management system in place, accredited to both ISO 9001 and ISO14001:2015 standards. The certification is provided as Appendix 1.

2.2.5 Waste Segregation

Although additional waste codes are proposed within this variation, there will be no wastes with additional hazardous properties accepted by the site and therefore, no additional waste segregation measures are required. The Operator intends use the attritor for non-hazardous wastes, including liquids in packaging. Because of this, the addition of the attritor is an associated activity with activity references A3, A4 and A12 and ensures incompatible wastes are not shredded concurrently.

The attritor plant is designed to improve the efficiency of separation of packaging and contents, particularly liquids. During separation, liquids from the containers are allowed to drain into a container beneath the separating drum. Liquids are stored in IBC's or drums as appropriate in designated bays, according to the substance type pending transferal off-Site for disposal or recovery at an authorised facility.

Dry packaging is crushed / shred, via paddles within the attritor drum and centrifuged before being conveyed out of the drum and bulked up prior to transferral for recovery or disposal to a facility licenced to do so according to packaging type.

Bunding will encompass the plant and will comprise of a 22 cm sleeping policeman capable of containing 110% of the maximum capacity of the attritor contents i.e. 10 m^3. The walls of the building will additionally serve as secondary containment for any spillages from the plant.+

The Operator will move the paint treatment plant, as can be seen in Drawing CE-FA-1921-DW01 Rev A from emission point A2a to A2b. The same waste segregation measures will be in place on this plant.

The location of the present chemical waste storage will expand and include those areas shown on Drawing CE-FA-1921-DW01 Rev A. The storage matrix within the Waste Storage Procedure outlines the procedure by which the Operator identifies wastes which require segregation and the type of segregation required. The Waste Storage Procedure is included within the EMS.

2.2.6 Waste Compatibility Prior to Mixing or Blending of Waste

Wastes to be bulked will be tested prior to bulking to ensure compatibility. This procedure is detailed in the site's Waste Acceptance Procedure, which forms part of the EMS. The existing procedure allows assessment of compatibility based on waste hazards. This procedure will be adhered to for the additional waste codes.

2.2.7 Solid Waste Sorting

All solid waste accepted by the site will first go to the waste reception area where it will be visually inspected to identify the type of solid waste. The solid wastes accepted by the site will be:

- Contaminated absorbents/packaging – arriving in skips
- Fridges/WEEE waste
- Commercial fridges and other WEEE waste

Although additional waste codes are proposed in this variation, these wastes will also fall under the type of solid waste detailed above and therefore, the current solid waste sorting processes will not be impacted by the proposed variation.

2.3 BAT 3

The following information will be kept by the site and updated regularly:

- Simplified process flowsheets showing the different waste intakes, waste treatment processes and site outputs;
- Specification sheets of all main plant equipment;
- Schematics of all main plant equipment;
- Process descriptions (including air emissions abatement)

The Operator make use of a waste tracking system which contains the following information:

- Waste storage area;
- Date of arrival;
- Job number (refers to producer deceleration);
- EWC code;
- Waste description;
- Components and concentration;
- Quantity;
- Container type;
- Disposal point;
- Price and quote number;
- Lab analysis required;
- Unique ID number;

- Bay number;
- Verification completed by;
- Non conformance reference;
- HP codes; and
- Activity

Copies of Waste Transfer Notes, Consignment Notes, Season Tickets, Pre-Acceptance Declaration Documentation and all records required in accordance with the Environmental Permit will be kept in the Site office. Where at all possible, records will be electronic.

It will be ensured that the information above is kept up to date.

The permit currently lists three air emission points, A1, A2 and A3. These emission points are shown on Drawing No. CE-FA-1921-DW01. It is proposed that the paint and aerosol treatment plant moves location, the location of emission point A2 will also move (from point A2a to A2b – emission points A2 will not operate concurrently).

Emission point A1 comprises an exhaust stack emission to atmosphere from the WEEE plant. Emission point A2a is from a combined single stack from the aerosol and paint plant and paint processing plant and emission point A2b serves the paint treatment plant only. Emission point A3 is from the steam raising boiler.

Emission points A1 and A2 are monitored quarterly for total particulate matter, particulate matter fraction PM10 & PM2.5, CFCs, and volatile organic compounds. Flowrate and temperature will also be monitored at these emission points. There are no set parameters or limits for the monitoring of A3.

Although it is proposed that emission point A2 moves location, the same abatement and emission prevention measures will be in place. The same monitoring requirements are also stipulated for this emission point. Emission point A2b will omit emissions associated with aerosol treatment.

There will be no waste water streams associated with the site. Any effluent formed by site processes will be transported off site by an effluent treatment company for disposal.

2.4 BAT 4

2.4.1 Optimised Storage Location

The waste storage locations are designed to ensure segregation and containment. Storage locations are sited away from building entrances, limiting chance of loss of containment and minimise waste handling. The Site Storage procedure is within the EMS.

2.4.2 Adequate Storage Capacity

It is proposed to increase the waste throughput from 24,999 tonnes per annum (tpa) to 29,999 tpa.

The Operator employ a waste tracking system which is used to track the quantity of waste on site and therefore, the remaining waste capacity. The quantity of incoming waste is verified during the waste pre-acceptance and waste acceptance procedures. This waste tracking system and inventory takes into account the hazardous properties of the waste, the risks posed by the waste in terms of process safety, occupational safety and environmental impact, as well as the information provided by the previous waste holder(s).

The Operator maintain a stock inventory of wastes, inspection of storage areas is performed so as to assess waste quantities on site. Waste will not be accepted if there is insufficient storage capacity available or if the site is inadequately manned.

The calculations used to determine the maximum storage of individual storage areas is included in the storage procedure in the EMS.

The maximum storage time in the initial waste reception area is 5 days. The maximum storage time of wastes in total is 6 months.

2.4.3 Safe Storage Operation

Although additional waste codes are proposed within this variation, there will be no wastes with additional hazardous properties accepted by the site and therefore, no additional safe storage measures are required. The Operator treats hazardous packaging through the paint and aerosol plant and will shred/separate non-hazardous waste using the attritor. The use of dedicated plant for hazardous and non-hazardous waste streams mean that ensuring incompatible waste are not treated together, will reduce this risk.

All proposed new wastes will be labelled and directed to the appropriate storage area through verification of the pre-acceptance and acceptance procedures.

In line with HSG71, HSG76 and HSG51, the site's Waste Storage Plan within the EMS sets out the control measures at each storage location.

The waste chemical storage areas are shown on Drawing CE-FA-1921-RP01-DW01. The Operator employs a storage matrix within the Waste Storage Procedure outlines the procedure by which the Operator identifies wastes which require segregation and the type of segregation required. The proposed additional waste codes will be stored in accordance with the storage matrix.

2.4.4 Separate Area for Storage and Handling of Packaged Hazardous Waste

Packaged hazardous waste will be separated and handled in dedicated areas. All wastes will be stored in accordance with the storage matrix.

2.5 BAT 5

Waste handling and transfer procedures are:

- carried out by competent staff;
- duly documented, validated prior to execution and verified after execution; and
- Include measures to prevent, detect and mitigate spills.

There is no requirement to change the procedures already employed at the site.

All handling and transfer procedures are risk-based considering the likelihood of accidents and incidents and their environmental impact.

2.6 BAT 6 & 7

There are no point sources emissions to surface water or sewer at the site. This will not change with the proposed variation.

2.7 BAT 8

The permit currently lists three air emission points, A1, A2 and A3. These emission points are shown on Drawing No. CE-FA-1921-DW01. As it is proposed that the paint and aerosol treatment plant moves location, the location of emission point A2 will also move.

Emission point A1 comprises an exhaust stack emission to atmosphere from the WEEE plant. Emission point A2 is from a combined single stack from the aerosol and paint plant and paint processing plant and emission point A3 from the steam raising boiler.

Emission points A1 and A2 are monitored quarterly for total particulate matter, particulate matter fraction PM10 & PM2.5, CFCs, and volatile organic compounds. Flowrate and temperature will also be monitored at these emission points. There are no set parameters or limits for the monitoring of A3.

Although it is proposed that emission point A2 moves location, the same abatement and emission prevention measures will be in place. The same monitoring requirements are also stipulated for this emission point.

Therefore, the monitoring methods to be used on site can be seen in the current permit.

2.8 BAT 9

There is no regeneration of spent solvents, decontamination of equipment containing POPs with solvents or physico-chemical treatment of solvents for the recovery of their calorific value undertaken on site. This will continue with the proposed variation.

2.9 BAT 10

An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

There have been no substantiated odour complaints at the facility throughout its operation under environmental permit. However, it is not anticipated that there will be odour nuisance at sensitive receptors, as a result of the site activities due to;

- Improved process control,
- Robust pre-acceptance measures,
- Enhanced training (both odour management and process control).

2.10 BAT 11

Aquaforce monitor the annual consumption of water, energy and raw materials at the site for submission to the EA through a Resource Efficiency Physical Index (REPI). This REPI also includes the annual waste transferred for disposal and recovery in terms of hazardous and non-hazardous waste. The most recent REPI submission has been included as Appendix 2.

2.11 BAT 12

An OMP has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

An Odour Action Plan is included within this OMP which includes the following:

- A protocol containing actions and timelines;
- A protocol for conduction odour monitoring;
- A protocol for response to identified odour incidents; and
- An odour prevention and reduction programme designed to identify the source(s); to characterise the contributions of the sources; and to implement prevention and/or reduction measures.

2.12 BAT 13

An OMP has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

Odour control measures are included within this OMP, the following are included:

- Pre-acceptance and acceptance checks will be made and any waste loads that are highly odorous will not be accepted at the Site.
- In the unlikely event that any highly odorous wastes are inadvertently received they will be placed in a sealed and lidded container and stored as quarantined wastes until they can be removed off-site to the producer or authorised facility. The use of a lidded skip or container will help to minimise any potential odour release during their storage on Site and subsequent transport off-site. The removal of any highly odorous wastes from the Site will be regarded as a priority incident and carried out as soon as practicable and within 24 hours, subject to the producer or authorised facility being able to accept them within this timescale.
- The Operator will pay particular attention to wastes that have the potential to become highly odorous such as gypsum and biodegradable waste to ensure that such materials are prioritised for

removal off site so that extended storage times do not occur and that odour generation is avoided (typically these wastes only become highly odorous if they are stored for too long, hence rapid turnaround times will be imposed).

- Following acceptance at the Site, the maximum storage time for waste materials prior to transfer will be up to two days (which is within the five days maximum stated in Environment Agency Sector Guidance Note S5.06 'Guidance for the Recovery and Disposal of Non-hazardous and Hazardous Waste', which states "storage within the reception area should be for a maximum of five working days". However, any gypsum, biodegradable wastes, food wastes etc which have the potential to become highly odorous, e.g. if storage times are excessive, will be prioritised for rapid removal from the Site and within 24 hours.
- It is the Operator's policy not to accept any wastes that are already highly odorous. However, in the unlikely event that highly odorous wastes are inadvertently received they will be transferred to a sealed and lidded quarantine skip or container and removed as a priority and within 24 hours to a suitably authorised facility.
- Incoming wastes will typically be processed on a first in first out basis, albeit that any potentially odorous wastes or wastes that have been placed in quarantined storage will be prioritised for removal.
- The use of first in first out principles will ensure the Site operates a rapid turnover of waste materials and that the waste transfer station bays are emptied each working day (and after 48 hours at the latest) so that all materials are removed and the bays are totally emptied (including the corners of the bay). This prevents the potential for any build-up of odour and ensures that any degradable materials are rapidly removed.
- Site cleaning procedures include sweeping out the bays, including the corners, to ensure all material is removed and potentially odorous residues do not remain in-situ. Operational staff will record the housekeeping of the bays on the appropriate checklist, maintained in the Site office, in order to adhere to the maximum emptying and cleaning frequency of 48 hrs.
- Sniff tests will be conducted at strategic areas around the Site (see Figure 3 for locations) at a minimum of twice daily. On the occasions when inherently odorous material is stored at the facility such as biodegradable waste, food waste and gypsum, the frequency of sniff tests will be increased to such an extent to ensure that any malodourous emissions do not result in annoyance beyond the boundary of the Site.
- Should the level of odour be considered as offensive, the offending material will be transferred to the quarantine container via permanent on-site plant, covered and removed to another suitably authorised facility within, at a maximum, 4 hours.

2.13 BAT 14

A Dust and Emissions Management Plan has been prepared to support Aquaforce's application to vary the permit. The details of this plan can be found in CE-FA-1921-RP06-DMP-Final v2.

In summary, the Dust and Emissions Management Plan contains the following control measures:

- Wastes delivered will mainly comprise of WEEE, waste paints, aerosols, airbags and hazardous liquids that are not inherently dusty. With the exception of receipt of the waste and exporting wastes off-Site, all Site activities are carried out within the confines of the building. Records of all incoming loads stored on Site or in a secure off Site location in accordance with the Duty of Care requirements of the Environmental Permit.
- Waste producers are required to provide details of any precautions that should be taken at the Site to abate emissions as part of the Waste Acceptance Procedure. Only waste material stipulated in the Environmental Permit will be accepted with inherently dusty waste (e.g. incinerator ash) refused.
- Preventative and remedial measures to implement on the Site include a vehicle speed restriction of 10mph and drop heights from the vehicles will be minimised as best practicable.
- Vehicles and plant will be hosed on exit from the Site as required in order to minimise the dispersion of emissions to sensitive receptors off Site.
- On Site sweeping will take place when conditions require. All areas and plant will be subjected to general housekeeping to prevent the accumulation of dust and loose material.

- Any waste that may be stockpiled will not exceed 4m in height to alleviate the potential of emissions becoming airborne. Stockpiles and vehicle loads will also be covered whenever this does not impinge on operations.
- Operations on Site will cease during periods of high winds to aid in the immobilisation of fugitive dust and particulate emissions.
- The Site Manager and Technically Competent Person will be responsible for the implementation of the DMP and the application of appropriate, recommended dust suppression measures.
- Any complaints received concerning dust and particulate emissions at the Site will be dealt with in accordance with the company's EMS complaints procedure.
- The investigation will be instigated by the Site Manager or the Technical Competent Person following the completion of the Complaints Report Form.

An OMP has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final. The OMP details control measures to reduce the likelihood of any diffuse emissions of odour.

The permit currently lists three air emission points, A1, A2 and A3. These emission points are shown on Drawing No. CE-FA-1921-DW01. It is proposed that the paint and aerosol treatment plant moves location, the location of emission point A2 will also move.

Emission point A1 comprises an exhaust stack emission to atmosphere from the WEEE plant. Emission point A2 is from a combined single stack from the aerosol and paint plant and paint processing plant and emission point A3 from the steam raising boiler.

Although it is proposed that emission point A2 moves location, the same abatement and emission prevention measures will be in place. The same monitoring requirements are also stipulated for this emission point.

Although the attritor is essentially a sealed unit, there is the potential for the emission of particulate matter at the end of the process. As such, emissions abatement for particulate matter will be incorporated into the plant.

2.14 BAT 15 & 16

Flaring will not be used on site.

2.15 BAT 17

The site has not received any noise complaints during the time that the permit has been in place. Potentially noisy plant are located within a building. The site setting is considered to not be sensitive to noise.

All other proposed variations will not impact the noise generated by the site and therefore, a noise and vibration management is not required.

2.16 BAT 18

The site has not received any noise complaints during the time that the permit has been in place. Potentially noisy plant are located within a building. The site setting is considered to not be sensitive to noise.

The following noise control measures are used on site:

- All vehicles, plant and machinery operated at the Site will be maintained in accordance with the manufacturer's specification and fitted with effective silencers. Any breakdown or malfunction of silencing equipment will be treated as an emergency and dealt with immediately. Where a repair cannot be affected immediately the equipment will be taken out of service until the repair is made.
- The Site will only be operated during the hours specified in the planning permission. No un-sociable or night-time working will be carried out. The additional activities carried out under the permit variation i.e. the attritor and drum washer are sealed units that will be installed indoors to

minimise risk of noise or vibration emitted during operating. They will be located on concreted flooring and roller shutter doors are kept shut at all times except for the entry and egress of loads.
- Any complaints received at the Site about noise will be monitored and logged in accordance with the EMS. Mitigation measures will be implemented, as appropriate, to ensure a high level of control.

2.17 BAT 19

The Site does not use significant quantities of water (See 2023 REPI as Appendix 2). There are also no point sources to surface water or sewer at the site. This will not change with the proposed variation.

2.18 BAT 20

There are no point sources emissions to surface water or sewer at the site. This will not change with the proposed variation.

2.19 BAT 21

The Site is bounded by hedgerows and fencing and CCTV is installed near the Site entrance as well as in strategic positions throughout the Site, both internal and external, which detect vehicles and people entering the premises. In the event of unauthorised public access to the Site, security measures will be reviewed and increased in the event of unlawful entry.

A Fire Prevention and Mitigation Plan (FPP) has been prepared to support Aquaforce's application to vary the permit. The details of the FPP can be found in CE-FA-1921-RP08-FPP-Final v3. The FPP details control measures to reduce the likelihood of any fire.

The site is proposing to move the location of a portion of the waste chemical storage and paint and aerosol treatment plant. However, the same mitigation measures as seen in the current waste chemical storage will be in place in the new location and additional fire prevention measures will be added to the paint plant as shown below:

- Ductwork and plant constructed with access hatches to allow inspection and ease of cleaning.
- Daily inspections and documented cleaning procedure of the work area, plant and ductwork.
- A fire suppression system to detect sparks to prevent a fire from starting and extinguish fires if they ever got started.
- Fireproof concrete bunding around plant and other waste.
- A shut off valve within dusting.
- A particulate filter and screen.

Although it is proposed that emission point A2 moves location, the same protection measures will be in place. The same monitoring requirements are also stipulated for this emission point.

As part of the EMS developed for the site, an Environmental Accident and Incident Record has been created which will be used to record all accidents or incidents which may lead to environmental risk, the actions used to mitigate the accident/incident and how they can be learned from.

2.20 BAT 22

The Site does not typically consume significant quantities of raw materials (see the 2023 REPI, Appendix 2). This will continue following the proposed variation.

2.21 BAT 23

The Operator is committed to maintaining an energy efficiency plan and energy balance record as part of this proposed variation. These will form part of the EMS.

2.22 BAT 24

Since submission of the application in 2023, the Operator is no longer seeking to add drum washing to the permit.

The Operator is committed to maintain a residues management plan as part of the proposed permit variation This will form part of the EMS.

2.23 BAT 25

There will be no change to the current mechanical treatment of waste processes already in use at the site. The site is proposing to move the paint and aerosol treatment plant, however, all current mitigation measures on this plant will remain.

A Dust and Emissions Management Plan has been prepared to support Aquaforce's application to vary the permit. The details of this plan can be found in CE-FA-1921-RP06-DMP-Final v2.

The permit currently lists three air emission points, A1, A2 and A3. These emission points are shown on Drawing No. CE-FA-1921-DW01. It is proposed that the paint and aerosol treatment plant moves location, the location of emission point A2 will also move.

Emission point A1 comprises an exhaust stack emission to atmosphere from the WEEE plant. Emission point A2 is from a combined single stack from the aerosol and paint plant and paint processing plant and emission point A3 from the steam raising boiler.

Although the attritor is essentially a sealed unit, there is the potential for the emission of particulate matter at the end of the process. As such, emissions abatement for particulate matter will be incorporated into the plant.

2.24 BAT 26

There will be no change to the current mechanical treatment of waste processes already in use at the site. The site are proposing to move the paint and aerosol treatment plant, however, all current mitigation measures on this plant will remain, new mitigation measures will also be added.

Waste to be shredded by the attritor will not be baled prior to treatment.

There will be no dangerous items in the attritor waste input stream.

A determination of cleanliness will be obtained during the site's waste pre-acceptance and acceptance procedures for waste to be used as an input to the attritor.

2.25 BAT 27

Deflagrations currently do not occur on site and will not occur following the proposed variation.

2.26 BAT 28

There will be no change to the current mechanical treatment of waste processes already in use at the site. The site are proposing to move the paint and aerosol treatment plant, however, all current mitigation measures on this plant will remain.

A conveyor system will be in place on the proposed attritor treatment unit.

2.27 BAT 29

There will be no change to the current mechanical treatment of waste processes already in use at the site. The site are proposing to move the paint and aerosol treatment plant, however, all current mitigation measures on this plant will remain.

The proposed attritor system will not treat WEEE waste containing VFCs and/or VHCs.

2.28 BAT 30

There will be no change to the current mechanical treatment of waste processes already in use at the site. The site are proposing to move the paint and aerosol treatment plant, however, all current mitigation measures on this plant will remain.

The proposed attritor system will not treat WEEE waste containing VFCs and/or VHCs.

2.29 BAT 31

There will be no change to the current mechanical treatment of waste processes already in use at the site. The site are proposing to move the paint and aerosol treatment plant, however, all current mitigation measures on this plant will remain, new mitigation measures will also be added.

The permit currently lists three air emission points, A1, A2 and A3. These emission points are shown on Drawing No. CE-FA-1921-DW01. It is proposed that the paint and aerosol treatment plant moves location, the location of emission point A2 will also move.

Emission point A1 comprises an exhaust stack emission to atmosphere from the WEEE plant. Emission point A2 is from a combined single stack from the aerosol and paint plant and paint processing plant and emission point A3 from the steam raising boiler.

Although it is proposed that emission point A2 moves location, the same abatement and emission prevention measures will be in place. The same monitoring requirements are also stipulated for this emission point.

Although the attritor is essentially a sealed unit, there is the potential for the emission of particulate matter at the end of the process. As such, emissions abatement for particulate matter will be incorporated into the plant.

2.30 BAT 32

There will be no change to the current mechanical treatment of waste processes already in use at the site. The site are proposing to move the paint and aerosol treatment plant, however, all current mitigation measures on this plant will remain.

The proposed attritor system will not treat WEEE waste containing mercury.

2.31 BATs 33 – 35

There will be no biological treatment of waste with this proposed variation.

2.32 BAT 36 & 37

There will be no aerobic treatment of waste with this proposed variation.

2.33 BAT 38

There will be no anaerobic treatment of waste with this proposed variation.

2.34 BAT 39

There will be no mechanical biological treatment (MBT) of waste with this proposed variation.

2.35 BAT 40

The site's waste pre-acceptance and acceptance procedures are contained within the EMS.

These procedures including the checks which incoming wastes go through in terms of their composition.

2.36 BAT 41

A Dust and Emissions Management Plan has been prepared to support Aquaforce's application to vary the permit. The details of this plan can be found in CE-FA-1921-RP06-DMP-Final v2.

The permit currently lists three air emission points, A1, A2 and A3. These emission points are shown on Drawing No. CE-FA-1921-DW01. It is proposed that the paint and aerosol treatment plant moves location, the location of emission point A2 will also move.

Emission point A1 comprises an exhaust stack emission to atmosphere from the WEEE plant. Emission point A2 is from a combined single stack from the aerosol and paint plant and paint processing plant and emission point A3 from the steam raising boiler.

Although it is proposed that emission point A2 moves location, the same abatement and emission prevention measures will be in place. The same monitoring requirements are also stipulated for this emission point.

Although the attritor is essentially a sealed unit, there is the potential for the emission of particulate matter at the end of the process. As such, emissions abatement for particulate matter will be incorporated into the plant.

There will be no emissions of NH_3 to air with this proposed variation.

2.37 BATs 42 – 44

There will be no re-refining of waste oil following this proposed variation.

2.38 BAT 45

The site currently undertake physico-chemical treatment of waste with calorific value in their WTEE waste treatment system. This system will not be altered with the proposed variation.

The permit currently lists three air emission points, A1, A2 and A3. These emission points are shown on Drawing No. CE-FA-1921-DW01. It is proposed that the paint and aerosol treatment plant moves location, the location of emission point A2 will also move.

Emission point A1 comprises an exhaust stack emission to atmosphere from the WEEE plant. Emission point A2 is from a combined single stack from the aerosol and paint plant and paint processing plant and emission point A3 from the steam raising boiler.

Although it is proposed that emission point A2 moves location, the same abatement and emission prevention measures will be in place. The same monitoring requirements are also stipulated for this emission point.

Although the attritor is essentially a sealed unit, there is the potential for the emission of particulate matter at the end of the process. As such, emissions abatement for particulate matter will be incorporated into the plant.

2.39 BAT 46 & 47

There will be no regeneration of spent solvents with this proposed variation.

2.40 BAT 48 & 49

There will be no thermal treatment of spent activated carbon, waste catalysts and excavated contaminated soil with this proposed variation.

2.41 BAT 50

There will be no water washing of excavated contaminated soil with this proposed variation.

2.42 BAT 51

The proposed attritor system will not treat WEEE waste containing PCBs and therefore will not require decontamination.

2.43 BAT 52

The site will not treat water-based liquid waste. Although the proposed non-hazardous WEEE treatment plant will deal with water-based liquids, these liquids will be drained from containers and stored to await removal from the site.

Water based liquid wastes may be bulked up on Site (provided that they are suitably compatible).

2.44 BAT 53

The site will not treat water-based liquid waste. Although the proposed non-hazardous WEEE treatment plant will deal with water-based liquids, these liquids will be drained from containers and stored to await removal from the site.

Section 3.0: Assessment Against "Waste Electrical and Electronic Equipment (WEEE): Appropriate Measures for Permitted Facilities"

The following section assesses compliance against "Waste electrical and electronic equipment (WEEE): appropriate measures for permitted facilities" as requested by the EA.

3.1 General Management Appropriate Measures

3.1.1 Management System

1. An Environmental Management System (EMS) has been prepared to support Aquaforce's application to vary the permit.

The Operator is committed to include the following features within the Site's EMS:

- Commitment of the management, including senior management;
- Definition, by the management, of an environmental policy that includes the continuous improvement of the environmental performance of the installation;
- Planning and establishing the necessary procedures, objectives and targets, in conjunction with financial planning and investment;
- Implementation of procedures paying particular attention to:
    - Structure and responsibility,
    - Recruitment, training, awareness and competence,
    - Communication,
    - Employee involvement,
    - Documentation,
    - Effective process control,
    - Maintenance programmes,
    - Emergency preparedness and response,
    - Safeguarding compliance in line with the Site's environmental permit;
- Checking performance and taking corrective action, paying particular attention to:
    - Monitoring and measurement,
    - Corrective and preventive action,
    - Maintenance of records,
    - Independent (where practicable) internal or external auditing in order to determine whether or not the EMS conforms to planned arrangements and has been properly implemented and maintained;
- Review, by senior management, of the EMS and its continuing suitability, adequacy and effectiveness;
- Following the development of cleaner technologies;
- Consideration for the environmental impacts from the eventual decommissioning of the plant at the stage of designing a new plant, and throughout its operating life;
- Application of sectoral benchmarking on a regular basis;
- Waste stream management;
- An inventory of waste water and waste gas streams;
- Residues management plan;

- Accident management plan;
- Odour management plan;
- Dust management plan;
- Site infrastructure plan;
- Site condition report;
- Fire prevention plan.

3.1.2 Staff Competence

1. The site has a COTC holder in place with an appropriate level of COTC award. The site chemist is degree level qualified in Chemistry or a related subject with similar discipline.

2. Site staff will be trained and instructed in procedures relevant to their role and will be aware of the requirements of the environmental permit and environmental management system.

3. The site has a COTC holder in place with an appropriate level of COTC award. The management structure in place at the site can be seen in the site's working plan (EMS).

4. There are two waste treatment operators on site. These operators are fully conversant with the requirements of the licence insofar as it is relevant to their duties.

Site staff will be trained and instructed in the procedures required to operate the Site and will be aware of the permitted waste types accepted at the Site as well as the requirements of the Environmental Permit and Management System.

3.1.3 Accident Management Plan

1. The operator is committed to developing an accident management plan as part of the proposed variation. A plan for dealing with any accidents or incidents is included within the EMS.

2. The accident management plan identifies and assesses the risks posed by the site to human health and environment.

3. The plan will consider:

- Waste types and the risks they pose;
- Robust waste acceptance procedures to avoid receiving unwanted items, such as gas cylinders
- Failure of abatement systems;
- Failure of plant and equipment;
- Failure of containment;
- Failure to contain firefighting water;
- Making the wrong connections in drains or other systems;
- Checking the composition of an effluent before emission (if relevant);
- Vandalism and arson;
- Extreme weather conditions, for example flooding or very high winds; and
- Loss of power.

4. The risk of accidents and their possible has been assessed.

5. The risk of fire has also been assessed.

A Fire Prevention and Mitigation Plan (FPP) has been prepared to support Aquaforce's application to vary the permit. The details of the FPP can be found in CE-FA-1921-RP08-FPP-Final v3. The FPP details control measures to reduce the likelihood of any fire.

6. The factors considered during the accident risk assessment include:

- Scale and nature of the accident hazard presented by the plant and its activities;
- Risks to areas of population and the environment; and
- Nature of the plant and complexity of the activities and how difficult it is to decide and justify adequate risk control techniques

7. The accident management plan also identifies the roles and responsibilities of the staff involved in managing accidents.

8. One facility employee has been appointed as an emergency co-ordinator who will take lead responsibility for implementing the plan.

Employees will also be trained so they can perform their duties effectively and safely and know how to respond to an emergency.

9. It has been established how the site will communicate with relevant authorities, emergency services and neighbours both before, during and after an accident.

The site will have appropriate emergency procedures, including for safe plant shutdown and site evacuation.

The site will have accident procedures that include assessing the harm that may have been caused by an accident and the remediation actions that will be taken.

The site will test the plan through emergency drills and exercises.

3.1.4 Accident Prevention Measures

1. A plan for dealing with any accidents will be included within the accident management plan as part of the proposed variation.

2. Although additional waste codes are proposed within this variation, there will be no wastes with additional hazardous properties accepted by the site and therefore, no additional waste segregation measures are required.

Aquaforce employ the use of a waste storage plan included in the EMS. Included in this plan is a storage matrix which identifies the wastes which require segregation and the type of segregation required.

3. The floor of the operational area is of concrete, of unknown, but substantial, thickness. All spillages are contained by this impervious surface. The whole operational area is bunded by its walls, with the exception of the entrance doors, which are protected by a 40mm cement lip.

Storage, quarantine, bulking and reception areas for wastes are:

- Indoors so run off from precipitation will not occur.
- Are performed in an area with nil drainage with no access to discharge to watercourse or sewer, storm or foul.

There are additional free-standing bunds to prevent mixing of chemically incompatible wastes. Some wastes do not contain any free liquid and are not readily chemically reactive and therefore when containerised will not require additional drainage or bunding.

3.1.4.1 Physical treatment – additional plant - attrittor

The attritor plant is designed to remove any residual liquids from the containers which are released into a container beneath the drum. Liquids are stored in IBC’s or drums as appropriate in designated bays according to the substance type pending transferal off-Site for disposal or recovery at an authorised facility.

Dry packaging is crushed and passes through paddles and centrifuged before being conveyed out of the drum and bulked up prior to transferral for recovery or disposal to a facility licenced to do so according to packaging type.

Bunding will encompass the plant and will comprise of a 22 cm sleeping policeman capable of containing 110% of the maximum capacity of the attritor contents i.e. 10 m^3. The walls of the building will additionally serve as secondary containment for any spillages from the plant.

The location of the present chemical waste storage will expand and include those areas shown on Drawing CE-FA-1921-DW01 Rev A. The storage matrix within the Waste Storage Procedure outlines the procedure by which the Operator identifies wastes which require segregation and the type of segregation required. The Waste Storage Procedure is included within the EMS.

In the event of a major fire requiring the intervention of the Fire Brigade, it is considered that firewater would be contained by the building itself and existing bunding. retained by the lip-bunds and walls of the site, up to the maximum capacity of the bunding. In Absorbent booms are available in the site stores for deployment across the doorways to contain oil which may be disturbed during any firefighting activities. These will also increase the effective volume of the bunded area, containing most of the firewater.

4. The floor of the operational area is of concrete, of unknown, but substantial, thickness. All spillages are contained by this impervious surface. The whole operational area is bunded by its walls, with the exception of the entrance doors, which are protected by a 40mm cement lip.

Storage, quarantine, bulking and reception areas for wastes are:

- Indoors so run off from precipitation will not occur.
- Are performed in an area with nil drainage with no access to discharge to watercourse or sewer, storm or foul.

There are additional free-standing bunds to prevent mixing of chemically incompatible wastes. Some wastes do not contain any free liquid and are not readily chemically reactive and therefore when containerised will not require additional drainage or bunding.

The attritor plant is designed to remove any residual liquids from the containers which are released into a container beneath the drum. Separated liquids are collected in IBC's or drums as appropriate in designated bays according to the substance type pending transferal off-Site for disposal or recovery at an authorised facility.

Dry packaging is crushed/shred and passes through paddles and centrifuged before being conveyed out of the drum and bulked up prior to transferral for recovery or disposal to a facility licenced to do so according to packaging type.

Bunding will encompass the plant and will comprise of a 22 cm sleeping policeman capable of containing 110% of the maximum capacity of the attritor contents i.e. 10 m^3. The walls of the building will additionally serve as secondary containment for any spillages from the plant.

The waste chemical storage areas are shown on Drawing CE-FA-1921-RP01-DW01. The Operator employs a storage matrix within the Waste Storage Procedure outlines the procedure by which the Operator identifies wastes which require segregation and the type of segregation required. The proposed additional waste codes will be stored in accordance with the storage matrix.

The containment measure capacities have been calculated through consideration of the following:

- Nature of the pollutants;
- Sensitivity of the receiving environment.

5. All wastewater from buffer storage will be entirely contained and not discharged to ground, surface water or sewer.

6. Stocks of oil-absorbent granules, brooms and shovels, PPE and a clip-top 45- gallon drum are kept within the office/stores for use in cleaning up any spillage.

The whole operational area is bunded by its walls, with the exception of the entrance doors, which are protected by a 40mm cement lip.

Inspection for leaks or spillages is continuous during normal operation and takes place formally each day as part of the site inspection procedures. Any spillages other than minor occurrences will be reported to the EA immediately and recorded in the site diary.

7. In the event of a major fire requiring the intervention of the Fire Brigade, water used would be retained by the lip-bunds and walls of the site, up to the maximum capacity of the bunding. Any additional fire water would flow out of the site and enter the surface water system of the Industrial Estate. Absorbent booms are available in the site stores for deployment across the doorways to contain oil which may be disturbed during any firefighting activities. These will also increase the effective volume of the bunded area, containing most of the firewater.

A Fire Prevention and Mitigation Plan (FPP) has been prepared to support Aquaforce's application to vary the permit. The details of the FPP can be found in CE-FA-1921-RP08-FPP-Final v3.

8. The waste chemical storage areas are shown on Site Layout Plan Drawing CE-FA-1921-RP01-DW01 Rev A. The Operator employs a storage matrix within the Waste Storage Procedure outlines the procedure by which the Operator identifies wastes which require segregation and the type of segregation required. The proposed additional waste codes will be stored in accordance with the storage matrix.

Any diffuse emissions of dust or odour will be controlled through the measures stipulated in the respective dust and odour management plans.

9. The site is bounded by hedgerows and fencing and CCTV is installed near the Site entrance as well as in strategic positions throughout the Site, both internal and external, which detect vehicles and people entering the premises. In the event of unauthorised public access to the Site, security measures will be reviewed and increased in the event of unlawful entry.

10. The site is bounded by hedgerows and fencing and CCTV is installed near the Site entrance as well as in strategic positions throughout the Site, both internal and external, which detect vehicles and people entering the premises. In the event of unauthorised public access to the Site, security measures will be reviewed and increased in the event of unlawful entry.

11. A Fire Prevention and Mitigation Plan (FPP) has been prepared to support Aquaforce's application to vary the permit. The details of the FPP can be found in CE-FA-1921-RP08-FPP-Final.

This plan sets out control measures which aim to:

- Minimise the likelihood of a fire happening
- Aim for a fire to be extinguished within 4 hours
- Minimise the spread of fire within the site and to neighbouring sites

12. A Fire Prevention and Mitigation Plan (FPP) has been prepared to support Aquaforce's application to vary the permit. The details of the FPP can be found in CE-FA-1921-RP08-FPP-Final v3.

13.The plant is designed to shut down immediately should any emissions outside benchmark levels be detected. It cannot be restarted until the cause of the emissions have been investigated and rectified. Authorisation for re-start is the responsibility of the Plant Manager, who holds the only Lock-out key. Any alarm triggers are automatically recorded, and will be reported, along with rectification measures taken, to the Environment Agency without delay. Details will be recorded in the Site diary.

The site also make use of the following on relevant equipment:

- Alarms;
- Process trips and interlocks;

- Automatic systems; and
- Manual interventions;

14. The plant is designed to shut down immediately should any emissions outside benchmark levels be detected. It cannot be restarted until the cause of the emissions have been investigated and rectified. Authorisation for re-start is the responsibility of the Plant Manager, who holds the only Lock-out key. Any alarm triggers are automatically recorded, and will be reported, along with rectification measures taken, to the Environment Agency without delay. Details will be recorded in the Site diary.

All equipment and infrastructure on Site will be inspected, serviced and maintained as per manufacturer guidance and 'Preventative Maintenance Checklist'. Any maintenance works required will be recorded on the 'Maintenance Record'. These can be seen in the EMS.

Spontaneously combustible materials are not accommodated on site and therefore will not be accepted. The location of the present chemical waste storage will expand and include those areas shown on Drawing CE-FA-1921-DW01 Rev A. The storage matrix within the Waste Storage Procedure outlines the procedure by which the Operator identifies wastes which require segregation and the type of segregation required. The Waste Storage Procedure is included within the EMS.

15. The site's EMS which has been developed for this proposed variation contains an environmental accident and incident form. A maintenance checklist and record is also contained within this EMS.

The site also make use of a waste tracking system which contains the following information:

- Waste storage area;
- Date of arrival;
- Job number (refers to producer deceleration);
- EWC code;
- Waste description;
- Components and concentration;
- Quantity;
- Container type;
- Disposal point;
- Price and quote number;
- Lab analysis required;
- Unique ID number;
- Bay number;
- Verification completed by;
- Non conformance reference;
- HP codes; and
- Activity

Wastes to be bulked will be tested prior to bulking to ensure compatibility. This procedure is detailed in the site's waste acceptance procedure (EMS) and will not change following the proposed variation. The Waste Storage Plan is used to ensure wastes are stored correctly (see EMS). Included in this plan is a storage matrix which identifies the wastes which require segregation and the type of segregation required.

Documentation and all records required in accordance with the environmental permit will be kept in the site office. Where at all possible, records will be electronic.

3.1.5 Contingency Plan and Procedures

1. The Site are committed to preparing a Site contingency plan. This will include information on how permit conditions and operating procedures will be complied with during maintenance or shutdown.

2. The contingency plan will include provisions and procedures to ensure the site:

- Do not exceed storage limits in your permit and continue to apply appropriate measures for storing and handling waste;

- Stop accepting waste unless there is a clearly defined method of recovery or disposal and enough permitted storage capacity;
- As far as possible, know in advance about any planned shutdowns at waste management facilities where waste is sent.

The contingency plan includes plans and procedures for circumstances where wastes cannot be sent to other sites due to their planned or unplanned shutdown.

3. No end-of-waste material is produced at the site.

4. Customers will be made aware of the contingency plan, and of the circumstances in which waste would not be accepted.

5. It has been considered whether sites or companies which are relied on:

- Can take the waste at short notice; and
- Are authorised to do so in the quantities and types likely to be needed – in addition to carrying out their existing activities

6. Where circumstances mean that the site could exceed the permitted storage limits or compromise storage procedures, alternative disposal or recovery options will be evaluated. Disposal or recovery options based on extra cost or geographical distance will not be discounted.

7. Unauthorised capacity has not been included in the contingency plan.

8. The contingency plan and management procedures:

- Identify known or predictable malfunctions associated with your technology and the procedures, spare parts, tools and expertise needed to deal with them;
- Include a record of spare parts held, especially critical spares;
- Have a defined procedure to identify, review and prioritise items of plant which need a preventative regime;
- Include all equipment or plant whose failure could directly or indirectly lead to an impact on the environment or human health;
- Identify ‘non-productive’ or redundant items such as tanks, pipework, retaining walls, bunds, reusable waste containers, ducts, filters and security systems; and
- Make sure the site has the spare parts, tools, and competent staff needed before starting maintenance.

9. The EMS system developed for this proposed variation includes procedures for auditing performance against all contingency measures and reporting these audit results to the site manager.

3.1.6 Plant Decommissioning

1. The Site are committed to preparing a decommissioning plan for to minimise risks during later decommissioning.

2. Potential decommissioning risks will be addressed for existing plant. Changes and design improvements will be made as and when the plant is upgraded, or when construction and development works are carried out.

3. The site have implemented, as part of the proposed variation, a decommissioning plan to demonstrate that:

- Plant will be decommissioned without causing pollution; and
- The site will be returned to a satisfactory condition.

4. The decommissioning plan will includes details on:

- Whether pipelines and vessels will be flushed and how they will be emptied of any potentially harmful contents;
- Site plans showing the location of all underground pipes and vessels;
- How asbestos materials will be removed;
- Methods for dismantling buildings and other structures, and for protecting surface water and groundwater during construction or demolition at the site;
- Soil testing needed to check for any pollution caused by the site activities, and information on any remediation needed to return the site to a satisfactory state when activities are ceased, as defined by the initial site condition report;
- The measures proposed, once activities have definitively stopped, to avoid any pollution risk and to return the site of operation to a satisfactory state; and
- The clearing of deposited residues, waste and any contamination resulting from the waste treatment activities.

5. Equipment taken out of use will be decontaminated and removed from the site.

3.2 Waste Pre-acceptance, Acceptance and Tracking Appropriate Measures

3.2.1 Waste Pre-acceptance

1. The site's waste pre-acceptance procedure is included in the EMS

2. The site's waste pre-acceptance procedure is included in the EMS

3. The site's waste pre-acceptance procedure is included in the EMS

4. The site's waste pre-acceptance procedure is included in the EMS

5. The site's waste pre-acceptance procedure is included in the EMS

6. The site's waste pre-acceptance procedure is included in the EMS

7. The site's waste pre-acceptance procedure is included in the EMS

8. The site's waste pre-acceptance procedure is included in the EMS

9. The site's waste pre-acceptance procedure is included in the EMS

3.2.2 Waste Acceptance

1. The site's waste acceptance procedure is included in the EMS.

2. The site's waste acceptance procedure is included in the EMS.

3. The site's waste acceptance procedure is included in the EMS.

4. The site make use of a waste tracking system which is used to determine the quantity of waste on site and therefore, the remaining waste capacity. The quantity of incoming waste is verified during the waste pre-acceptance and waste acceptance procedures. This waste tracking system and inventory takes into account the hazardous properties of the waste, the risks posed by the waste in terms of process safety, occupational safety and environmental impact, as well as the information provided by the previous waste holder(s).

The site also maintain a stock inventory of wastes, inspection of storage areas is performed so as to assess waste quantities on site. Waste will not be accepted if there is insufficient storage capacity available or if the site is inadequately manned.

The calculations used to determine the maximum storage of individual storage areas is included in the storage procedure document (EMS).

5. Storage, quarantine, bulking and reception areas for wastes are:

- Indoors so run off from precipitation will not occur.
- On impervious surface.
- Bunded therefore containing all contaminated run off.
- Are performed in an area with nil drainage with no access to discharge to watercourse or sewer, storm or foul.

All wastewater from buffer storage will be entirely contained and not discharged to ground, surface water or sewer.

6. The site's storage plan (EMS) details the materials reception area which is used for all incoming wastes.

Site staff will be trained and instructed in the procedures required to operate the Site and will be aware of the permitted waste types accepted at the Site as well as the requirements of the Environmental Permit and Management System.

7. The site's waste acceptance procedure is included in the EMS.

8. The site's waste acceptance procedure is included in the EMS.

9. The site's waste acceptance procedure is included in the EMS.

10. The site's waste acceptance procedure is included in the EMS.

11. The site's waste acceptance procedure is included in the EMS.

12. The site's waste acceptance procedure is included in the EMS.

13. A quarantine area will be clearly identified and marked on site to allow the segregation of unsuitable or combusted material. The quarantine area has a 6m separation distance around it and is shown on Drawing No: CE-FA-1921-DW01.

14. Waste sent to quarantine storage will be stored there for a maximum of fourteen working days before being removed from site. Quarantined waste will be removed, as soon as practicable in appropriate vehicles and properly disposed of at a suitably permitted site.

15. Quarantine procedures will be detailed in the site's storage procedures in the EMS and consists of marking up quarantine material with red and white tape so they can be easily identified prior to storing them in the usual storage bays with other compatible chemicals.

16. The quarantine area has a 6m separation distance around it and is shown on Drawing No: CE-FA-1921-DW01.

3.2.3 Waste Tracking

1. The site's waste acceptance procedure (EMS) contains information regarding the waste tracking system and inventory in place at the site, it is ensured that the information within this system is kept up-to-date. This system will be updated to allow for the inclusion of the proposed additional waste codes and waste treatment route.

2. The site's waste acceptance procedure (EMS) contains information regarding the waste tracking system and inventory in place at the site, it is ensured that the information within this system is kept up-to-date. This system will be updated to allow for the inclusion of the proposed additional waste codes and waste treatment route.

The site's waste tracking system contains the following information:

- Waste storage area;
- Date of arrival;
- Job number (refers to producer deceleration);
- EWC code;
- Waste description;
- Components and concentration;
- Quantity;
- Container type;
- Disposal point;
- Price and quote number;
- Lab analysis required;
- Unique ID number;
- Bay number;
- Verification completed by;
- Non conformance reference;
- HP codes; and
- Activity

Copies of Waste Transfer Notes, Consignment Notes, Season Tickets, Pre-Acceptance Declaration Documentation and all records required in accordance with the Environmental Permit will be kept in the Site office. Where at all possible, records will be electronic.

3. The site's waste acceptance procedure (EMS) contains information regarding the waste tracking system and inventory in place at the site, it is ensured that the information within this system is kept up-to-date. This system will be updated to allow for the inclusion of the proposed additional waste codes and waste treatment route.

The site's waste tracking system contains the following information:

- Waste storage area;
- Date of arrival;
- Job number (refers to producer deceleration);
- EWC code;
- Waste description;
- Components and concentration;
- Quantity;
- Container type;
- Disposal point;
- Price and quote number;
- Lab analysis required;
- Unique ID number;
- Bay number;
- Verification completed by;
- Non conformance reference;
- HP codes; and
- Activity

4. The site's waste acceptance procedure (EMS) contains information regarding the waste tracking system and inventory in place at the site, it is ensured that the information within this system is kept up-to-date. This system will be updated to allow for the inclusion of the proposed additional waste codes and waste treatment route.

The site's waste tracking system contains the following information:

- Waste storage area;
- Date of arrival;
- Job number (refers to producer deceleration);
- EWC code;

- Waste description;
- Components and concentration;
- Quantity;
- Container type;
- Disposal point;
- Price and quote number;
- Lab analysis required;
- Unique ID number;
- Bay number;
- Verification completed by;
- Non conformance reference;
- HP codes; and
- Activity

5. Backup copies of computer records will be stored off-site.

6. Acceptance records are kept for 2 years after the waste has been treated or removed off site. Hazardous waste consignment notes are kept for 5 years.

3.3 Waste Storage, Segregation and Handling Appropriate Measures

3.3.1 General Waste Storage

1. Although additional waste codes are proposed within this variation, these wastes are similar to what is already accepted at the site and therefore, there will be no change to the handling and transfer procedures used on site.

It is ensured that handling and transfer procedures:

- Are carried out by competent staff;
- Are duly documented, validated prior to execution and verified after execution; and
- Include measures to prevent, detect and mitigate spills.

2. The proposed waste storage layout can be seen on Site Layout Plan CE-FA-1921-DW01 Rev A. It has been ensured that all waste storage locations will be located as far as technically possible from sensitive receptors.

3. The site is bounded by hedgerows and fencing and CCTV is installed near the Site entrance as well as in strategic positions throughout the Site, both internal and external, which detect vehicles and people entering the premises. In the event of unauthorised public access to the Site, security measures will be reviewed and increased in the event of unlawful entry.

4. The site make use of a waste tracking system which is used to determine the quantity of waste on site and therefore, the remaining waste capacity. The quantity of incoming waste is verified during the waste pre-acceptance and waste acceptance procedures. This waste tracking system and inventory takes into account the hazardous properties of the waste, the risks posed by the waste in terms of process safety, occupational safety and environmental impact, as well as the information provided by the previous waste holder(s).

The site also maintain a stock inventory of wastes, inspection of storage areas is performed so as to assess waste quantities on site. Waste will not be accepted if there is insufficient storage capacity available or if the site is inadequately manned.

The calculations used to determine the maximum storage of individual storage areas is included in the storage procedure document (EMS).

5. The calculations used to determine the maximum storage of individual storage areas is included in the storage procedure document (EMS).

The site maintain a stock inventory of wastes, inspection of storage areas is performed so as to assess waste quantities on site. Waste will not be accepted if there is insufficient storage capacity available or if the site is inadequately manned.

6. Although additional waste codes are proposed within this variation, there will be no wastes with additional hazardous properties accepted by the site and therefore, there are no additional relevant Health and Safety Executive (HSE) guidance and standards to this variation.

7. The maximum storage time in the initial waste reception area is 5 days. The maximum storage time of wastes in total is 6 months.

Waste sent to quarantine storage will be stored there for a maximum of fourteen working days before being removed from site. Quarantined waste will be removed, as soon as practicable in appropriate vehicles and properly disposed of at a suitably permitted site.

8. All waste is stored to allow for easy inspection. There is also pedestrian and vehicular access to all storage areas.

9. Due to the nature of the waste materials accepted at the Site, i.e. WEEE, hazardous and non-hazardous waste, the risk from pests as a result of the operation of the proposed variation is considered insignificant.

10. Inspection for leaks or spillages is continuous during normal operation and takes place formally each day as part of the site inspection procedures. Any spillages other than minor occurrences will be reported to the EA immediately and recorded in the site diary.

11. Activities prohibited in waste storage areas to prevent fire:

- Smoking is banned across that whole site.
- Welding or metal working or any maintenance or activity that generates heat or sparks can only be carried out when that storage area or containment system being worked in or on is empty and clean – ensuring any adjacent storage areas are made safe.

12. The site's storage areas have been assessed in terms of storage risk and the storage layout (as seen in EMS) has taken this risk into consideration.

13. There will be no outdoor waste storage following the proposed variation.

14. The floor of the operational area is of concrete, of unknown, but substantial, thickness. All spillages are contained by this impervious surface. The whole operational area is bunded by its walls, with the exception of the entrance doors, which are protected by a 40mm cement lip.

Storage, quarantine, bulking and reception areas for wastes are:

- Indoors so run off from precipitation will not occur.
- On impervious surface.
- Bunded therefore containing all contaminated run off.
- Are performed in an area with nil drainage with no access to discharge to watercourse or sewer, storm or foul.

There are additional free-standing bunds to prevent mixing of chemically incompatible wastes. Some wastes do not contain any free liquid and are not readily chemically reactive and therefore when containerised will not require additional drainage or bunding.

Stocks of oil-absorbent granules, brooms and shovels, PPE and a clip-top 45- gallon drum are kept within the office/stores for use in cleaning up any spillage.

15. All storage areas are indoors; this will continue following the proposed variation. There is therefore no requirement for weatherproof coverings.

16. All storage areas are indoors; this will continue following the proposed variation. There is therefore no requirement for weatherproof coverings.

17. All storage areas are indoors; this will continue following the proposed variation. There is therefore no requirement for weatherproof coverings.

18. Stocks of oil-absorbent granules, brooms and shovels, PPE and a clip-top 45- gallon leakproof drum are kept within the office/stores for use in cleaning up any spillage.

Spillages are collected without delay, the areas affected by spillages are also cleaned without delay.

19. Forklift drivers are trained in the handling of waste, to minimise forklift truck damage to the integrity of containers or individual appliances.

20. The attritor plant is designed to remove any residual liquids from the containers which are released into a container beneath the drum. Liquids are stored in IBC's or drums as appropriate in designated bays according to the substance type pending transferal off-Site for disposal or recovery at an authorised facility.

Bunding will encompass the plant and will comprise of a 22 cm sleeping policeman capable of containing 110% of the maximum capacity of the attritor contents i.e. 10 m^3. The walls of the building will additionally serve as secondary containment for any spillages from the plant.

Although the site are proposing to move the current hazardous waste treatment plant, the same treatment storage measures will be in place in the new location.

21. Dry packaging is crushed and passes through paddles and centrifuged before being conveyed out of the drum and bulked up prior to transferral for recovery or disposal to a facility licenced to do so according to packaging type.

Although the site are proposing to move the current hazardous waste treatment plant, the same treatment storage measures will be in place in the new location.

All waste storage will be indoors and therefore, covering is not necessary.

22. All waste storage containers will be clearly labelled.

23. Lithium-ion batteries will not be stored.

3.3.2 Additional Storage Requirements for Specific Categories of WEEE

1. Although fluorescent tubes are stored and treated on site, there will no changes to this process following the proposed variation.

2. Although fluorescent tubes are stored and treated on site, there will no changes to this process following the proposed variation.

3. Although fluorescent tubes are stored and treated on site, there will no changes to this process following the proposed variation.

4. Although fluorescent tubes are stored and treated on site, there will no changes to this process following the proposed variation.

5. Although fluorescent tubes are stored and treated on site, there will no changes to this process following the proposed variation.

6. Although fluorescent tubes are stored and treated on site, there will no changes to this process following the proposed variation.

7. Although fluorescent tubes are stored and treated on site, there will no changes to this process following the proposed variation.

8. Flat panel display equipment will not be stored on site.

9. Flat panel display equipment will not be stored on site.

10. Flat panel display equipment will not be stored on site.

11. Flat panel display equipment will not be stored on site.

12. Flat panel display equipment will not be stored on site.

13. Cathode ray tube equipment will not be stored on site.

14. Cathode ray tube equipment will not be stored on site.

15. Cathode ray tube equipment will not be stored on site.

16. Small mixed WEEE waste will not be stored on site.

17. Photovoltaic panels will not be stored on site.

18. Photovoltaic panels will not be stored on site.

3.4 Waste Treatment

3.4.1 Preparing WEEE for Reuse

1. Although additional waste codes are proposed within this variation, all new wastes will be similar to what is already treated on site and therefore, the current WEEE treatment processes will not change with the proposed variation. Although it is proposed that the paint and aerosol treatment plant is moved, the same processes will be in place.

The attritor will treat water-based paint and the associated paint cans.

The attritor plant is designed to remove any residual liquids from the containers which are released into a container beneath the drum. Liquids are stored in IBC's or drums as appropriate in designated bays according to the substance type pending transferal off-Site for disposal or recovery at an authorised facility.

Dry packaging is crushed and passes through paddles and centrifuged before being conveyed out of the drum and bulked up prior to transferral for recovery or disposal to a facility licenced to do so according to packaging type.

Bunding will encompass the plant and will comprise of a 22 cm sleeping policeman capable of containing 110% of the maximum capacity of the attritor contents i.e. 10 m^3. The walls of the building will additionally serve as secondary containment for any spillages from the plant.

2. There are no opportunities for on site re-use with the proposed variation. Off site recovery will be in place wherever possible. It will be ensured that all waste which is suitable for off site recovery is segregated as soon as possible.

3. Although it is proposed that the paint and aerosol treatment plant is moved, the same processes will be in place.

All waste will be stored indoors and therefore weatherproof covering is not required. The attritor plant is designed to remove any residual liquids from the containers which are released into a container beneath the drum. Liquids are stored in IBC's or drums as appropriate in designated bays according to the substance type pending transferal off-Site for disposal or recovery at an authorised facility.

Dry packaging is crushed and passes through paddles and centrifuged before being conveyed out of the drum and bulked up prior to transferral for recovery or disposal to a facility licenced to do so according to packaging type.

Bunding will encompass the plant and will comprise of a 22 cm sleeping policeman capable of containing 110% of the maximum capacity of the attritor contents i.e. 10 m^3. The walls of the building will additionally serve as secondary containment for any spillages from the plant.

Water-based paint will be transported off site via bulk tanker for recovery.

4. No waste which is POPs waste will be added following the proposed variation.

5. Although additional waste codes are proposed within this variation, all new wastes will be similar to what is already treated on site and therefore, the current WEEE treatment processes will not change with the proposed variation. Although it is proposed that the paint and aerosol treatment plant is moved, the same processes will be in place.

WEEE waste which has been treated by the attritor will not be reused on site and will instead be transported off site for recovery.

6. Although additional waste codes are proposed within this variation, all new wastes will be similar to what is already treated on site and therefore, the current WEEE treatment processes will not change with the proposed variation. Although it is proposed that the paint and aerosol treatment plant is moved, the same processes will be in place.

WEEE waste which has been treated by the attritor will not be reused on site and will instead be transported off site for recovery.

7. Although the site undertake the treatment of fridge waste (including the removal of refrigerants), this process will not change with the proposed variation.

3.4.2 General Waste Treatment

1. Although additional waste codes are proposed within this variation, all new wastes will be similar to what is already treated on site and therefore, the current WEEE treatment processes will not change with the proposed variation. Although it is proposed that the paint and aerosol treatment plant is moved, the same processes will be in place.

The attritor will treat WEEE waste (in the form of paint cans of water-based paint), both the paint and paint cans be stored and subsequently transported off site for energy recovery.

2. The treated output material from the WTEE waste treatment plant goes through extensive monitoring procedures as seen in Working Plan (contained in EMS) to ensure the expectations of output material are met and is suitable for its intended disposal or recovery.

The waste output from the proposed attritor system which will be used to treat non-hazardous paints will go through analysis to identify its composition and weight, ensuring the expectations of output material are met and is suitable for its intended disposal or recovery. The same process will be used for the treatment of non-hazardous and hazardous waste in the paint and aerosol plant. Although it is proposed that this plant is moved location, all treatment processes undertaken within this plant will remain the same.

3. The treated output material from the WTEE waste treatment plant goes through extensive monitoring procedures as seen as seen in Working Plan (contained in EMS) to ensure the expectations of output material are met and is suitable for its intended disposal or recovery.

The waste output from the proposed attritor system which will be used to treat non-hazardous paints will go through analysis to identify its composition and weight, ensuring the expectations of output material are met and is suitable for its intended disposal or recovery. The same process will be used for the treatment

of non-hazardous and hazardous waste in the paint and aerosol plant. Although it is proposed that this plant is moved location, all treatment processes undertaken within this plant will remain the same.

4. A Dust and Emissions Management Plan has been prepared to support Aquaforce's application to vary the permit. The details of this plan can be found in CE-FA-1921-RP06-DMP-Final v2.

The permit currently lists three air emission points, A1, A2 and A3. These emission points are shown on Drawing No. CE-FA-1921-DW01. It is proposed that the paint and aerosol treatment plant moves location, the location of emission point A2 will also move.

Emission point A1 comprises an exhaust stack emission to atmosphere from the WEEE plant. Emission point A2 is from a combined single stack from the aerosol and paint plant and paint processing plant and emission point A3 from the steam raising boiler.

Although it is proposed that emission point A2 moves location, the same abatement and emission prevention measures will be in place. The same monitoring requirements are also stipulated for this emission point.

Although the attritor is essentially a sealed unit, there is the potential for the emission of particulate matter at the end of the process. As such, emissions abatement for particulate matter will be incorporated into the plant.

5. The site's waste pre-acceptance and acceptance procedures will ensure that the only waste accepted by the site is suitable for the appropriate treatment. The site also maintain a waste tracking system which contains information on all relevant waste characteristics. This system will be updated to allow for the inclusion of the proposed additional waste codes and attritor treatment route.

The following information will be kept by the site and updated regularly:

- Simplified process flowsheets showing the different waste intakes, waste treatment processes and site outputs;
- Specification sheets of all main plant equipment;
- Schematics of all main plant equipment;
- Process descriptions (including air emissions abatement)
- Details of manual dismantling processes, for example removal of cables and plugs, removal of batteries, capacitors and printer cartridges, draining of oil from radiators;
- Details of physical treatment processes, for example shredding, separation, compaction, filtration, heating, cooling or washing;
- The control system philosophy and how the control system incorporates environmental monitoring information;
- Process flow diagrams (schematics);
- Venting and emergency relief provisions;
- A summary of operating and maintenance procedures;
- Process instrumentation diagrams

6. The site maintain up to date written details of the measures taken during abnormal conditions to make sure permit conditions are complied with.

7. The site's waste pre-acceptance and acceptance procedures will ensure that the only waste accepted by the site is suitable for the appropriate treatment. The site also maintain a waste tracking system which contains information on all relevant waste characteristics. This system will be updated to allow for the inclusion of the proposed additional waste codes and attritor treatment route.

8. The site's waste pre-acceptance and acceptance procedures will ensure that the only waste accepted by the site is suitable for the appropriate treatment. The site also maintain a waste tracking system which contains information on all relevant waste characteristics. This system will be updated to allow for the inclusion of the proposed additional waste codes and attritor treatment route.

The site's waste pre-acceptance and acceptance procedures along with the waste tracking system, allows for the consideration of the following:

- Waste input;
- Different waste treatment outputs; and
- Waste treatment emissions.

9. The site's waste pre-acceptance and acceptance procedures will ensure that the only waste accepted by the site is suitable for the appropriate treatment. The site also maintain a waste tracking system which contains information on all relevant waste characteristics. This system will be updated to allow for the inclusion of the proposed additional waste codes and attritor treatment route.

10. The site's waste pre-acceptance and acceptance procedures considers:

- The hazardous properties of the waste;
- The restricted chemicals in the waste;
- The risks posed by the waste in terms of process safety;
- Occupational safety and environmental impact; and
- Knowledge of the previous waste holders.

11. Although additional waste codes are proposed within this variation, all new wastes will be similar to what is already treated on site and therefore, the current WEEE treatment processes will not change with the proposed variation. Although it is proposed that the paint and aerosol treatment plant is moved, the same processes will be in place.

The proposed attritor treatment system will not have any associated emissions to water or ground. All water-based paint will be contained within the system before being stored and transported off site for recovery.

A Dust and Emissions Management Plan has been prepared to support Aquaforce's application to vary the permit. The details of this plan can be found in CE-FA-1921-RP06-DMP-Final v2.

The permit currently lists three air emission points, A1, A2 and A3. These emission points are shown on Drawing No. CE-FA-1921-DW01. It is proposed that the paint and aerosol treatment plant moves location, the location of emission point A2 will also move.

Emission point A1 comprises an exhaust stack emission to atmosphere from the WEEE plant. Emission point A2 is from a combined single stack from the aerosol and paint plant and paint processing plant and emission point A3 from the steam raising boiler.

Although it is proposed that emission point A2 moves location, the same abatement and emission prevention measures will be in place. The same monitoring requirements are also stipulated for this emission point.

Although the attritor is essentially a sealed unit, there is the potential for the emission of particulate matter at the end of the process. As such, emissions abatement for particulate matter will be incorporated into the plant.

The site will develop and maintain a residues management plan as part of this proposed variation.

12. Treatment will not go ahead if the site's risk assessment indicates that losses from a process will cause:

- The breach of an environmental quality standard;
- The breach of a benchmark; or
- A significant environmental impact.

A Dust and Emissions Management Plan has been prepared to support Aquaforce's application to vary the permit. The details of this plan can be found in CE-FA-1921-RP06-DMP-Final v2.

The permit currently lists three air emission points, A1, A2 and A3. These emission points are shown on Drawing No. CE-FA-1921-DW01. It is proposed that the paint and aerosol treatment plant moves location, the location of emission point A2 will also move.

Emission point A1 comprises an exhaust stack emission to atmosphere from the WEEE plant. Emission point A2 is from a combined single stack from the aerosol and paint plant and paint processing plant and emission point A3 from the steam raising boiler.

Although it is proposed that emission point A2 moves location, the same abatement and emission prevention measures will be in place. The same monitoring requirements are also stipulated for this emission point.

13. An EMS has been prepared to support Aquaforce's application to vary the permit. The details of the EMS can be found in CE-FA-1921-RP01-EMS-Final v2.

Contained within this EMS is a written procedure for proposing, considering and approving changes to technical developments, or to procedural or quality changes.

14. Although additional waste codes are proposed within this variation, all new wastes will be similar to what is already treated on site and therefore, the current WEEE treatment processes will not change with the proposed variation. Although it is proposed that the paint and aerosol treatment plant is moved, the same processes will be in place.

The proposed attritor system will be fully enclosed and undertaken within the site building. All air emissions from this system will pass through a non-fabric filter to remove particulates. There will be no emissions to water or ground from this system.

15. Although additional waste codes are proposed within this variation, all new wastes will be similar to what is already treated on site and therefore, the current WEEE treatment processes will not change with the proposed variation. Although it is proposed that the paint and aerosol treatment plant is moved, the same processes will be in place.

All water-based paint will be removed via the attritor system before being stored and transported off site for recovery.

16. Although additional waste codes are proposed within this variation, all new wastes will be similar to what is already treated on site and therefore, the current WEEE treatment processes will not change with the proposed variation. Although it is proposed that the paint and aerosol treatment plant is moved, the same processes will be in place.

The proposed attritor treatment system will not have any associated emissions to water or ground. All water-based paint will be contained within the system before being stored and transported off site for recovery.

17. Although additional waste codes are proposed within this variation, all new wastes will be similar to what is already treated on site and therefore, the current WEEE treatment processes will not change with the proposed variation. Although it is proposed that the paint and aerosol treatment plant is moved, the same processes will be in place.

All water-based paint will be removed via the attritor system before being stored and transported off site for recovery.

18. The characteristics of the waste, as determined by the site's pre-acceptance, acceptance and waste tracking system will be provided to recipients upon removal from the site.

19. The hazardous properties of wastes will be identified during the pre-acceptance and acceptance procedures. Wastes containing unacceptable hazardous properties will not be accepted by the site.

20. Although additional waste codes are proposed within this variation, all new wastes will be similar to what is already treated on site and therefore, the current WEEE treatment processes will not change with the proposed variation. Although it is proposed that the paint and aerosol treatment plant is moved, the same processes will be in place.

The proposed attritor treatment system will not have any associated emissions to water or ground. All water-based paint will be contained within the system before being stored and transported off site for recovery.

21. Although additional waste codes are proposed within this variation, all new wastes will be similar to what is already treated on site and therefore, the current WEEE treatment processes will not change with the proposed variation. Although it is proposed that paint and aerosol treatment plant is moved, the same processes will be in place.

There will be no removal of components associated with the proposed attritor system.

22. Although additional waste codes are proposed within this variation, all new wastes will be similar to what is already treated on site and therefore, the current WEEE treatment processes will not change with the proposed variation. Although it is proposed that the paint and aerosol treatment plant is moved, the same processes will be in place.

There will be no removal of components associated with the proposed attritor system.

23. Although additional waste codes are proposed within this variation, all new wastes will be similar to what is already treated on site and therefore, the current WEEE treatment processes will not change with the proposed variation. Although it is proposed that the paint and aerosol treatment plant is moved, the same processes will be in place.

There will be no removal of components associated with the proposed attritor system.

24. Battery waste will not be accepted by the site.

25. Lithium and lithium ion-batteries will not be accepted by the site.

26. There will be no outdoor WEEE treatment areas associated with the proposed variation.

27. Although additional waste codes are proposed within this variation, all new wastes will be similar to what is already treated on site and therefore, the current WEEE treatment processes will not change with the proposed variation. Although it is proposed that the paint and aerosol treatment plant is moved, the same processes will be in place.

The floor of the operational area is of concrete, of unknown, but substantial, thickness. All spillages are contained by this impervious surface. The whole operational area is bunded by its walls, with the exception of the entrance doors, which are protected by a 40mm cement lip.

Stocks of oil-absorbent granules, brooms and shovels, PPE and a clip-top 45- gallon drum are kept within the office/stores for use in cleaning up any spillage.

28. All WEEE treatment will take place indoors.

3.4.3 Treatment of WEEE Containing BFRs and POPs

Although additional waste codes are proposed within this variation, all new wastes will be similar to what is already treated on site and therefore, the current WEEE treatment processes will not change with the proposed variation. Although it is proposed that the paint and aerosol treatment plant is moved, the same processes will be in place.

The proposed attritor system will not treat any WEEE containing BFRs or POPs.

3.4.4 Process Monitoring

1. Although additional waste codes are proposed within this variation, all new wastes will be similar to what is already treated on site and therefore, the current WEEE treatment processes will not change with the proposed variation Although it is proposed that the paint and aerosol treatment plant is moved, the same processes will be in place.

Once a year, the site will carry out a mass balance exercise on the proposed attritor system to determine and record the mass of each individual output fraction derived from a given mass of input material. It will be ensured the batch size is large enough so a representative sample is obtained.

2. The results of the previously mentioned mass balance exercise will be compared to the results of the exercise from the previous year, the site will then look to optimise their WEEE treatment processes following this comparison.

3. Although additional waste codes are proposed within this variation, all new wastes will be similar to what is already treated on site and therefore, the current WEEE treatment processes will not change with the proposed variation. Although it is proposed that the paint and aerosol treatment plant is moved, the same processes will be in place.

Although additional waste codes are proposed within this variation, all new wastes will be similar to what is already treated on site and therefore, the current WEEE treatment processes will not change with the proposed variation. Although it is proposed that the paint and aerosol treatment plant is moved, the same processes will be in place.

The proposed attritor treatment system will not have any associated emissions to water or ground. All water-based paint will be contained within the system before being stored and transported off site for recovery.

Off site process monitoring will not be required for WEEE waste treated by the attritor system.

4. The material testing, analysis procedures and methods used for the fridge treatment plant have been included in the Working Plan (EMS).

The site keep a record of all analysis undertaken on the outputs from the paint and aerosol plant, these same analysis methods will be used on the proposed attritor system.

5. Sample containers and packaging are chosen based on the nature and requirements of the contained materials.

6. Sample containers will be appropriately labelled.

7. All samples which will be taken will be representative of the waste and will be taken by the site chemist.

8. Samples will be stored in a dark, cool place and dispatched to the laboratory for analysis (where applicable) as soon as possible.

9. Sampling will be undertaken during normal operating conditions.

10. Should sampling show that any treatment plant does not meet any applicable standards, a report will be sent to the EA, summarising:

- The actions to be taken to improve performance in order to achieve the standards given, including any additional sampling and testing; and
- The dates these actions will be completed by, including the dates for any additional sampling and testing.

11. Waste fractions and residues will be sampled in line with appropriate guidance.

3.4.5 Treatment of Gas Discharge Lamps

Although fluorescent tubes are stored and treated on site, there will no changes to this process following the proposed variation.

3.4.6 Treatment of Cathode Ray Tube (CRT) Equipment

There will be no CRT equipment treated on site.

3.4.7 Treatment of FPD Equipment

There will be no treatment of FPD equipment on site.

3.4.8 Treatment of SMW

There will be no treatment of SMW on site.

3.4.9 Treatment of IT, Telecommunications and Business Equipment.

There will be no treatment of IT, telecommunications or business equipment on site.

3.4.10 Treatment of LDA

Although LDA, such as fridges, are stored and treated on site, there will be changes to this process following the proposed variation.

3.4.11 Treatment of Photovoltaic Panels

There will be no treatment of photovoltaic panels on site.

3.4.12 Post-shredding Treatments

Although it is proposed that the paint and aerosol treatment plant is moved, the same processes will be in place.

Although WEEE waste will be shredded on site. The proposed attritor system will not undertake any shredding of WEEE.

3.4.13 Record Keeping for All Treatment Residues

1. The site's waste acceptance procedure (EMS) contains information regarding the waste tracking system and inventory in place at the site, it is ensured that the information within this system is kept up-to-date. This system will be updated to allow for the inclusion of the proposed additional waste codes and waste treatment route.

It will be ensured that the following is recorded in the waste tracking system:

- That the WEEE has been treated or consigned to another WEEE treatment facility;
- What WEEE has been consigned to a preparing for reuse operator; and
- What the treatment residues, treated components and fractions are.

3.5 Emissions Control

3.5.1 Point Source Emissions to Air

There will be no additional point source emissions to air with the proposed variation.

3.5.2 Fugitive Emissions to Air (Including Odour)

1. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

There have been no substantiated odour complaints at the facility throughout its operation under environmental permit. However, it is not anticipated that there will be odour nuisance at sensitive receptors, as a result of the site activities due to;

- Improved process control,
- Robust pre-acceptance measures,
- Enhanced training (both odour management and process control).

A Dust and Emissions Management Plan has been prepared to support Aquaforce's application to vary the permit. The details of this plan can be found in CE-FA-1921-RP06-DMP-Final.

In summary, the Dust and Emissions Management Plan contains the following control measures:

- Wastes delivered will mainly comprise of WEEE, waste paints, aerosols, airbags and hazardous liquids that are not inherently dusty. With the exception of receipt of the waste and exporting wastes off-Site, all Site activities are carried out within the confines of the building. Records of all incoming loads stored on Site or in a secure off Site location in accordance with the Duty of Care requirements of the Environmental Permit.
- Waste producers are required to provide details of any precautions that should be taken at the Site to abate emissions as part of the Waste Acceptance Procedure. Only waste material stipulated in the Environmental Permit will be accepted with inherently dusty waste (e.g. incinerator ash) refused.
- Preventative and remedial measures to implement on the Site include a vehicle speed restriction of 10mph and drop heights from the vehicles will be minimised as best practicable.
- Vehicles and plant will be hosed on exit from the Site as required in order to minimise the dispersion of emissions to sensitive receptors off Site.
- On Site sweeping will take place when conditions require. All areas and plant will be subjected to general housekeeping to prevent the accumulation of dust and loose material.
- Any waste that may be stockpiled will not exceed 4m in height to alleviate the potential of emissions becoming airborne. Stockpiles and vehicle loads will also be covered whenever this does not impinge on operations.
- Operations on Site will cease during periods of high winds to aid in the immobilisation of fugitive dust and particulate emissions.
- The Site Manager and Technically Competent Person will be responsible for the implementation of the DMP and the application of appropriate, recommended dust suppression measures.
- Any complaints received concerning dust and particulate emissions at the Site will be dealt with in accordance with the company's EMS complaints procedure.
- The investigation will be instigated by the Site Manager or the Technical Competent Person following the completion of the Complaints Report Form.

2. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

A Dust and Emissions Management Plan has been prepared to support Aquaforce's application to vary the permit. The details of this plan can be found in CE-FA-1921-RP06-DMP-Final v2.

Although additional waste codes are proposed within this variation, there will be no wastes with additional hazardous properties accepted by the site and therefore, the waste storage currently in place at the site is deemed acceptable. There should no fugitive emissions of dust as a result of this proposed variation as all new WEEE wastes will be solid.

As emissions abatement for particulate matter will be incorporated into the attritor plant, there will be minimal emissions of particulate matter to air. Although it is proposed that the paint and aerosol treatment plant is moved, the same processes will be in place.

3. Although the attritor is essentially a sealed unit, there is the potential for the emission of particulate matter at the end of the process. As such, emissions abatement for particulate matter will be incorporated into the plant.

There will be no changes to any other WEEE treatment undertaken on site following the proposed variation. Although it is proposed that the paint and aerosol treatment plant is moved, the same processes will be in place.

4. The site's waste pre-acceptance and acceptance procedures will be used to characterise waste and therefore, will identify any wastes which could case fugitive emissions to air. The site also undertake storage area inspection which will assist with this characterisation.

There should no fugitive emissions of dust as a result of this proposed variation as all new WEEE wastes will be solid.

An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP.

5. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

There have been no substantiated odour complaints at the facility throughout its operation under environmental permit. However, it is not anticipated that there will be odour nuisance at sensitive receptors, as a result of the site activities due to;

- Improved process control,
- Robust pre-acceptance measures,
- Enhanced training (both odour management and process control).

A Dust and Emissions Management Plan has been prepared to support Aquaforce's application to vary the permit. The details of this plan can be found in CE-FA-1921-RP06-DMP-Final v2.

In summary, the Dust and Emissions Management Plan contains the following control measures:

- Wastes delivered will mainly comprise of WEEE, waste paints, aerosols, airbags and hazardous liquids that are not inherently dusty. With the exception of receipt of the waste and exporting wastes off-Site, all Site activities are carried out within the confines of the building. Records of all incoming loads stored on Site or in a secure off Site location in accordance with the Duty of Care requirements of the Environmental Permit.
- Waste producers are required to provide details of any precautions that should be taken at the Site to abate emissions as part of the Waste Acceptance Procedure. Only waste material stipulated in the Environmental Permit will be accepted with inherently dusty waste (e.g. incinerator ash) refused.
- Preventative and remedial measures to implement on the Site include a vehicle speed restriction of 10mph and drop heights from the vehicles will be minimised as best practicable.
- Vehicles and plant will be hosed on exit from the Site as required in order to minimise the dispersion of emissions to sensitive receptors off Site.
- On Site sweeping will take place when conditions require. All areas and plant will be subjected to general housekeeping to prevent the accumulation of dust and loose material.
- Any waste that may be stockpiled will not exceed 4m in height to alleviate the potential of emissions becoming airborne. Stockpiles and vehicle loads will also be covered whenever this does not impinge on operations.
- Operations on Site will cease during periods of high winds to aid in the immobilisation of fugitive dust and particulate emissions.
- The Site Manager and Technically Competent Person will be responsible for the implementation of the DMP and the application of appropriate, recommended dust suppression measures.
- Any complaints received concerning dust and particulate emissions at the Site will be dealt with in accordance with the company's EMS complaints procedure.
- The investigation will be instigated by the Site Manager or the Technical Competent Person following the completion of the Complaints Report Form.

6. A Dust and Emissions Management Plan has been prepared to support Aquaforce's application to vary the permit. The details of this plan can be found in CE-FA-1921-RP06-DMP-Final v2.

7. Inspection for leaks or spillages is continuous during normal operation and takes place formally each day as part of the site inspection procedures. Any spillages other than minor occurrences will be reported to the EA immediately and recorded in the site diary.

All equipment and infrastructure on Site will be inspected, serviced and maintained as per manufacturer guidance and 'Preventative Maintenance Checklist'. Any maintenance works required will be recorded on the 'Maintenance Record'. These can be seen in the site's EMS.

8. All equipment and infrastructure on Site will be inspected, serviced and maintained as per manufacturer guidance and 'Preventative Maintenance Checklist'. Any maintenance works required will be recorded on the 'Maintenance Record'. These can be seen in the site's EMS.

All waste storage areas, treatment areas and equipment will be cleaned. Any residues collected during cleaning will be contained.

Although additional waste codes are proposed within this variation, there will be no wastes with additional hazardous properties accepted by the site and therefore, the current waste storage procedures are deemed acceptable for use with this proposed variation.

9. All equipment and infrastructure on Site will be inspected, serviced and maintained as per manufacturer guidance and 'Preventative Maintenance Checklist'. Any maintenance works required will be recorded on the 'Maintenance Record'. These can be seen in the site's EMS.

The site is regularly cleaned to avoid large-scale decontamination activities.

10. All equipment and infrastructure on Site will be inspected, serviced and maintained as per manufacturer guidance and 'Preventative Maintenance Checklist'. Any maintenance works required will be recorded on the 'Maintenance Record'. These can be seen in the site's EMS.

Although additional waste codes are proposed within this variation, there will be no wastes with additional hazardous properties accepted by the site and therefore, the current waste storage procedures are deemed acceptable for use with this proposed variation.

11. All equipment and infrastructure on Site will be inspected, serviced and maintained as per manufacturer guidance and 'Preventative Maintenance Checklist'. Any maintenance works required will be recorded on the 'Maintenance Record'. These can be seen in the site's EMS.

All equipment and infrastructure on Site will be inspected, serviced and maintained as per manufacturer guidance and 'Preventative Maintenance Checklist'. Any maintenance works required will be recorded on the 'Maintenance Record'. These can be seen in the site's EMS.

The site's maintenance programme includes the inspection of protective equipment.

12. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

There have been no substantiated odour complaints at the facility throughout its operation under environmental permit. However, it is not anticipated that there will be odour nuisance at sensitive receptors, as a result of the site activities due to;

- Improved process control,
- Robust pre-acceptance measures,
- Enhanced training (both odour management and process control).

13. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

There have been no substantiated odour complaints at the facility throughout its operation under environmental permit. However, it is not anticipated that there will be odour nuisance at sensitive receptors, as a result of the site activities due to;

- Improved process control,
- Robust pre-acceptance measures,
- Enhanced training (both odour management and process control).

14. It has been determined that no odour abatement systems are necessary with the proposed variation.

15. Although the site will treat water-based liquid wastes, there should be no potential for contaminated waters with the proposed variation.

16. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

17. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

18. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

19. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

3.5.3 Emissions of Noise and Vibration

1. The site does not have a history of noise complaints. Although the proposed variation does include the addition of a non-hazardous WEEE waste treatment system, this system will be located indoors and therefore, the noise from this system at sensitive receptors will be minimal. Additionally, as the site is located in a heavily industrialised area, it is far away from noise sensitive receptors.

All other proposed variations will not impact the noise generated by the site and therefore, a noise and vibration management is not required.

2. The site does not have a history of noise complaints. Although the proposed variation does include the addition of a non-hazardous WEEE waste treatment system, this system will be located indoors and therefore, the noise from this system at sensitive receptors will be minimal. Additionally, as the site is located in a heavily industrialised area, it is far away from noise sensitive receptors.

All other proposed variations will not impact the noise generated by the site and therefore, a noise and vibration management is not required.

The following noise control measures are used on site:

- All vehicles, plant and machinery operated at the Site will be maintained in accordance with the manufacturer's specification and fitted with effective silencers. Any breakdown or malfunction of silencing equipment will be treated as an emergency and dealt with immediately. Where a repair cannot be affected immediately the equipment will be taken out of service until the repair is made.
- The Site will only be operated during the hours specified in the planning permission. No un-sociable or night-time working will be carried out. The additional activities carried out under the permit variation i.e. the attritor and drum washer are sealed units that will be installed indoors to minimise risk of noise or vibration emitted during operating. They will be located on concreted flooring and roller shutter doors are kept shut at all times except for the entry and egress of loads.
- Any complaints received at the Site about noise will be monitored and logged in accordance with the EMS. Mitigation measures will be implemented, as appropriate, to ensure a high level of control.

3. The site does not have a history of noise complaints. Although the proposed variation does include the addition of a non-hazardous WEEE waste treatment system, this system will be located indoors and

therefore, the noise from this system at sensitive receptors will be minimal. Additionally, as the site is located in a heavily industrialised area, it is far away from noise sensitive receptors

All other proposed variations will not impact the noise generated by the site and therefore, a noise and vibration management is not required.

4. The site does not have a history of noise complaints. Although the proposed variation does include the addition of a non-hazardous WEEE waste treatment system, this system will be located indoors and therefore, the noise from this system at sensitive receptors will be minimal. Additionally, as the site is located in a heavily industrialised area, it is far away from noise sensitive receptors.

5. All other proposed variations will not impact the noise generated by the site and therefore, a noise and vibration management is not required.

3.5.4 Point Source Emissions to Water and Sewer

There are no point source emissions to surface water or sewer

3.5.5 Fugitive Emissions to Land and Water

1. The floor of the operational area is of concrete, of unknown, but substantial, thickness. All spillages are contained by this impervious surface. The whole operational area is bunded by its walls, with the exception of the entrance doors, which are protected by a 40mm cement lip.

Storage, quarantine, bulking and reception areas for wastes are:

- Indoors so run off from precipitation will not occur.
- On impervious surface.
- Bunded therefore containing all contaminated run off.
- Are performed in an area with nil drainage with no access to discharge to watercourse or sewer, storm or foul.

There are additional free-standing bunds to prevent mixing of chemically incompatible wastes. Some wastes do not contain any free liquid and are not readily chemically reactive and therefore when containerised will not require additional drainage or bunding.

Bunding will encompass the attritor plant and will comprise of a 22 cm sleeping policeman capable of containing 110% of the maximum capacity of the attritor contents i.e. 10 m^3. The walls of the building will additionally serve as secondary containment for any spillages from the plant.

Stocks of oil-absorbent granules, brooms and shovels, PPE and a clip-top 45- gallon drum are kept within the office/stores for use in cleaning up any spillage.

Although additional waste codes are proposed within this variation, there will be no wastes with additional hazardous properties accepted by the site and therefore, the current waste storage procedures are deemed acceptable for use with this proposed variation.

2. The floor of the operational area is of concrete, of unknown, but substantial, thickness. All spillages are contained by this impervious surface. The whole operational area is bunded by its walls, with the exception of the entrance doors, which are protected by a 40mm cement lip.

There are additional free-standing bunds to prevent mixing of chemically incompatible wastes. Some wastes do not contain any free liquid and are not readily chemically reactive and therefore when containerised will not require additional drainage or bunding.

Sealed construction joints are in place throughout the site, there will be no additional buildings constructed following the proposed variation.

Storage, quarantine, bulking and reception areas for wastes are:

- Indoors so run off from precipitation will not occur.
- On impervious surface.
- Bunded therefore containing all contaminated run off.
- Are performed in an area with nil drainage with no access to discharge to watercourse or sewer, storm or foul.

3. All operational areas will be indoors.

4. All wastewater from buffer storage will be entirely contained and not discharged to ground, surface water or sewer.

5. There are additional free-standing bunds to prevent mixing of chemically incompatible wastes. Some wastes do not contain any free liquid and are not readily chemically reactive and therefore when containerised will not require additional drainage or bunding.

All wastewater from buffer storage will be entirely contained and not discharged to ground, surface water or sewer.

6. The floor of the operational area is of concrete, of unknown, but substantial, thickness. All spillages are contained by this impervious surface. The whole operational area is bunded by its walls, with the exception of the entrance doors, which are protected by a 40mm cement lip.

There are additional free-standing bunds to prevent mixing of chemically incompatible wastes. Some wastes do not contain any free liquid and are not readily chemically reactive and therefore when containerised will not require additional drainage or bunding.

Storage bay areas are fitted with 150mm wide precast concrete bund walls 2400mm high and sealed at the bottom to prevent leaking into adjacent bunds.

Stocks of oil-absorbent granules, brooms and shovels, PPE and a clip-top 45- gallon drum are kept within the office/stores for use in cleaning up any spillage.

7. All wastewater from buffer storage will be entirely contained and not discharged to ground, surface water or sewer.

8. All equipment and infrastructure on Site will be inspected, serviced and maintained as per manufacturer guidance and ‘Preventative Maintenance Checklist’. Any maintenance works required will be recorded on the ‘Maintenance Record’. These can be seen in the site’s EMS.

All equipment and infrastructure on Site will be inspected, serviced and maintained as per manufacturer guidance and ‘Preventative Maintenance Checklist’. Any maintenance works required will be recorded on the ‘Maintenance Record’. These can be seen in the site’s EMS.

9. The maximum capacity of the site’s bunding system will be calculated to account for potential abnormal operating scenarios and incidents and the nature of any polluting substances and their impact on the receiving environment. Absorbent booms are available in the site stores for deployment across the doorways to contain oil which may be disturbed during any firefighting activities. These will also increase the effective volume of the bunded area, containing most of the firewater.

Bunding will encompass the attritor plant and will comprise of a 22 cm sleeping policeman capable of containing 110% of the maximum capacity of the attritor contents i.e. 10 m^3. The walls of the building will additionally serve as secondary containment for any spillages from the plant.

Although it is proposed that the paint and aerosol treatment plant is moved, the same bunding will be in place.

10. All wastewater from buffer storage will be entirely contained and not discharged to ground, surface water or sewer.

11. Measures will be taken to prevent emissions from washing and cleaning activities, including:

- Collecting liquid effluent and wash waters in a sealed system for off site disposal;
- Using biodegradable and non-corrosive washing and cleaning products;
- Storing all detergents, emulsifiers and other cleaning agents in suitable bunded or containment facilities, within a locked storage area; AND
- preparing cleaning or disinfection solutions in contained areas of the site and never in areas that drain to the surface water system.

12. Although the site store oils and fuels, there will be no alterations to this storage with the proposed variation and therefore, the current storage procedures in place for oils are deemed acceptable.

A refuelling and emergency spillage procedure has been included as part of the EMS.

13. The site will implement a spillage response plan, and staff will be trained to follow it.

14. All leaks or spills will be dealt with immediately.

15. Stocks of oil-absorbent granules, brooms and shovels, PPE and a clip-top 45- gallon drum are kept within the office/stores for use in cleaning up any spillage. Spillage equipment is located close to locations where spillages could occur.

16. The maximum capacity of the site's bunding system has been calculated to account for potential abnormal operating scenarios and incidents and the nature of any polluting substances and their impact on the receiving environment. Absorbent booms are available in the site stores for deployment across the doorways to contain oil which may be disturbed during any firefighting activities. These will also increase the effective volume of the bunded area, containing most of the firewater.

17. The site's spillage response plan includes information on how to handle and correctly dispose of waste produced from a spillage.

18. There will be no sub-surface structures on site.

19. The floor of the operational area is of concrete, of unknown, but substantial, thickness. All spillages are contained by this impervious surface. Although additional waste codes are proposed within this variation, there will be no wastes with additional hazardous properties accepted by the site and therefore, this surface is deemed acceptable for the proposed variation.

20. All equipment and infrastructure on Site will be inspected, serviced and maintained as per manufacturer guidance and 'Preventative Maintenance Checklist'. Any maintenance works required will be recorded on the 'Maintenance Record'. These can be seen in the site's EMS.

21. Bunding will encompass the attritor plant and will comprise of a 22 cm sleeping policeman capable of containing 110% of the maximum capacity of the attritor contents i.e. 10 m^3. The walls of the building will additionally serve as secondary containment for any spillages from the plant.

The bund will also:

- Be impermeable and resistant to the stored materials;
- Have no outlet and drain to a blind collection point;
- Have pipework routed within bunded areas with no penetration of contained surfaces;
- Be designed to catch leaks from tanks or fittings;
- Have regular visual inspections; and
- Have programmed engineering inspections

The liquid storage will be located indoors and therefore, this is no potential for rainwater to enter the bund.

There will be no changes to any other above-ground tanks with the proposed variation.

3.6 Emissions Monitoring and Limits

3.6.1 Point Source Emissions to Air

There will be no additional point source emissions to air following the proposed variation.

3.6.2 Point Source Emissions to Water or Sewer

There will be no point source emissions to water or sewer.

3.7 Process Efficiency

Aquaforce monitor the annual consumption of water, energy and raw materials at the site for submission to the EA through a Resource Efficiency Physical Index (REPI). This REPI also includes the annual waste transferred for disposal and recovery in terms of hazardous and non-hazardous waste.

3.7.1 Energy Efficiency

1. The Operator is committed to preparing an energy efficiency plan for the site. This plan:

- Defines and calculates the specific energy consumption of the activities undertaken on site and waste streams treated;
- Sets annual key performance indicators; and
- Plans periodic improvement targets and related actions.

2. This energy efficiency plan is regularly reviewed and updated as part of the site's EMS.

3. The site will maintain an energy balance record which will provide a breakdown of energy consumption and generation by the type of source. Sankey diagrams will be provided to show how energy is used in waste treatment processes.

4. This energy balance record is regularly reviewed and updated as part of the site's EMS.

5. The site has operating, maintenance and housekeeping measures in place for relevant areas, including:

- Air conditioning, process refrigeration and cooling systems;
- The operation of motors and drives;
- Compressed gas systems;
- Space heating and hot water systems;
- Lubrication to avoid high friction losses; and
- boiler operation and maintenance.

6. The site also makes use of insulation, seals and self-closing doors to avoid gross energy inefficiencies.

7. Wherever possible, the site will look to implement additional energy efficiency measures.

3.7.2 Raw Materials

1.As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume raw materials. This will continue following the proposed variation.

2.As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume raw materials. This will continue following the proposed variation.

3.As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume raw materials. This will continue following the proposed variation.

4. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume raw materials. This will continue following the proposed variation.

3.7.3 Water Use

1. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume water. This will continue following the proposed variation.

2. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume water. This will continue following the proposed variation.

3. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume water. This will continue following the proposed variation.

4. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume water. This will continue following the proposed variation.

5. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume water. This will continue following the proposed variation.

6. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume water. This will continue following the proposed variation.

7. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume water. This will continue following the proposed variation.

8. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume water. This will continue following the proposed variation.

9. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume water. This will continue following the proposed variation.

3.7.4 Waste Minimisation, Recovery and Disposal

1. The site have developed a residues management plan as part of the proposed permit variation

2. No waste is disposed of on site. This will continue following the proposed variation.

3. All wastes are transported off site for recovery. This will continue following the proposed variation.

Section 4.0: Assessment Against "Waste Temperature Exchange Equipment: Appropriate Measures for Permitted Facilities"

The following section assesses compliance against "Waste Temperature Exchange Equipment: Appropriate Measures for Permitted Facilities" as requested by the EA.

4.1 General Management Appropriate Measures

1. The site have developed a quality management system for the destruction and treatment of WTEE waste. This system can be seen in the site's working plan, included in the EMS.

The site will monitor the individual treatment stages of the entire WTEE treatment process to ensure performance of the system is as expected. There will be no changes to these processes with the proposed variation.

The system will also be used to compare monitored performance with the relevant standards of operation and ensure that the collection and recovery of waste gases, residues and recyclable fractions is maximised, along with the prevention of emissions.

4.1.1 Plant Commissioning Requirements

1. No new WTEE treatment will be commissioned with the proposed variation.

2. No new WTEE treatment will be commissioned with the proposed variation.

3. No new WTEE treatment will be commissioned with the proposed variation.

4. No new WTEE treatment will be commissioned with the proposed variation.

5. No new WTEE treatment will be commissioned with the proposed variation.

6. No new WTEE treatment will be commissioned with the proposed variation.

7. No new WTEE treatment will be commissioned with the proposed variation.

8. No new WTEE treatment will be commissioned with the proposed variation.

9. No new WTEE treatment will be commissioned with the proposed variation.

4.1.2 Other Accident Prevention Measures

1. The site's storage plan, (EMS), sets out the storage of hazardous substances at the site and the segregation required for each waste.

All wastes will be stored in line HSG71, HSG76 and HSG51. Although some storage locations are proposed to change with the proposed variation, the storage of WTEE waste will remain the same.

4.2 Waste Pre-acceptance, Acceptance and Tracking Appropriate Measures

4.2.1 Waste Pre-acceptance

1. The site's employs a waste pre-acceptance procedure (EMS).

As the site must comply with F gas legislation, it will be ensured that waste has no visible signs of damage and internal shelves, and external electrical cable are present.

Equipment suitable for preparing for reuse will be:

- Handled and consigned with extra care; and

- Separated or identified from other WTEE that are not suitable for reuse so they can be unloaded correctly at the receiving facility;

All WTEE waste will be stored indoors.

The following measures will be taken to protect equipment and prevent potential emissions during receipt, storage and handling:

- The cooling circuit and exterior casing will be protected;
- Prevention of the removal of the copper bullet and compressor before degassing; and
- Checking that any organic or other contents are removed from the appliance before collection or delivery.

4.2.2 Waste Acceptance

1. The site's employs a waste acceptance procedure (EMS).

All WTEE waste will be checked on arrival for:

- Damage to the casing; and
- Leaks of oil and gas, including whether the cooling circuit is intact and includes a compressor.

2. All WTEE will be visually checked inside for non-compliant items.

4.2.3 Waste Tracking

1. The site's waste acceptance procedure (EMS) contains information regarding the waste tracking system and inventory in place at the site, it is ensured that the information within this system is kept up-to-date.

The site also track WTEE waste through each waste treatment process step, including:

- Preparing for reuse;
- Storage; and
- Treatment.

2. The site make use of a waste tracking system which is used to determine the quantity of waste on site and therefore, the remaining waste capacity. The quantity of incoming waste is verified during the waste pre-acceptance and waste acceptance procedures. This waste tracking system and inventory takes into account the hazardous properties of the waste, the risks posed by the waste in terms of process safety, occupational safety and environmental impact, as well as the information provided by the previous waste holder(s).

The site also maintain a stock inventory of wastes, inspection of storage areas is performed so as to assess waste quantities on site. Waste will not be accepted if there is insufficient storage capacity available or if the site is inadequately manned.

The calculations used to determine the maximum storage of individual storage areas is included in the storage procedure document (EMS).

The maximum storage time in the initial waste reception area is 5 days. The maximum storage time of wastes in total is 6 months.

3. The site's current permit gives the waste codes which can be treated by the site, there will be no additional WTEE waste codes in the proposed variation.

4.3 Waste Storage and Handling Appropriate Measures

1. All WTEE waste will be stored and handled in a way which protects and prevents damage to cooling circuits, compressors, the appliance casing and foam insulation. WTEE will not be tipped.

2. WTEE waste which has not been degassed will be stored whole. All WTEE waste will be stored and handled in a way which protects and prevents damage to cooling circuits.

3. All wastes will be stored in line HSG71, HSG76 and HSG51. Although some storage locations are proposed to change with the proposed variation, the storage of WTEE waste will remain the same.

This ensures that:

- WTEE waste can be picked up and handles safely and easily; and
- The need to handle or move WTEE waste, or waste next to it, is minimised.

4. Forklifts used to handle WTEE waste are designed and used in a way that makes sure they do not damage the cooling circuit, appliance casing or insulation foam of the equipment. All force or pressure applied to WTEE will be controlled or minimised.

5. Should WTEE waste be found to be damaged to the extent that insulation foam can be seen exposed or it is assessed as posing a significant risk of releasing refrigerant gas oil, it will be moved to the site's quarantine area.

Quarantine procedures are detailed in the site's storage procedures (EMS) and consists of marking up quarantine material so they can be easily identified prior to storing them in the usual storage bays with other compatible chemicals.

16. The quarantine area has a 6m separation distance around it and is shown on Drawing No: CE-FA-1921-DW01.

6. WTEE waste will not be stored for longer than 3 months before treatment or off-site transfer. All other wastes will be removed within a maximum of 6 months from receipt.

7. A Fire Prevention and Mitigation Plan (FPP) has been prepared to support Aquaforce's application to vary the permit. The details of the FPP can be found in CE-FA-1921-RP08-FPP-Final v3. The FPP details control measures to reduce the likelihood of any fire.

8. Storage, quarantine, bulking and reception areas for wastes are:

- Indoors so run off from precipitation will not occur.
- On impervious surface.
- Bunded therefore containing all contaminated run off.
- Are performed in an area with nil drainage with no access to discharge to watercourse or sewer, storm or foul.

WTEE waste will not be stacked more than 3.6m high.

9. No WTEE waste will be dismantled prior to treatment.

10. Compressors removed from WTEE waste are completely drained during stage 1 of the degassing process. The removed compressors are stored in 1m^3 bins which stand in a metal drip tray. Any leakage into the drip tray is soaked up with absorbent granules, and the used granules disposed of appropriately. Any compressors found to be leaking on receipt are drained into the tank.

11. All compressor oil is removed from the WTEE waste during degassing by a degassing machine. The machine the heats the oil, to drive off dissolved ODS, and separates the two. Oil is then pumped to a 5000 litre self-bunded tank.

All recovered blowing agents and refrigerants are removed during degassing. Gas is collected in a pressure vessel and then it is decanted into a 1 tonne pressure vessel supplied by the disposal contractor. There is a warning light system to indicate a full pressure vessel.

12. Compressor oil is stored in a 5000 litre self-bunded tank.

Storage, quarantine, bulking and reception areas for wastes are:

- Indoors so run off from precipitation will not occur.
- On impervious surface.
- Bunded therefore containing all contaminated run off.
- Are performed in an area with nil drainage with no access to discharge to watercourse or sewer, storm or foul.

13. All recovered blowing agents and refrigerants are removed during degassing. Gas is collected in a pressure vessel and then it is decanted into a 1 tonne pressure vessel supplied by the disposal contractor. There is a warning light system to indicate a full pressure vessel.

14. On all waste storage bays, the bund wall at the entrance to each bay will be:

- Labelled with the bay number;
- Have a list of the quantity and type of waste on a clip board; and
- Labelled with hazard designation contained within the bay.

All waste containers will be labelled to include:

- Date;
- Hazard codes and warning diamond;
- Reference number that can be cross referenced to the computer tracking system; and
- Description of the waste;

15. All waste with the potential for releasing fugitive emissions will be stored within an enclosed container wherever possible, all waste will be stored indoors.

An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

A Dust and Emissions Management Plan has been prepared to support Aquaforce's application to vary the permit. The details of this plan can be found in CE-FA-1921-RP06-DMP-Final v2.

16. Inspection for leaks or spillages is continuous during normal operation and takes place formally each day as part of the site inspection procedures.

All equipment and infrastructure on Site will be inspected, serviced and maintained as per manufacturer guidance and 'Preventative Maintenance Checklist'. Any maintenance works required will be recorded on the 'Maintenance Record'. These can be seen in the site's EMS.

17. All wastes will be stored in line HSG71, HSG76 and HSG51. Although some storage locations are proposed to change with the proposed variation, the storage of WTEE waste will remain the same.

18. All recovered blowing agents and refrigerants are removed during degassing. Gas is collected in a pressure vessel and then it is decanted into a 1 tonne pressure vessel supplied by the disposal contractor. There is a warning light system to indicate a full pressure vessel.

This pressure vessel is designed, operated and maintained in line with relevant industry standards and guidance.

4.4 Waste Treatment Appropriate Measures

1. Site staff will be trained and instructed in procedures relevant to their role and will be aware of the requirements of the environmental permit and environmental management system.

A record of all training will be kept on the ‘Training Record’ in accordance with the ‘Training Needs Checklist’ kept within the site’s EMS which has been developed as part of this permit variation.

2. Forklifts are used on site to minimise waste handling.

3. Prior to stage 2 destruction, all potentially hazardous components such as mercury switches, capacitors containing polychlorinated biphenyls or capacitors over 25mm containing substances of concern will be removed intact and placed in clip-top drums for appropriate disposal.

4. Both the stage 1 and stage 2 treatment if WTEE occurs in a controlled environment. The areas where these stages are carried out are maintained at an atmospheric pressure less than ambient, which results in all airflow being inward, and ultimately through the treatment plant’s filter system.

The site also operates a CFC recovery system which consists of two adsorption vessels filled with activated carbon, an extraction air fan, a condenser, 2 decanters, a product cooler and a carbon drying system. This system treats exhaust gases which have passed through the treatment plant’s filter system.

No liquids should be released from stage 1 or stage 2 of the WTEE treatment process.

5. The CFC recovery system and individual WTEE treatment processes will be monitored to ensure that the system is operating as expected.

Inspection for leaks or spillages is continuous during normal operation and takes place formally each day as part of the site inspection procedures.

All equipment and infrastructure on Site will be inspected, serviced and maintained as per manufacturer guidance and ‘Preventative Maintenance Checklist’. Any maintenance works required will be recorded on the ‘Maintenance Record’. These can be seen in the site’s.

6. Ambient monitoring is undertaken by the site using proprietary gas detection equipment to check for any gas leaks. The results of this monitoring are recorded.

Any maintenance works required will be recorded on the ‘Maintenance Record’. These can be seen in the site’s EMS.

7. Removed gas is weighed on calibrated electric scales of an appropriate precision, and the net weight of each cylinder dispatched for disposal logged in the site diary.

Drained oil is removed for disposal in bulk, the weight disposed is notified by the disposal contractor, and logged.

8. Removed gas is weighed on calibrated electric scales of an appropriate precision, and the net weight of each cylinder dispatched for disposal logged in the site diary.

Drained oil is removed for disposal in bulk, the weight disposed is notified by the disposal contractor, and logged.

The site also make use of a waste tracking system which contains the following information:

- Waste storage area;
- Date of arrival;
- Job number (refers to producer deceleration);
- EWC code;
- Waste description;
- Components and concentration;
- Quantity;
- Container type;
- Disposal point;
- Price and quote number;

- Lab analysis required;
- Unique ID number;
- Bay number;
- Verification completed by;
- Non conformance reference;
- HP codes; and
- Activity

9. All effluent will be disposed of off site by an effluent treatment company.

4.4.1 Stage 1 Treatment (Degassing)

1. The site operate a degassing machine to extract oil and refrigerant from the cooling circuit.

The machine is a proprietary vacuum pump and oil separation device, which extracts the oil and gases together, and then separates the gases from the oil. It is designed for this purpose and can handle six units simultaneously Connection is made by piercing pliers which clamp onto the compressor outlet pipe, and pierce it with a hollow spike, and a flexible hose.

2. Compressors are only removed from WTEE waste once it has been confirmed that the cooling circuit has been fully degassed.

3. The removed compressors are stored in 1 m3 bins, which stand in a metal drip tray. Any leakage into the drip tray is soaked up with absorbent granules, and the used granules disposed of appropriately.

It is ensured through the site's segregation measures, that oil removed from WTEE waste is not mixed with oil from other equipment or sources. These measures will remain the same following the proposed variation.

4. The removed compressors are stored in 1 m3 bins, which stand in a metal drip tray. Any leakage into the drip tray is soaked up with absorbent granules, and the used granules disposed of appropriately. Any compressors found to be leaking on receipt are drained into the tank.

5. The previously mentioned degassing machine heats compressor oil to drive off dissolved refrigerants and separates the oil from the refrigerants.

The removed compressors are stored in 1 m3 bins, which stand in a metal drip tray. Any leakage into the drip tray is soaked up with absorbent granules, and the used granules disposed of appropriately. Any compressors found to be leaking on receipt are drained into the tank.

6. Refrigerants are condensed within the CFC recovery system and are therefore stored in an IBC.

7. The floor of the operational area is of concrete, of unknown, but substantial, thickness. All spillages are contained by this impervious surface. The whole operational area is bunded by its walls, with the exception of the entrance doors, which are protected by a 40mm cement lip.

All treatment processes are carried out indoors.

8. The site's stage 1 treatment plant is designed to remove and collect all of the refrigerants and oils from the cooling circuit and compressor of WTEE and prevent emissions to the environment. This is ensured through the monitoring of individual treatment processes.

9. The site's treatment process achieves a refrigerant removal and recovery rate of at least 90%. This is ensured through the monitoring of individual treatment processes.

10. The degassing process has been designed and operates to make sure that the residual refrigerant content in recovered compressor oil is less than 0.9% weight per weight, unless the oil is both:

- transferred immediately to a suitable sealed container to prevent fugitive emissions; or

- sent for further refrigerant recovery or destruction

This is ensured through the monitoring of individual treatment processes. All monitoring results are recorded.

11. The site do not accept WTEE containing ammonia. This will continue following the proposed variation.

4.4.2 Stage 2 Treatment (Destruction)

1. There will be no size reduction of WTEE waste prior to the destruction process.

2. The site make use of a magnet and eddy current separator to ensure ferrous and non-ferrous materials are separated and so that high standards of recovery can be achieved.

The site make use of a cyclone to treat the foam fraction and maximise the release and capture of blowing agent gas.

The site collect the treated foam as dust in bags. Previously a briquetter was used to form foam bricks, however, through discussion with energy recovery sites (where the foam is transferred to), it was discovered that more efficient energy recovery was achieved with foam dust.

3. All destruction processes take place in a controlled environment. The areas where these processes are carried out are maintained at an atmospheric pressure less than ambient, which results in all airflow being inward, and ultimately through the treatment plant's filter system.

The site also operates a CFC recovery system which consists of two adsorption vessels filled with activated carbon, an extraction air fan, a condenser, 2 decanters, a product cooler and a carbon drying system. This system treats exhaust gases which have passed through the treatment plant's filter system.

4. The areas where destruction processes are carried out are maintained at an atmospheric pressure less than ambient, which results in all airflow being inward, and ultimately through the treatment plant's filter system.

The site also operates a CFC recovery system which consists of two adsorption vessels filled with activated carbon, an extraction air fan, a condenser, 2 decanters, a product cooler and a carbon drying system. This system treats exhaust gases which have passed through the treatment plant's filter system.

5. The CFC operates using two filters in parallel. After the carbon is saturated with organics and the bed has reached the breakthrough point, the CFC concentration leaving the adsorber will start to increase. Once the average CFC concentration in the stack has reach 10ppm the adsorber that is on standby will be automatically put on line and the adsorber that is on line will be regenerated.

6. Extracted air is passed through a cyclone which removes gross particles of foam and any metal carried over. This is followed by a reverse jet filter unit which removes all particulates.

7. Water from the treatment process is contaminated with blowing agent. This water mixture is contained in gas-tight pressure vessels and a sample is sent for analysis.

8. All destruction processes take place in a controlled environment. The areas where these processes are carried out are maintained at an atmospheric pressure less than ambient, which results in all airflow being inward, and ultimately through the treatment plant's filter system.

The Lower Explosive Limit of cyclopentane is 2%; the air ducting system will contain 0.25% pentane under normal operating conditions when processing foam-containing cyclopentane. If the air extraction fan stops or if the air flowrate drops below 3750 m3/hr the conveyors will automatically stop. This will avoid pentane concentrations in the air ducts reaching 0.5%. CFCs are not flammable.

9. The Lower Explosive Limit of cyclopentane is 2%; the air ducting system will contain 0.25% pentane under normal operating conditions when processing foam-containing cyclopentane. If the air extraction fan

stops or if the air flowrate drops below 3750 m3/hr the conveyors will automatically stop. This will avoid pentane concentrations in the air ducts reaching 0.5%. CFCs are not flammable.

10. All destruction processes take place in a controlled environment. The areas where these processes are carried out are maintained at an atmospheric pressure less than ambient, which results in all airflow being inward, and ultimately through the treatment plant's filter system.

The Lower Explosive Limit of cyclopentane is 2%; the air ducting system will contain 0.25% pentane under normal operating conditions when processing foam-containing cyclopentane. If the air extraction fan stops or if the air flowrate drops below 3750 m3/hr the conveyors will automatically stop. This will avoid pentane concentrations in the air ducts reaching 0.5%. CFCs are not flammable.

11. The permit currently lists three air emission points, A1, A2 and A3. These emission points are shown on Drawing No. CE-FA-1921-DW01. It is proposed that the paint and aerosol treatment plant moves location, the location of emission point A2 will also move.

Emission point A1 comprises an exhaust stack emission to atmosphere from the WEEE plant. Emission point A2 is from a combined single stack from the aerosol and paint plant and paint processing plant and emission point A3 from the steam raising boiler.

Emission points A1 and A2 are monitored quarterly for total particulate matter, particulate matter fraction PM10 & PM2.5, CFCs, and volatile organic compounds. Flowrate and temperature will also be monitored at these emission points. There are no set parameters or limits for the monitoring of A3.

12. Thermal or catalytic conversion systems are not used to break down recovered blowing agent.

13. The site's treatment process achieves a refrigerant removal and recovery rate of at least 90%. This is ensured through the monitoring of individual treatment processes.

14. Recovered refrigerants and blowing agents are not destroyed on-site.

15. It is ensured that the residual blowing agent (VFC and VHC) content of treated foam is less than 0.2% w/w. This is ensured through the monitoring of individual treatment processes which are detailed in the site's working plan, (EMS). All monitoring results are recorded by the site.

16. It is ensured that the residual content of untreated foam in the recovered metal and plastic fractions is less than:

- 0.5% w/w in metal streams (ferrous and non-ferrous); and
- 1.0% w/w in plastic streams

This is ensured through the monitoring of individual treatment processes which are detailed in the site's working plan, (EMS). All monitoring results are recorded by the site.

4.5 Process Monitoring Appropriate Measures

1. The site monitor all individual WTEE treatment stages on a continual basis. These monitoring processes can be seen in the site's working plan (EMS). All monitoring results are recorded by the site.

2. The site's pre-acceptance and acceptance procedures, (EMS), contain the processes used identify defective WTEE.

The site also make use of a waste tracking system which contains the following information:

- Waste storage area;
- Date of arrival;
- Job number (refers to producer deceleration);
- EWC code;
- Waste description;

- Components and concentration;
- Quantity;
- Container type;
- Disposal point;
- Price and quote number;
- Lab analysis required;
- Unique ID number;
- Bay number;
- Verification completed by;
- Non conformance reference;
- HP codes; and
- Activity

3. Where available, an independent accredited laboratory is used to complete compliance tests, using appropriately accredited methods.

The site also employs a site chemist and operate an on-site laboratory which can be used for monitoring. All records of staff training are kept on site.

All test results are kept on site.

4. Removed gas is weighed on calibrated electric scales of an appropriate precision, and the net weight of each cylinder dispatched for disposal logged in the site diary.

5. It is ensured that treatment plant, vessels and containers are cleaned and empty before doing refrigerant recovery and blowing agent recovery assessments.

6. To avoid any loss of refrigerant or blowing agent, the site:

- Fill sample containers to the top, closing and sealing them immediately after filling;
- Close and seal the containers and vessels that samples have been taken from immediately after sampling;
- Send all samples containing or suspected of containing these substances to the laboratory as quickly as possible – on the same or next day; and
- Store and transport samples below 4°C where possible

7. The frequency of many of the monitoring procedures undertaken by the site are continuous or determined by waste treated. The EA inspector will be informed of monitoring wherever possible.

8. Should monitoring indicate that the performance of the WTEE treatment plant does not meet the expected standards, a report will be sent to the EA, summarising:

- The actions you will take to improve performance to achieve the standards given, including any additional sampling and testing; and
- The dates you will complete these actions by, including the dates for any additional sampling and testing

4.5.1 Refrigerant Recovery

1. The monitoring methods, frequencies and validation methodologies can be found on the site's working plan, (EMS).

2. Refrigerant recovery monitoring will always be done on a representative sample of the WTEE waste treated. The WTEE will be selected to make sure it is in good condition, with the cooling circuit and compressors intact, legible rating plate or label in place, and inspected to confirm there is no visible damage or leaks.

3. The site use calibrated electronic scales of an appropriate precision, to weigh and record:

- The mass of the chosen appliances before and after degassing; and
- The mass of refrigerant and oil collected from the degassed appliances.

A mass balance calculation is carried out, comparing the weight of the WTEE before and after stage 1 degassing (before other parts and components are removed following degassing, for example, compressors), and the mass of refrigerant and oil collected (recording and comparing the mass of the collection vessels before and after degassing). The number of defective units identified is recorded.

The following calculation is used to determine the amount of refrigerant collected as a percentage:

(A ÷ (B − C)) × 100 = % recovered

Where, A is the mass of refrigerant recovered (grams), B is the reduction in mass of degassed appliances (that is, mass of appliances before degassing minus mass after degassing (grams)) and C is the mass of oil recovered (grams).

4. The site make use of a waste tracking system which contains the following information:

- Waste storage area;
- Date of arrival;
- Job number (refers to producer deceleration);
- EWC code;
- Waste description;
- Components and concentration;
- Quantity;
- Container type;
- Disposal point;
- Price and quote number;
- Lab analysis required;
- Unique ID number;
- Bay number;
- Verification completed by;
- Non conformance reference;
- HP codes; and
- Activity

4.5.2 Blowing Agent Recovery

1. The monitoring methods, frequencies and validation methodologies can be found on the site's working plan (EMS).

2. The site make use of a waste tracking system which contains the following information:

- Waste storage area;
- Date of arrival;
- Job number (refers to producer deceleration);
- EWC code;
- Waste description;
- Components and concentration;
- Quantity;
- Container type;
- Disposal point;
- Price and quote number;
- Lab analysis required;
- Unique ID number;
- Bay number;
- Verification completed by;
- Non conformance reference;
- HP codes; and

- Activity

3. The monitoring methods, frequencies and validation methodologies can be found on the site's working plan, (EMS).

The site compare the measured and recorded mass of blowing agent recovered during that month from the WTEE and dismantled panels treated to the theoretical mass available for recovery.

The site calculate the theoretical mass of blowing agent available, recovered water is excluded from this calculation.

4. The monitoring methods, frequencies and validation methodologies can be found on the site's working plan (EMS).

5. The frequency of many of the monitoring procedures undertaken by the site are continuous or determined by waste treated. The EA inspector will be informed of monitoring wherever possible.

All monitoring is undertaken using a representative sample of the WTEE waste treated at the site and includes a minimum of 100 appliances. It is ensured that the WTEE is in good condition, labelled with the type of blowing agent it contains and inspected to confirm there is no visible damage. The mass of recorded blowing agent collected from the treatment of the WTEE is compared to the theoretical mass available for recovery.

4.5.3 Residual Materials

1. The site report the quantity of waste fractions and residues produced by their WTEE treatment processes and removed from the site to the EA every quarter. This includes quantity of refrigerant and blowing agents, oil, foam, metals, and plastics.

2. The monitoring methods, frequencies and validation methodologies can be found on the site's working plan (EMS).

3. The monitoring methods, frequencies and validation methodologies can be found on the site's working plan (EMS).

4.6 Emission Monitoring and Limits Appropriate Measures

4.6.1 Point Source Emissions to Air

There will be no additional point source emissions to air associated with the WTEE treatment plant with the proposed variation.

Section 5.0: Assessment Against "Treating Metal Waste in Shredders: Appropriate Measures for Permitted Facilities"

The following section assesses compliance against "Treating Metal Waste in Shredders: Appropriate Measures for Permitted Facilities" as requested by the EA.

5.1 General Management Appropriate Measures

5.1.1 Management System

1. An Environmental Management System (EMS) has been prepared to support Aquaforce's application to vary the permit.

The Operator is committed to include the following features within the Site's EMS:

- Commitment of the management, including senior management;
- Definition, by the management, of an environmental policy that includes the continuous improvement of the environmental performance of the installation;
- Planning and establishing the necessary procedures, objectives and targets, in conjunction with financial planning and investment;
- Implementation of procedures paying particular attention to:
    - Structure and responsibility,
    - Recruitment, training, awareness and competence,
    - Communication,
    - Employee involvement,
    - Documentation,
    - Effective process control,
    - Maintenance programmes,
    - Emergency preparedness and response,
    - Safeguarding compliance in line with the Site's environmental permit;
- Checking performance and taking corrective action, paying particular attention to:
    - Monitoring and measurement,
    - Corrective and preventive action,
    - Maintenance of records,
    - Independent (where practicable) internal or external auditing in order to determine whether or not the EMS conforms to planned arrangements and has been properly implemented and maintained;
- Review, by senior management, of the EMS and its continuing suitability, adequacy and effectiveness;
- Following the development of cleaner technologies;
- Consideration for the environmental impacts from the eventual decommissioning of the plant at the stage of designing a new plant, and throughout its operating life;
- Application of sectoral benchmarking on a regular basis;
- Waste stream management;
- An inventory of waste water and waste gas streams;
- Residues management plan;
- Accident management plan;

- Odour management plan;
- Dust management plan;
- Site infrastructure plan;
- Site condition report;
- Fire prevention plan.

5.1.2 Staff Competence

1. The site has a COTC holder in place with an appropriate level of COTC award. The site chemist is degree level qualified in Chemistry or a related subject with similar discipline.

2. Site staff will be trained and instructed in procedures relevant to their role and will be aware of the requirements of the environmental permit and environmental management system.

3. The site has a COTC holder in place with an appropriate level of COTC award. The management structure in place at the site can be seen in the site's working plan (contained within the EMS).

4. There are two waste treatment operators on site. These operators are fully conversant with the requirements of the licence insofar as it is relevant to their duties.

Site staff will be trained and instructed in the procedures required to operate the Site and will be aware of the permitted waste types accepted at the Site as well as the requirements of the Environmental Permit and Management System.

5.1.3 Accident Management Plan

1. The operator is committed to developing an accident management plan as part of the proposed variation. A plan for dealing with any accidents or incidents is included within the EMS.

2. The accident management plan identifies and assesses the risks posed by the site to human health and environment.

The plan will considers:

- Waste types and the risks they pose;
- Robust waste acceptance procedures to avoid receiving unwanted items, such as gas cylinders
- Failure of abatement systems;
- Failure of plant and equipment;
- Failure of containment;
- Failure to contain firefighting water;
- Making the wrong connections in drains or other systems;
- Checking the composition of an effluent before emission;
- Vandalism and arson;
- Extreme weather conditions, for example flooding

3. The risk of accidents and their possible has been assessed.

4. The risk of fire has also been assessed.

A Fire Prevention and Mitigation Plan (FPP) has been prepared to support Aquaforce's application to vary the permit. The details of the FPP can be found in CE-FA-1921-RP08-FPP-Final v3 . The FPP details control measures to reduce the likelihood of any fire.

The factors considered during the accident risk assessment include:

- Scale and nature of the accident hazard presented by the plant and its activities;
- Risks to areas of population and the environment; and

- Nature of the plant and complexity of the activities and how difficult it is to decide and justify adequate risk control techniques

5. The accident management plan also identifies the roles and responsibilities of the staff involved in managing accidents.

6. One facility employee has been appointed as an emergency co-ordinator who will take lead responsibility for implementing the plan.

Employees will also be trained so they can perform their duties effectively and safely and know how to respond to an emergency.

7. It has been established how the site will communicate with relevant authorities, emergency services and neighbours both before, during and after an accident.

The site will have appropriate emergency procedures, including for safe plant shutdown and site evacuation.

The site will have ost-accident procedures that include assessing the harm that may have been caused by an accident and the remediation actions that will be taken.

The site will test the plan through emergency drills and exercises.

5.1.4 Accident Prevention Measures

1. The site's operate waste pre-acceptance and acceptance procedures (EMS).

2. The site's operate waste pre-acceptance and acceptance procedures (EMS).

3. Although additional waste codes are proposed within this variation, there will be no wastes with additional hazardous properties accepted by the site and therefore, no additional waste segregation measures are required.

Aquaforce have developed a storage plan to include the changes proposed in this variation, (EMS). Included in this plan is a storage matrix which identifies the wastes which require segregation and the type of segregation required.

4. The floor of the operational area is of concrete, of unknown, but substantial, thickness. All spillages are contained by this impervious surface. The whole operational area is bunded by its walls, with the exception of the entrance doors, which are protected by a 40mm cement lip.

Storage, quarantine, bulking and reception areas for wastes are:

- Indoors so run off from precipitation will not occur.
- Are performed in an area with nil drainage with no access to discharge to watercourse or sewer, storm or foul.

There are additional free-standing bunds to prevent mixing of chemically incompatible wastes. Some wastes do not contain any free liquid and are not readily chemically reactive and therefore when containerised will not require additional drainage or bunding.

The attritor plant is designed to remove any residual liquids from the containers which are released into a container beneath the drum. Liquids are stored in IBC's or drums as appropriate in designated bays according to the substance type pending transferal off-Site for disposal or recovery at an authorised facility.

Dry packaging is crushed and passes through paddles and centrifuged before being conveyed out of the drum and bulked up prior to transferral for recovery or disposal to a facility licenced to do so according to packaging type.

Bunding will encompass the plant and will comprise of a 22 cm sleeping policeman capable of containing 110% of the maximum capacity of the attritor contents i.e. 10 m^3. The walls of the building will additionally serve as secondary containment for any spillages from the plant.

The waste chemical storage areas are shown on Drawing CE-FA-1921-RP01-DW01. The Operator employs a storage matrix within the Waste Storage Procedure outlines the procedure by which the Operator identifies wastes which require segregation and the type of segregation required. The proposed additional waste codes will be stored in accordance with the storage matrix.

In the event of a major fire requiring the intervention of the Fire Brigade, water used would be retained by the lip-bunds and walls of the site, up to the maximum capacity of the bunding. Any additional fire water would flow out of the site and enter the surface water system of the Industrial Estate. Absorbent booms are available in the site stores for deployment across the doorways to contain oil which may be disturbed during any firefighting activities. These will also increase the effective volume of the bunded area, containing most of the firewater.

5. The floor of the operational area is of concrete, of unknown, but substantial, thickness. All spillages are contained by this impervious surface. The whole operational area is bunded by its walls, with the exception of the entrance doors, which are protected by a 40mm cement lip.

Storage, quarantine, bulking and reception areas for wastes are:

- Indoors so run off from precipitation will not occur.
- Are performed in an area with nil drainage with no access to discharge to watercourse or sewer, storm or foul.

There are additional free-standing bunds to prevent mixing of chemically incompatible wastes. Some wastes do not contain any free liquid and are not readily chemically reactive and therefore when containerised will not require additional drainage or bunding.

The attritor plant is designed to remove any residual liquids from the containers which are released into a container beneath the drum. Liquids are stored in IBC's or drums as appropriate in designated bays according to the substance type pending transferal off-Site for disposal or recovery at an authorised facility.

Dry packaging is crushed and passes through paddles and centrifuged before being conveyed out of the drum and bulked up prior to transferral for recovery or disposal to a facility licenced to do so according to packaging type.

Bunding will encompass the plant and will comprise of a 22 cm sleeping policeman capable of containing 110% of the maximum capacity of the attritor contents i.e. 10 m^3. The walls of the building will additionally serve as secondary containment for any spillages from the plant.

The waste chemical storage areas are shown on Drawing CE-FA-1921-RP01-DW01. The Operator employs a storage matrix within the Waste Storage Procedure outlines the procedure by which the Operator identifies wastes which require segregation and the type of segregation required. The proposed additional waste codes will be stored in accordance with the storage matrix.

The containment measure capacities have been calculated through consideration of the following:

- Nature of the pollutants;

6. All wastewater from buffer storage will be entirely contained and not discharged to ground, surface water or sewer.

7. Stocks of oil-absorbent granules, brooms and shovels, PPE and a clip-top 45- gallon drum are kept within the office/stores for use in cleaning up any spillage.

The whole operational area is bunded by its walls, with the exception of the entrance doors, which are protected by a 40mm cement lip.

Inspection for leaks or spillages is continuous during normal operation and takes place formally each day as part of the site inspection procedures. Any spillages other than minor occurrences will be reported to the EA immediately and recorded in the site diary.

8. In the unlikely event of a major fire requiring the intervention of the Fire Brigade, water used would be retained by the lip-bunds and walls of the site, up to the maximum capacity of the bunding. Absorbent booms are available in the site stores for deployment across the doorways to contain oil which may be disturbed during any firefighting activities. These will also increase the effective volume of the bunded area, containing most of the firewater.

A Fire Prevention and Mitigation Plan (FPP) has been prepared to support Aquaforce's application to vary the permit. The details of the FPP can be found in CE-FA-1921-RP08-FPP-Final.

9. Current waste storage and containment measures are addressed in the Storage procedure (EMS). The risk matric is used to determine safe storage.

Any diffuse emissions of dust or odour will be controlled through the measures stipulated in the respective dust and odour management plans.

10. The site is bounded by hedgerows and fencing and CCTV is installed near the Site entrance as well as in strategic positions throughout the Site, both internal and external, which detect vehicles and people entering the premises. In the event of unauthorised public access to the Site, security measures will be reviewed and increased in the event of unlawful entry.

11. The site is bounded by hedgerows and fencing and CCTV is installed near the Site entrance as well as in strategic positions throughout the Site, both internal and external, which detect vehicles and people entering the premises. In the event of unauthorised public access to the Site, security measures will be reviewed and increased in the event of unlawful entry.

12. A Fire Prevention and Mitigation Plan (FPP) has been prepared to support Aquaforce's application to vary the permit. The details of the FPP can be found in CE-FA-1921-RP08-FPP-Final v3.

This plan sets out control measures which aim to:

- Minimise the likelihood of a fire happening
- Aim for a fire to be extinguished within 4 hours
- Minimise the spread of fire within the site and to neighbouring sites

13. A Fire Prevention and Mitigation Plan (FPP) has been prepared to support Aquaforce's application to vary the permit. The details of the FPP can be found in CE-FA-1921-RP08-FPP-Final.

14. The plant is designed to shut down immediately should any emissions outside benchmark levels be detected. It cannot be restarted until the cause of the emissions have been investigated and rectified. Authorisation for re-start is the responsibility of the Plant Manager, who holds the only Lock-out key. Any alarm triggers are automatically recorded, and will be reported, along with rectification measures taken, to the Environment Agency without delay. Details will be recorded in the Site diary.

15. .The plant is designed to shut down immediately should any emissions outside benchmark levels be detected. It cannot be restarted until the cause of the emissions have been investigated and rectified. Authorisation for re-start is the responsibility of the Plant Manager, who holds the only Lock-out key. Any alarm triggers are automatically recorded, and will be reported, along with rectification measures taken, to the Environment Agency without delay. Details will be recorded in the Site diary.

All equipment and infrastructure on Site will be inspected, serviced and maintained as per manufacturer guidance and 'Preventative Maintenance Checklist'. Any maintenance works required will be recorded on the 'Maintenance Record'. These can be seen in the site's EMS.

Spontaneously combustible materials are not accommodated on site and therefore will not be accepted. Although additional waste codes are proposed within this variation, there will be no wastes with additional hazardous properties by the site and therefore, the current storage in place at the site is considered acceptable, storage measures can be found in the EMS. The site proposes to change the location of the waste chemical storage, however, the same storage measures will be used in the new location.

16. The site's EMS which has been developed for this proposed variation contains an environmental accident and incident form. A maintenance checklist and record is also contained within this EMS.

The site also make use of a waste tracking system which contains the following information:

- Waste storage area;
- Date of arrival;
- Job number (refers to producer deceleration);
- EWC code;
- Waste description;
- Components and concentration;
- Quantity;
- Container type;
- Disposal point;
- Price and quote number;
- Lab analysis required;
- Unique ID number;
- Bay number;
- Verification completed by;
- Non conformance reference;
- HP codes; and
- Activity

Wastes to be bulked will be tested prior to bulking to ensure compatibility. This procedure is detailed in the site's waste acceptance procedure (EMS) and will not change following the proposed variation.

The storage matrix within the Waste Storage Procedure outlines the procedure by which the Operator identifies wastes which require segregation and the type of segregation required. The Waste Storage Procedure is included within the EMS.

Documentation and all records required in accordance with the environmental permit will be kept in the site office. Where at all possible, records will be electronic.

5.1.5 Contingency Plan and Procedures

1. The Site are committed to preparing a Site contingency plan. This will include information on how permit conditions and operating procedures will be complied with during maintenance or shutdown.

2. The contingency plan will include provisions and procedures to ensure the site:

- Do not exceed storage limits in your permit and continue to apply appropriate measures for storing and handling waste;
- Stop accepting waste unless there is a clearly defined method of recovery or disposal and enough permitted storage capacity;
- As far as possible, know in advance about any planned shutdowns at waste management facilities where waste is sent.

3. The contingency plan includes plans and procedures for circumstances where wastes cannot be sent to other sites due to their planned or unplanned shutdown.

4. No end-of-waste material is produced at the site.

Customers will be made aware of the contingency plan, and of the circumstances in which waste would not be accepted.

5. It has been considered whether sites or companies which are relied on:

- Can take the waste at short notice; and
- Are authorised to do so in the quantities and types likely to be needed – in addition to carrying out their existing activities

6. Where circumstances mean that the site could exceed the permitted storage limits or compromise storage procedures, alternative disposal or recovery options will be evaluated. Disposal or recovery options based on extra cost or geographical distance will not be discounted.

7. Unauthorised capacity has not been included in the contingency plan.

8. The contingency plan and management procedures:

- Identify known or predictable malfunctions associated with your technology and the procedures, spare parts, tools and expertise needed to deal with them;
- Include a record of spare parts held, especially critical spares;
- Have a defined procedure to identify, review and prioritise items of plant which need a preventative regime;
- Include all equipment or plant whose failure could directly or indirectly lead to an impact on the environment or human health;
- Identify 'non-productive' or redundant items such as tanks, pipework, retaining walls, bunds, reusable waste containers, ducts, filters and security systems; and
- Make sure the site has the spare parts, tools, and competent staff needed before starting maintenance.

9. The EMS system developed for this proposed variation includes procedures for auditing performance against all contingency measures and reporting these audit results to the site manager.

5.1.6 Plant Decommissioning

1. The Site are committed to preparing a decommissioning plan for to minimise risks during later decommissioning.

Potential decommissioning risks have been addressed for existing plant. Changes and design improvements will be made as and when the plant is upgraded, or when construction and development works are carried out.

2. The site have implemented, as part of the proposed variation, a decommissioning plan to demonstrate that:

- Plant will be decommissioned without causing pollution; and
- The site will be returned to a satisfactory condition.

3. The decommissioning plan includes details on:

- Whether pipelines and vessels will be flushed and how they will be emptied of any potentially harmful contents;
- Site plans showing the location of all underground pipes and vessels;
- How asbestos materials will be removed;
- Methods for dismantling buildings and other structures, and for protecting surface water and groundwater during construction or demolition at the site;

- Soil testing needed to check for any pollution caused by the site activities, and information on any remediation needed to return the site to a satisfactory state when activities are ceased, as defined by the initial site condition report;
- The measures proposed, once activities have definitively stopped, to avoid any pollution risk and to return the site of operation to a satisfactory state; and
- The clearing of deposited residues, waste and any contamination resulting from the waste treatment activities.

4. Equipment taken out of use will be decontaminated and removed from the site.

5.2 Waste Pre-acceptance, Acceptance and Tracking Appropriate Measures

5.2.1 Waste Pre-acceptance

1. The site implement a waste pre-acceptance procedure (EMS).

2. The site implement a waste pre-acceptance procedure (EMS).

3. The site implement a waste pre-acceptance procedure (EMS)

4. The site implement a waste pre-acceptance procedure (EMS)

5. The site implement a waste pre-acceptance procedure (EMS)

6. The site implement a waste pre-acceptance procedure (EMS)

7. The site implement a waste pre-acceptance procedure (EMS).

8. The site implement a waste pre-acceptance procedure (EMS)

9. The site implement a waste pre-acceptance procedure (EMS)

5.2.2 Waste Acceptance and Tracking

1. The site implement a waste acceptance procedure (EMS).

2. The site implement a waste acceptance procedure (EMS).

3. The site implement a waste acceptance procedure (EMS).

4. The site implement a waste acceptance procedure (EMS).

5. The site make use of a waste tracking system which is used to determine the quantity of waste on site and therefore, the remaining waste capacity. The quantity of incoming waste is verified during the waste pre-acceptance and waste acceptance procedures. This waste tracking system and inventory takes into account the hazardous properties of the waste, the risks posed by the waste in terms of process safety, occupational safety and environmental impact, as well as the information provided by the previous waste holder(s).

The site also maintain a stock inventory of wastes, inspection of storage areas is performed so as to assess waste quantities on site. Waste will not be accepted if there is insufficient storage capacity available or if the site is inadequately manned.

The calculations used to determine the maximum storage of individual storage areas is included in the storage procedure document (EMS).

6. Storage, quarantine, bulking and reception areas for wastes are:

- Indoors so run off from precipitation will not occur.
- On impervious surface.

- Bunded therefore containing all contaminated run off.
- Are performed in an area with nil drainage with no access to discharge to watercourse or sewer, storm or foul.

All wastewater from buffer storage will be entirely contained and not discharged to ground, surface water or sewer.

7. The site's storage plan (EMS) details the materials reception area which is used for all incoming wastes.

Site staff will be trained and instructed in the procedures required to operate the Site and will be aware of the permitted waste types accepted at the Site as well as the requirements of the Environmental Permit and Management System.

8. The site implement a waste acceptance procedure (EMS).

9. The site implement a waste acceptance procedure (EMS).

10. The site implement a waste acceptance procedure (EMS).

11. The Site does not accept radioactive waste.

12. The Site does not accept radioactive waste.

13. The Site does not accept radioactive waste.

14. The Site does not accept radioactive waste.

15. The site will only accept drums and tanks with prior notice and that have a certificate of cleanliness and with hazard warning symbols obliterated.

16. Baled waste will not be accepted by the site.

17. Baled waste will not be accepted by the site.

18. A quarantine area will be clearly identified and marked on site to allow the segregation of unsuitable or combusted material. The quarantine area has a 6m separation distance around it and is shown on Drawing No: CE-FA-1921-DW01.

19. Waste sent to quarantine storage will be stored there for a maximum of fourteen working days before being removed from site. Quarantined waste will be removed, as soon as practicable in appropriate vehicles and properly disposed of at a suitably permitted site.

20. Quarantine procedures are detailed in the site's storage procedures (EMS) and are marked so they can be easily identified prior to storing them in the usual storage bays with other compatible chemicals.

21. The quarantine area has a 6m separation distance around it and is shown on Drawing No: CE-FA-1921-DW01.

22. Gas cylinders are identified and isolated from the waste stream and stored in locked cages. Gas cylinders will be sent back to the owner wherever possible.

5.2.3 Waste Tracking

1. The site's waste acceptance procedure (EMS) contains information regarding the waste tracking system and inventory in place at the site, it is ensured that the information within this system is kept up-to-date. This system will be updated to allow for the inclusion of the proposed additional waste codes and waste treatment route.

2. The site's waste acceptance procedure (EMS) contains information regarding the waste tracking system and inventory in place at the site, it is ensured that the information within this system is kept up-to-date. This system will be updated to allow for the inclusion of the proposed additional waste codes and waste treatment route.

The site's waste tracking system contains the following information:

- Waste storage area;
- Date of arrival;
- Job number (refers to producer deceleration);
- EWC code;
- Waste description;
- Components and concentration;
- Quantity;
- Container type;
- Disposal point;
- Price and quote number;
- Lab analysis required;
- Unique ID number;
- Bay number;
- Verification completed by;
- Non conformance reference;
- HP codes; and
- Activity

Copies of Waste Transfer Notes, Consignment Notes, Season Tickets, Pre-Acceptance Declaration Documentation and all records required in accordance with the Environmental Permit will be kept in the Site office. Where at all possible, records will be electronic.

3. The site's waste acceptance procedure (EMS) contains information regarding the waste tracking system and inventory in place at the site, it is ensured that the information within this system is kept up-to-date. This system will be updated to allow for the inclusion of the proposed additional waste codes and waste treatment route.

The site's waste tracking system contains the following information:

- Waste storage area;
- Date of arrival;
- Job number (refers to producer deceleration);
- EWC code;
- Waste description;
- Components and concentration;
- Quantity;
- Container type;
- Disposal point;
- Price and quote number;
- Lab analysis required;
- Unique ID number;
- Bay number;
- Verification completed by;
- Non conformance reference;
- HP codes; and
- Activity

4. The site's waste acceptance procedure (EMS) contains information regarding the waste tracking system and inventory in place at the site, it is ensured that the information within this system is kept up-to-date. This system will be updated to allow for the inclusion of the proposed additional waste codes and waste treatment route.

The site's waste tracking system contains the following information:

- Waste storage area;
- Date of arrival;
- Job number (refers to producer deceleration);
- EWC code;
- Waste description;
- Components and concentration;
- Quantity;
- Container type;
- Disposal point;
- Price and quote number;
- Lab analysis required;
- Unique ID number;
- Bay number;
- Verification completed by;
- Non conformance reference;
- HP codes; and
- Activity

5. Backup copies of computer records are stored off-site.

6. Acceptance records are kept for 2 years after the waste has been treated or removed off site. Hazardous waste consignment notes are kept for 5 years.

5.3 Waste Storage, Segregation and Handling Appropriate Measures

5.3.1 Storage Locations

1. Although additional waste codes are proposed within this variation, these wastes are similar to what is already accepted at the site and therefore, there will be no change to the handling and transfer procedures used on site.

It is ensured that handling and transfer procedures:

- Are carried out by competent staff;
- Are duly documented, validated prior to execution and verified after execution; and
- Include measures to prevent, detect and mitigate spills.

All waste is stored in locations close to their appropriate treatment/disposal location to minimise handling. Waste handling is done by forklifts, operated by appropriately trained staff.

2. All waste is stored in locations close to their appropriate treatment/disposal location to minimise handling.

3. All waste will be stored indoors.

4. The site operate a waste storage plan (EMS). Waste Storage locations are sited away from sensitive receptors.

5. The site is bounded by hedgerows and fencing and CCTV is installed near the Site entrance as well as in strategic positions throughout the Site, both internal and external, which detect vehicles and people entering the premises. In the event of unauthorised public access to the Site, security measures will be reviewed and increased in the event of unlawful entry.

5.3.2 Storage Duration and Capacity

1. The site make use of a waste tracking system which is used to determine the quantity of waste on site and therefore, the remaining waste capacity. The quantity of incoming waste is verified during the waste pre-acceptance and waste acceptance procedures. This waste tracking system and inventory takes into

account the hazardous properties of the waste, the risks posed by the waste in terms of process safety, occupational safety and environmental impact, as well as the information provided by the previous waste holder(s).

The site also maintain a stock inventory of wastes, inspection of storage areas is performed so as to assess waste quantities on site. Waste will not be accepted if there is insufficient storage capacity available or if the site is inadequately manned.

The calculations used to determine the maximum storage of individual storage areas is included in the storage procedure document and FPP (EMS).

2. The calculations used to determine the maximum storage of individual storage areas is included in the storage procedure document and FPP (EMS).

The site maintain a stock inventory of wastes, inspection of storage areas is performed so as to assess waste quantities on site. Waste will not be accepted if there is insufficient storage capacity available or if the site is inadequately manned.

3. All wastes will be removed within 6 months of receipt.

4. All waste is stored to allow for easy inspection. There is pedestrian and vehicular access to all storage areas.

5. Due to the nature of the waste materials accepted at the Site, i.e. WEEE, hazardous and non-hazardous waste, the risk from pests as a result of the operation of the proposed variation is considered insignificant.

6. Inspection for leaks or spillages is continuous during normal operation and takes place formally each day as part of the site inspection procedures. Any spillages other than minor occurrences will be reported to the EA immediately and recorded in the site diary.

7. Activities prohibited in waste storage areas to prevent fire:

- Smoking is banned across that whole site.
- Welding or metal working or any maintenance or activity that generates heat or sparks can only be carried out when that storage area or containment system being worked in or on is empty and clean – ensuring any adjacent storage areas are made safe.

5.3.3 Dangerous Substances and Explosive Atmospheres Regulation 2002 (DSEAR)

1. Although additional waste codes are proposed within this variation, there will be no wastes with additional hazardous properties accepted by the site and therefore, no additional safe storage measures are required.

All proposed new wastes will be labelled and directed to the appropriate storage area through verification of the pre-acceptance and acceptance procedures.

In line with HSG71, HSG76 and HSG51, the site's storage plan (EMS) sets out the control measures at each storage location. The storage matrix within the Waste Storage Procedure outlines the procedure by which the Operator identifies wastes which require segregation and the type of segregation required. The Waste Storage Procedure is included within the EMS.

5.3.4 Battery Storage

The site does not store batteries, this will continue with the proposed variation.

5.4 Waste Treatment Appropriate Measures

5.4.1 General Waste Treatment

1. Although it is proposed that a non-hazardous waste treatment process is added to the site's permit, this process will be very similar to what is already carried out on site, however, will treat water-based paint instead of solvent-based paint. Therefore, the benefits of the waste treatment undertaken at the site will remain the same.

The treated output material from the WTEE waste treatment plant goes through extensive monitoring procedures as seen in Working Plan (EMS) to ensure the expectations of output material are met and is suitable for its intended disposal or recovery.

The waste output from the proposed attritor system which will be used to treat non-hazardous paints will go through analysis to identify its composition and weight, ensuring the expectations of output material are met and is suitable for its intended disposal or recovery. The same process will be used for the treatment of non-hazardous and hazardous waste in the paint and aerosol plant. Although it is proposed that this plant is moved location, all treatment processes undertaken within this plant will remain the same.

Although it is proposed that the paint and aerosol treatment plant is moved location, all treatment processes undertaken within this plant will remain the same.

2. The treated output material from the WTEE waste treatment plant goes through extensive monitoring procedures as seen in Working Plan (EMS) to ensure the expectations of output material are met and is suitable for its intended disposal or recovery.

The waste output from the proposed attritor system which will be used to treat non-hazardous paints will go through analysis to identify its composition and weight, ensuring the expectations of output material are met and is suitable for its intended disposal or recovery. The same process will be used for the treatment of non-hazardous and hazardous waste in the paint and aerosol plant. Although it is proposed that this plant is moved location, all treatment processes undertaken within this plant will remain the same.

3. The permit currently lists three air emission points, A1, A2 and A3. These emission points are shown on Drawing No. CE-FA-1921-DW01. It is proposed that the paint and aerosol treatment plant moves location, the location of emission point A2 will also move.

Emission point A1 comprises an exhaust stack emission to atmosphere from the WEEE plant. Emission point A2 is from a combined single stack from the aerosol and paint plant and paint processing plant and emission point A3 from the steam raising boiler.

Emission points A1 and A2 are monitored quarterly for total particulate matter, particulate matter fraction PM10 & PM2.5, CFCs, and volatile organic compounds. Flowrate and temperature will also be monitored at these emission points. There are no set parameters or limits for the monitoring of A3.

Although it is proposed that emission point A2 moves location, the same abatement and emission prevention measures will be in place. The same monitoring requirements are also stipulated for this emission point.

4. The site's waste pre-acceptance and acceptance procedures will ensure that the only waste accepted by the site is suitable for the appropriate treatment. The site also maintain a waste tracking system which contains information on all relevant waste characteristics. This system will be updated to allow for the inclusion of the proposed additional waste codes and attritor treatment route.

The following information will be kept by the site and updated regularly:

- Simplified process flowsheets that show the origin of any emissions;
- Details of emission control and abatement techniques for emissions to air;
- Diagrams of the main plant items where they have environmental relevance;
- Details of physical treatment processes;
- An equipment inventory, detailing plant type and design parameters;

- Waste types to be subjected to the process;
- The control system philosophy and how the control system incorporates environmental monitoring information;
- Process flow diagrams (schematics);
- Venting and emergency relief provisions;
- A summary of operating and maintenance procedures;
- Process instrumentation diagrams; and
- Monitoring points and monitoring schedules.

5. The site maintain up to date written details of the measures taken during abnormal conditions to make sure permit conditions are complied with.

6. The site's waste pre-acceptance and acceptance procedures will ensure that the only waste accepted by the site is suitable for the appropriate treatment. The site also maintain a waste tracking system which contains information on all relevant waste characteristics. This system will be updated to allow for the inclusion of the proposed additional waste codes and attritor treatment route.

The site's waste pre-acceptance and acceptance procedures considers:

- The hazardous properties of the waste;
- The restricted chemicals in the waste;
- The risks posed by the waste in terms of process safety;
- Occupational safety and environmental impact; and
- Knowledge of the previous waste holders.

Although additional waste codes are proposed within this variation, all new wastes will be similar to what is already treated on site and therefore, the current waste treatment processes will not change with the proposed variation.

There will be no emissions to water or ground, the site ensure air emissions are minimised.

A Dust and Emissions Management Plan has been prepared to support Aquaforce's application to vary the permit. The details of this plan can be found in CE-FA-1921-RP06-DMP-Final v2.

The permit currently lists three air emission points, A1, A2 and A3. These emission points are shown on Drawing No. CE-FA-1921-DW01. It is proposed that the paint and aerosol treatment plant moves location, the location of emission point A2 will also move.

Emission point A1 comprises an exhaust stack emission to atmosphere from the WEEE plant. Emission point A2 is from a combined single stack from the aerosol and paint plant and paint processing plant and emission point A3 from the steam raising boiler.

Although it is proposed that emission point A2 moves location, the same abatement and emission prevention measures will be in place. The same monitoring requirements are also stipulated for this emission point.

7. Treatment will not go ahead if the site's risk assessment indicates that losses from a process will cause:

- The breach of an environmental quality standard;
- The breach of a benchmark; or
- A significant environmental impact.

5.4.2 Metal Shredding Plant and Downstream Processes

1. Metal shredding is undertaken in both the WTEE waste treatment facility and the paint and aerosol plant. Although it is proposed that this plant is moved location, all treatment processes undertaken within this plant will remain the same. There will be no changes to the current WTEE waste treatment processes.

2. All metal shredding treatment systems have been designed to consider physical hazards and environmental risks and emissions from the plant and processes. Preventative and protective measures are also in place, including:

- Working instructions;
- Staff training;
- Appropriate process control measures;
- Monitoring systems, alarms and interlocks;
- Plant maintenance;
- Checks;
- Audits; and
- Emergency procedures.

3. All shredder processes are undertaken indoors. Separation technologies such as magnetic and electromagnetic separation are used to further separate and purify shredded fractions.

Although it is proposed that this plant is moved location, all treatment processes undertaken within this plant will remain the same. There will be no changes to the current WTEE waste treatment processes.

4. Fractions produced by shredder treatment systems are analysed to accurately classify and code the waste. This will continue with the proposed variation.

Although it is proposed that this plant is moved location, all treatment processes undertaken within this plant will remain the same. There will be no changes to the current WTEE waste treatment processes.

5. Waste codes are not used for single material fractions. This will continue with the proposed variation.

6. Density separation is not used on site. This will continue with the proposed variation.

5.4.3 POPs

1. All waste plastic separated from WEEE waste on Site has the potential to contain POPs. The Site assumes all plastic waste could contain POPs. Rather than assess the waste themselves, they subcontract this responsibility to a third party.

2. All waste plastic separated from WEEE waste on Site has the potential to contain POPs. The Site assumes all plastic waste could contain POPs. Rather than assess the waste themselves, they subcontract this responsibility to a third party.

3. All waste plastic separated from WEEE waste on Site has the potential to contain POPs. The Site assumes all plastic waste could contain POPs. Rather than assess the waste themselves, they subcontract this responsibility to a third party.

4. All waste plastic separated from WEEE waste on Site has the potential to contain POPs. The Site assumes all plastic waste could contain POPs. Rather than assess the waste themselves, they subcontract this responsibility to a third party.

5. All waste plastic separated from WEEE waste on Site has the potential to contain POPs. The Site assumes all plastic waste could contain POPs. Rather than assess the waste themselves, they subcontract this responsibility to a third party.

5.4.4 Antimony Trioxide

1. Wastes containing antimony trioxide will not be accepted on site.

5.4.5 Minimising Diffuse Emissions from the Process

1. All shredding activities are undertaken in an enclosed building, under an appropriate pressure.

All emissions from shredding activities are vented to particulate abatement.

A Dust and Emissions Management Plan has been prepared to support Aquaforce's application to vary the permit. The details of this plan can be found in CE-FA-1921-RP06-DMP-Final v2.

2. Contained within this EMS is a written procedure for proposing, considering and approving changes to technical developments, or to procedural or quality changes.

3. All emissions from shredding activities are vented to particulate abatement.

5.4.6 Record Keeping for All Treatment Residues

1. The site have developed a residues management plan as part of the proposed permit variation.

5.5 Emissions Control Appropriate Measures

5.5.1 Point Source Emissions to Air

There will be no additional point source emissions to air with this proposed variation.

5.5.2 Fugitive Emissions to Air (Including Odour)

1. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

There have been no substantiated odour complaints at the facility throughout its operation under environmental permit. However, it is not anticipated that there will be odour nuisance at sensitive receptors, as a result of the site activities due to;

- Improved process control,
- Robust pre-acceptance measures,
- Enhanced training (both odour management and process control).

A Dust and Emissions Management Plan has been prepared to support Aquaforce's application to vary the permit. The details of this plan can be found in CE-FA-1921-RP06-DMP-Final v2.

In summary, the Dust and Emissions Management Plan contains the following control measures:

- Wastes delivered will mainly comprise of WEEE, waste paints, aerosols, airbags and hazardous liquids that are not inherently dusty. With the exception of receipt of the waste and exporting wastes off-Site, all Site activities are carried out within the confines of the building. Records of all incoming loads stored on Site or in a secure off Site location in accordance with the Duty of Care requirements of the Environmental Permit.
- Waste producers are required to provide details of any precautions that should be taken at the Site to abate emissions as part of the Waste Acceptance Procedure. Only waste material stipulated in the Environmental Permit will be accepted with inherently dusty waste (e.g. incinerator ash) refused.
- Preventative and remedial measures to implement on the Site include a vehicle speed restriction of 10mph and drop heights from the vehicles will be minimised as best practicable.
- Vehicles and plant will be hosed on exit from the Site as required in order to minimise the dispersion of emissions to sensitive receptors off Site.
- On Site sweeping will take place when conditions require. All areas and plant will be subjected to general housekeeping to prevent the accumulation of dust and loose material.
- Any waste that may be stockpiled will not exceed 4m in height to alleviate the potential of emissions becoming airborne. Stockpiles and vehicle loads will also be covered whenever this does not impinge on operations.
- Operations on Site will cease during periods of high winds to aid in the immobilisation of fugitive dust and particulate emissions.
- The Site Manager and Technically Competent Person will be responsible for the implementation of the DMP and the application of appropriate, recommended dust suppression measures.
- Any complaints received concerning dust and particulate emissions at the Site will be dealt with in accordance with the company's EMS complaints procedure.

- The investigation will be instigated by the Site Manager or the Technical Competent Person following the completion of the Complaints Report Form.

2. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

A Dust and Emissions Management Plan has been prepared to support Aquaforce's application to vary the permit. The details of this plan can be found in CE-FA-1921-RP06-DMP-Final.

Although additional waste codes are proposed within this variation, there will be no wastes with additional hazardous properties accepted by the site and therefore, the waste storage currently in place at the site is deemed acceptable.

Although it is proposed that the paint and aerosol treatment plant is moved, the same processes will be in place. There shall be no changes to the WTEE treatment plant with this proposed variation.

3. A Dust and Emissions Management Plan has been prepared to support Aquaforce's application to vary the permit. The details of this plan can be found in CE-FA-1921-RP06-DMP-Final v2.

4. There will be no changes to any other shredder treatment undertaken on site following the proposed variation. Although it is proposed that the paint and aerosol treatment plant is moved, the same processes will be in place. There shall be no changes to the WTEE treatment plant with this proposed variation.

5. The site's waste pre-acceptance and acceptance procedures will be used to characterise waste and therefore, will identify any wastes which could case fugitive emissions to air. The site also undertake storage area inspection which will assist with this characterisation.

There should no fugitive emissions of dust as a result of this proposed variation.

An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

6. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

7. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

8. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

9. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

10. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

11. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

12. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

13. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

14. A Dust and Emissions Management Plan has been prepared to support Aquaforce's application to vary the permit. The details of this plan can be found in CE-FA-1921-RP06-DMP-Final v2.

15. A Dust and Emissions Management Plan has been prepared to support Aquaforce's application to vary the permit. The details of this plan can be found in CE-FA-1921-RP06-DMP-Final.

16. A Dust and Emissions Management Plan has been prepared to support Aquaforce's application to vary the permit. The details of this plan can be found in CE-FA-1921-RP06-DMP-Final.

17. Inspection for leaks or spillages is continuous during normal operation and takes place formally each day as part of the site inspection procedures. Any spillages other than minor occurrences will be reported to the EA immediately and recorded in the site diary.

All equipment and infrastructure on Site will be inspected, serviced and maintained as per manufacturer guidance and 'Preventative Maintenance Checklist'. Any maintenance works required will be recorded on the 'Maintenance Record'. These can be seen in the site's EMS.

18. All equipment and infrastructure on Site will be inspected, serviced and maintained as per manufacturer guidance and 'Preventative Maintenance Checklist'. Any maintenance works required will be recorded on the 'Maintenance Record'. These can be seen in the site's EMS.

All waste storage areas, treatment areas and equipment will be cleaned. Any residues collected during cleaning will be contained.

19. All equipment and infrastructure on Site will be inspected, serviced and maintained as per manufacturer guidance and 'Preventative Maintenance Checklist'. Any maintenance works required will be recorded on the 'Maintenance Record'. These can be seen in the site's.

The site is regularly cleaned to avoid large-scale decontamination activities.

20. Although it is proposed that the paint and aerosol treatment plant is moved, the same processes will be in place. There shall be no changes to the WTEE treatment plant with this proposed variation.

21. All equipment and infrastructure on Site will be inspected, serviced and maintained as per manufacturer guidance and 'Preventative Maintenance Checklist'. Any maintenance works required will be recorded on the 'Maintenance Record'. These can be seen in the site's EMS.

22. Measures will be taken to prevent emissions from washing and cleaning activities, including:

- Collecting liquid effluent and wash waters in a sealed system for off site disposal;
- Using biodegradable and non-corrosive washing and cleaning products;
- Storing all detergents, emulsifiers and other cleaning agents in suitable bunded or containment facilities, within a locked storage area; AND
- preparing cleaning or disinfection solutions in contained areas of the site and never in areas that drain to the surface water system.

23. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

24. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

25. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

26. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

27. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

28. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

29. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

30. Deflagration is not undertaken on site. This will continue following the proposed variation.

31. Deflagration is not undertaken on site. This will continue following the proposed variation.

32. Deflagration is not undertaken on site. This will continue following the proposed variation.

5.5.3 Emissions of Noise and Vibration

1. The site has not received any noise complaints during the time that the permit has been in place. Although the proposed variation does include the addition of a non-hazardous WEEE waste treatment system, this system will be located indoors and therefore, the noise from this system at sensitive receptors will be minimal. Additionally, as the site is located in a heavily industrialised area, it is far away from noise sensitive receptors.

All other proposed variations will not impact the noise generated by the site and therefore, a noise and vibration management is not required.

2. The site has not received any noise complaints during the time that the permit has been in place. Although the proposed variation does include the addition of a non-hazardous WEEE waste treatment system, this system will be located indoors and therefore, the noise from this system at sensitive receptors will be minimal. Additionally, as the site is located in a heavily industrialised area, it is far away from noise sensitive receptors.

All other proposed variations will not impact the noise generated by the site and therefore, a noise and vibration management is not required.

The following noise control measures are used on site:

- All vehicles, plant and machinery operated at the Site will be maintained in accordance with the manufacturer's specification and fitted with effective silencers. Any breakdown or malfunction of silencing equipment will be treated as an emergency and dealt with immediately. Where a repair cannot be affected immediately the equipment will be taken out of service until the repair is made.
- The Site will only be operated during the hours specified in the planning permission. No un-sociable or night-time working will be carried out. The additional activities carried out under the permit variation i.e. the attritor and drum washer are sealed units that will be installed indoors to minimise risk of noise or vibration emitted during operating. They will be located on concreted flooring and roller shutter doors are kept shut at all times except for the entry and egress of loads.
- Any complaints received at the Site about noise will be monitored and logged in accordance with the EMS. Mitigation measures will be implemented, as appropriate, to ensure a high level of control.

3. The site has not received any noise complaints during the time that the permit has been in place. Although the proposed variation does include the addition of a non-hazardous WEEE waste treatment system, this system will be located indoors and therefore, the noise from this system at sensitive receptors will be minimal. Additionally, as the site is located in a heavily industrialised area, it is far away from noise sensitive receptors.

All other proposed variations will not impact the noise generated by the site and therefore, a noise and vibration management is not required.

4. The site has not received any noise complaints during the time that the permit has been in place. Although the proposed variation does include the addition of a non-hazardous WEEE waste treatment system, this system will be located indoors and therefore, the noise from this system at sensitive receptors

will be minimal. Additionally, as the site is located in a heavily industrialised area, it is far away from noise sensitive receptors.

5. All other proposed variations will not impact the noise generated by the site and therefore, a noise and vibration management is not required.

5.5.4 Point Source Emissions to Water and Sewer

There are no point source emissions to water or sewer

5.5.5 Fugitive Emissions to Land and Water

1. The floor of the operational area is of concrete, of unknown, but substantial, thickness. All spillages are contained by this impervious surface. The whole operational area is bunded by its walls, with the exception of the entrance doors, which are protected by a 40mm cement lip.

Storage, quarantine, bulking and reception areas for wastes are:

- Indoors so run off from precipitation will not occur.
- On impervious surface.
- Bunded therefore containing all contaminated run off.
- Are performed in an area with nil drainage with no access to discharge to watercourse or sewer, storm or foul.

There are additional free-standing bunds to prevent mixing of chemically incompatible wastes. Some wastes do not contain any free liquid and are not readily chemically reactive and therefore when containerised will not require additional drainage or bunding.

Bunding will encompass the attritor plant and will comprise of a 22 cm sleeping policeman capable of containing 110% of the maximum capacity of the attritor contents i.e. 10 m^3. The walls of the building will additionally serve as secondary containment for any spillages from the plant.

Stocks of oil-absorbent granules, brooms and shovels, PPE and a clip-top 45- gallon drum are kept within the office/stores for use in cleaning up any spillage.

Although additional waste codes are proposed within this variation, there will be no wastes with additional hazardous properties accepted by the site and therefore, the current waste storage procedures are deemed acceptable for use with this proposed variation.

2. The floor of the operational area is of concrete, of unknown, but substantial, thickness. All spillages are contained by this impervious surface. The whole operational area is bunded by its walls, with the exception of the entrance doors, which are protected by a 40mm cement lip.

There are additional free-standing bunds to prevent mixing of chemically incompatible wastes. Some wastes do not contain any free liquid and are not readily chemically reactive and therefore when containerised will not require additional drainage or bunding.

Sealed construction joints are in place throughout the site, there will be no additional buildings constructed following the proposed variation.

Storage, quarantine, bulking and reception areas for wastes are:

- Indoors so run off from precipitation will not occur.
- On impervious surface.
- Bunded therefore containing all contaminated run off.
- Are performed in an area with nil drainage with no access to discharge to watercourse or sewer, storm or foul.

3. All wastewater from buffer storage will be entirely contained and not discharged to ground, surface water or sewer.

4. There are additional free-standing bunds to prevent mixing of chemically incompatible wastes. Some wastes do not contain any free liquid and are not readily chemically reactive and therefore when containerised will not require additional drainage or bunding.

All wastewater from buffer storage will be entirely contained and not discharged to ground, surface water or sewer.

5. The floor of the operational area is of concrete, of unknown, but substantial, thickness. All spillages are contained by this impervious surface. The whole operational area is bunded by its walls, with the exception of the entrance doors, which are protected by a 40mm cement lip.

There are additional free-standing bunds to prevent mixing of chemically incompatible wastes. Some wastes do not contain any free liquid and are not readily chemically reactive and therefore when containerised will not require additional drainage or bunding.

Storage bay areas are fitted with 150mm wide precast concrete bund walls 2400mm high and sealed at the bottom to prevent leaking into adjacent bunds.

Stocks of oil-absorbent granules, brooms and shovels, PPE and a clip-top 45- gallon drum are kept within the office/stores for use in cleaning up any spillage.

6. All wastewater from buffer storage will be entirely contained and not discharged to ground, surface water or sewer.

7. All equipment and infrastructure on Site will be inspected, serviced and maintained as per manufacturer guidance and ‘Preventative Maintenance Checklist’. Any maintenance works required will be recorded on the ‘Maintenance Record’. These can be seen in the site’s EMS.

All equipment and infrastructure on Site will be inspected, serviced and maintained as per manufacturer guidance and ‘Preventative Maintenance Checklist’. Any maintenance works required will be recorded on the ‘Maintenance Record’. These can be seen in the site’s EMS.

8. The maximum capacity of the site’s bunding system will be calculated to account for potential abnormal operating scenarios and incidents and the nature of any polluting substances and their impact on the receiving environment. Absorbent booms are available in the site stores for deployment across the doorways to contain oil which may be disturbed during any firefighting activities. These will also increase the effective volume of the bunded area, containing most of the firewater.

Bunding will encompass the attritor plant and will comprise of a 22 cm sleeping policeman capable of containing 110% of the maximum capacity of the attritor contents i.e. 10 m^3. The walls of the building will additionally serve as secondary containment for any spillages from the plant.

Although it is proposed that the paint and aerosol treatment plant is moved, the same bunding will be in place.

9. All wastewater from buffer storage will be entirely contained and not discharged to ground, surface water or sewer.

10. Measures will be taken to prevent emissions from washing and cleaning activities, including:

- Collecting liquid effluent and wash waters in a sealed system for off site disposal;
- Using biodegradable and non-corrosive washing and cleaning products;
- Storing all detergents, emulsifiers and other cleaning agents in suitable bunded or containment facilities, within a locked storage area; AND
- preparing cleaning or disinfection solutions in contained areas of the site and never in areas that drain to the surface water system.

11. Although the site store oils and fuels, there will be no alterations to this storage with the proposed variation and therefore, the current storage procedures in place for oils are deemed acceptable.

A refuelling and emergency spillage procedure has been included as part of the EMS.

12. The site will implement a spillage response plan, staff have been trained to follow it.

13. All leaks or spills will be dealt with immediately.

14. Stocks of oil-absorbent granules, brooms and shovels, PPE and a clip-top 45- gallon drum are kept within the office/stores for use in cleaning up any spillage. Spillage equipment is located close to locations where spillages could occur.

15. The maximum capacity of the site's bunding system will be calculated to account for potential abnormal operating scenarios and incidents and the nature of any polluting substances and their impact on the receiving environment. Absorbent booms are available in the site stores for deployment across the doorways to contain oil which may be disturbed during any firefighting activities. These will also increase the effective volume of the bunded area, containing most of the firewater.

16. The site's spillage response plan includes information on how to handle and correctly dispose of waste produced from a spillage.

17. There will be no sub-surface structures on site.

18. The floor of the operational area is of concrete, of unknown, but substantial, thickness. All spillages are contained by this impervious surface. Although additional waste codes are proposed within this variation, there will be no wastes with additional hazardous properties accepted by the site and therefore, this surface is deemed acceptable for the proposed variation.

19. All equipment and infrastructure on Site will be inspected, serviced and maintained as per manufacturer guidance and 'Preventative Maintenance Checklist'. Any maintenance works required will be recorded on the 'Maintenance Record'. These can be seen in the site's EMS.

20. Bunding will encompass the attritor plant and will comprise of a 22 cm sleeping policeman capable of containing 110% of the maximum capacity of the attritor contents i.e. 10 m^3. The walls of the building will additionally serve as secondary containment for any spillages from the plant.

The bund will also:

- Be impermeable and resistant to the stored materials;
- Have no outlet and drain to a blind collection point;
- Have pipework routed within bunded areas with no penetration of contained surfaces;
- Be designed to catch leaks from tanks or fittings;
- Have regular visual inspections; and
- Have programmed engineering inspections

The liquid storage will be located indoors and therefore, this is no potential for rainwater to enter the bund.

There will be no changes to any other above-ground tanks with the proposed variation.

5.6 Emissions Limits, Monitoring and Appropriate Measures

1. The permit currently lists three air emission points, A1, A2 and A3. These emission points are shown on Drawing No. CE-FA-1921-DW01. It is proposed that the paint and aerosol treatment plant moves location, the location of emission point A2 will also move.

Emission point A1 comprises an exhaust stack emission to atmosphere from the WEEE plant. Emission point A2 is from a combined single stack from the aerosol and paint plant and paint processing plant and emission point A3 from the steam raising boiler.

Emission points A1 and A2 are monitored quarterly for total particulate matter, particulate matter fraction PM10 & PM2.5, CFCs, and volatile organic compounds. Flowrate and temperature will also be monitored at these emission points. There are no set parameters or limits for the monitoring of A3.

Although it is proposed that emission point A2 moves location, the same monitoring requirements are also stipulated for this emission point.

The site will comply with the emission limits and monitoring requirements set out in their environmental permit.

2. The site maintain an emissions inventory of the point source emissions to air. It is proposed that the paint and aerosol plant moves location, the location of emission point A2 will also move.

There are no point source emissions to water on site.

5.6.1 Emissions to Air

There will be no additional point source emissions to air with the proposed variation.

5.6.2 Emissions Limits and Monitoring Requirements

There will be no additional point source emissions to air with the proposed variation and so, all emissions limits and monitoring requirements can be seen in the site's current permit.

5.6.3 Emissions to Water or Sewer

There are no emissions to water or sewer

5.7 Process Efficiency Appropriate Measures

1. Aquaforce monitor the annual consumption of water, energy and raw materials at the site for submission to the EA through a Resource Efficiency Physical Index (REPI). This REPI also includes the annual waste transferred for disposal and recovery in terms of hazardous and non-hazardous waste. (Appendix 2).

5.7.1 Energy Efficiency

1. The Operator is committed to preparing an energy efficiency plan for the site. This plan:

- Defines and calculates the specific energy consumption of the activities undertaken on site and waste streams treated;
- Sets annual key performance indicators; and
- Plans periodic improvement targets and related actions.

2. This energy efficiency plan is regularly reviewed and updated as part of the site's EMS.

3. The site will maintain an energy balance record which will provide a breakdown of energy consumption and generation by the type of source. Sankey diagrams will be provided to show how energy is used in waste treatment processes.

4. This energy balance record is regularly reviewed and updated as part of the site's.

5. The site has operating, maintenance and housekeeping measures in place for relevant areas, including:

- Air conditioning, process refrigeration and cooling systems;
- The operation of motors and drives;
- Compressed gas systems;
- Space heating and hot water systems;
- Lubrication to avoid high friction losses; and

- boiler operation and maintenance.

6. The site also makes use of insulation, seals and self-closing doors to avoid gross energy inefficiencies.

7. Wherever possible, the site will look to implement additional energy efficiency measures.

5.7.2 Raw Materials

1. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume raw materials. This will continue following the proposed variation.

2. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume raw materials. This will continue following the proposed variation.

3. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume raw materials. This will continue following the proposed variation.

4. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume raw materials. This will continue following the proposed variation.

5.7.3 Water Use

1. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume water. This will continue following the proposed variation.

2. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume water. This will continue following the proposed variation.

3. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume water. This will continue following the proposed variation.

4. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume water. This will continue following the proposed variation.

5. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume water. This will continue following the proposed variation.

6. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume water. This will continue following the proposed variation.

7. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume water. This will continue following the proposed variation.

8. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume water. This will continue following the proposed variation.

9. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume water. This will continue following the proposed variation.

5.7.4 Waste Minimisation, Recovery and Disposal

1. The site have developed a residues management plan as part of the proposed permit variation

2. No waste is disposed of on site. This will continue following the proposed variation.

3. All wastes are transported off site for recovery. This will continue following the proposed variation.

Section 6.0: Assessment Against "Chemical Waste: Appropriate Measures for Permitted Facilities"

The following section assesses compliance against "Chemical waste: appropriate measures for permitted facilities" as requested by the EA.

6.1 General Management Appropriate Measures

6.1.1 Management System

1. An Environmental Management System (EMS) has been prepared to support Aquaforce's application to vary the permit.

The Operator is committed to include the following features within the Site's EMS:

- Commitment of the management, including senior management;
- Definition, by the management, of an environmental policy that includes the continuous improvement of the environmental performance of the installation;
- Planning and establishing the necessary procedures, objectives and targets, in conjunction with financial planning and investment;
- Implementation of procedures paying particular attention to:
    - Structure and responsibility,
    - Recruitment, training, awareness and competence,
    - Communication,
    - Employee involvement,
    - Documentation,
    - Effective process control,
    - Maintenance programmes,
    - Emergency preparedness and response,
    - Safeguarding compliance in line with the Site's environmental permit;
- Checking performance and taking corrective action, paying particular attention to:
    - Monitoring and measurement,
    - Corrective and preventive action,
    - Maintenance of records,
    - Independent (where practicable) internal or external auditing in order to determine whether or not the EMS conforms to planned arrangements and has been properly implemented and maintained;
- Review, by senior management, of the EMS and its continuing suitability, adequacy and effectiveness;
- Following the development of cleaner technologies;
- Consideration for the environmental impacts from the eventual decommissioning of the plant at the stage of designing a new plant, and throughout its operating life;
- Application of sectoral benchmarking on a regular basis;
- Waste stream management;
- An inventory of waste water and waste gas streams;
- Residues management plan;
- Accident management plan;

- Odour management plan;
- Dust management plan;
- Site infrastructure plan;
- Site condition report;
- Fire prevention plan.

6.1.2 Staff Competence

1. The site has a COTC holder in place with an appropriate level of COTC award. The site chemist is degree level qualified in Chemistry or a related subject with similar discipline.

2. Site staff will be trained and instructed in procedures relevant to their role and will be aware of the requirements of the environmental permit and environmental management system.

3. The site has a COTC holder in place with an appropriate level of COTC award. The management structure in place at the site can be seen in the site's working plan (EMS).

4. The site chemist will carry out the technical appraisal of waste's suitability for receipt at pre-acceptance. The site chemist is degree level qualified in Chemistry or a related subject with similar discipline.

The site chemist, or a designated person under the supervision of the site chemist will carry out technical appraisals for the following wastes:

- Asbestos;
- Fridges;
- WEEE waste;
- Chemical/hazardous waste.

5. Sampling of hazardous wastes will be undertaken by the site chemist should this be required. Although additional waste codes are proposed within this variation, there will be no wastes with additional hazardous properties accepted by the site and therefore, these procedures are deemed acceptable.

6. All samples will be representative of the waste and taken by the site chemist.

7. All analysis of samples will be undertaken by the site chemist.

8. Site staff will be trained and instructed in procedures relevant to their role and will be aware of the requirements of the environmental permit and environmental management system.

6.1.3 Accident Management Plan

1. The operator is committed to developing an accident management plan as part of the proposed variation. A plan for dealing with any accidents or incidents is included within the EMS.

2. The accident management plan will identify and assesses the risks posed by the site to human health and environment.

3. The plan will consider:

- Waste types and the risks they pose;
- Robust waste acceptance procedures to avoid receiving unwanted items, such as gas cylinders
- Failure of abatement systems;
- Failure of plant and equipment;
- Failure of containment;
- Failure to contain firefighting water;
- Making the wrong connections in drains or other systems;
- Checking the composition of an effluent before emission;
- Vandalism and arson;

- Extreme weather conditions, for example flooding or very high winds; and
- Loss of power.

4. The risk of accidents and their possible has been assessed.

5. The risk of fire has also been assessed.

A Fire Prevention and Mitigation Plan (FPP) has been prepared to support Aquaforce's application to vary the permit. The details of the FPP can be found in CE-FA-1921-RP08-FPP-Final v3. The FPP details control measures to reduce the likelihood of any fire.

6. The factors considered during the accident risk assessment include:

- Scale and nature of the accident hazard presented by the plant and its activities;
- Risks to areas of population and the environment; and
- Nature of the plant and complexity of the activities and how difficult it is to decide and justify adequate risk control techniques

7. The accident management plan also identifies the roles and responsibilities of the staff involved in managing accidents.

8. One facility employee has been appointed as an emergency co-ordinator who will take lead responsibility for implementing the plan.

Employees will also be trained so they can perform their duties effectively and safely and know how to respond to an emergency.

9. It has been established how the site will communicate with relevant authorities, emergency services and neighbours both before, during and after an accident.

The site will have appropriate emergency procedures, including for safe plant shutdown and site evacuation.

The site will have ost-accident procedures that include assessing the harm that may have been caused by an accident and the remediation actions that will be taken.

The site will test the plan through emergency drills and exercises.

6.1.4 Accident Prevention Measures

1. The operator is committed to developing an accident management plan as part of the proposed variation. A plan for dealing with any accidents or incidents is included within the EMS.

2. Although additional waste codes are proposed within this variation, there will be no wastes with additional hazardous properties accepted by the site and therefore, no additional waste segregation measures are required.

The location of the present chemical waste storage will expand and include those areas shown on Drawing CE-FA-1921-DW01 Rev A. The storage matrix within the Waste Storage Procedure outlines the procedure by which the Operator identifies wastes which require segregation and the type of segregation required. The Waste Storage Procedure is included within the EMS.

3. The floor of the operational area is of concrete, of unknown, but substantial, thickness. All spillages are contained by this impervious surface. The whole operational area is bunded by its walls, with the exception of the entrance doors, which are protected by a 40mm cement lip.

Storage, quarantine, bulking and reception areas for wastes are:

- Indoors so run off from precipitation will not occur.

- Are performed in an area with nil drainage with no access to discharge to watercourse or sewer, storm or foul.

There are additional free-standing bunds to prevent mixing of chemically incompatible wastes. Some wastes do not contain any free liquid and are not readily chemically reactive and therefore when containerised will not require additional drainage or bunding.

The attritor plant is designed to remove any residual liquids from the containers which are released into a container beneath the drum. Liquids are stored in IBC's or drums as appropriate in designated bays according to the substance type pending transferal off-Site for disposal or recovery at an authorised facility.

Dry packaging is crushed and passes through paddles and centrifuged before being conveyed out of the drum and bulked up prior to transferral for recovery or disposal to a facility licenced to do so according to packaging type.

Bunding will encompass the plant and will comprise of a 22 cm sleeping policeman capable of containing 110% of the maximum capacity of the attritor contents i.e. 10 m^3. The walls of the building will additionally serve as secondary containment for any spillages from the plant.

The waste chemical storage areas are shown on Drawing CE-FA-1921-RP01-DW01. The Operator employs a storage matrix within the Waste Storage Procedure outlines the procedure by which the Operator identifies wastes which require segregation and the type of segregation required. The proposed additional waste codes will be stored in accordance with the storage matrix.

Although it is proposed that the paint and aerosol treatment plant is moved, the same bunding will be in place.

In the unlikely event of a major fire requiring the intervention of the Fire Brigade, water used would be retained by the lip-bunds and walls of the site, up to the maximum capacity of the bunding. Any additional fire water would flow out of the site and enter the surface water system of the Industrial Estate. Absorbent booms are available in the site stores for deployment across the doorways to contain oil which may be disturbed during any firefighting activities. These will also increase the effective volume of the bunded area, containing most of the firewater.

4. The floor of the operational area is of concrete, of unknown, but substantial, thickness. All spillages are contained by this impervious surface. The whole operational area is bunded by its walls, with the exception of the entrance doors, which are protected by a 40mm cement lip.

Storage, quarantine, bulking and reception areas for wastes are:

- Indoors so run off from precipitation will not occur.
- Are performed in an area with nil drainage with no access to discharge to watercourse or sewer, storm or foul.

There are additional free-standing bunds to prevent mixing of chemically incompatible wastes. Some wastes do not contain any free liquid and are not readily chemically reactive and therefore when containerised will not require additional drainage or bunding.

The attritor plant is designed to remove any residual liquids from the containers which are released into a container beneath the drum. Liquids are stored in IBC's or drums as appropriate in designated bays according to the substance type pending transferal off-Site for disposal or recovery at an authorised facility.

Dry packaging is crushed and passes through paddles and centrifuged before being conveyed out of the drum and bulked up prior to transferral for recovery or disposal to a facility licenced to do so according to packaging type.

Bunding will encompass the plant and will comprise of a 22 cm sleeping policeman capable of containing 110% of the maximum capacity of the attritor contents i.e. 10 m^3. The walls of the building will additionally serve as secondary containment for any spillages from the plant.

The waste chemical storage areas are shown on Drawing CE-FA-1921-RP01-DW01. The Operator employs a storage matrix within the Waste Storage Procedure outlines the procedure by which the Operator identifies wastes which require segregation and the type of segregation required. The proposed additional waste codes will be stored in accordance with the storage matrix.

Although it is proposed that the paint and aerosol treatment plant is moved, the same bunding will be in place.

The containment measure capacities have been calculated through consideration of the following:

- Nature of the pollutants;

5. All wastewater from buffer storage will be entirely contained and not discharged to ground, surface water or sewer.

6. Stocks of oil-absorbent granules, brooms and shovels, PPE and a clip-top 45- gallon drum are kept within the office/stores for use in cleaning up any spillage.

The whole operational area is bunded by its walls, with the exception of the entrance doors, which are protected by a 40mm cement lip.

Inspection for leaks or spillages is continuous during normal operation and takes place formally each day as part of the site inspection procedures. Any spillages other than minor occurrences will be reported to the EA immediately and recorded in the site diary.

7. In the unlikely event of a major fire requiring the intervention of the Fire Brigade, water used would be retained by the lip-bunds and walls of the site, up to the maximum capacity of the bunding. Any additional fire water would flow out of the site and enter the surface water system of the Industrial Estate. Absorbent booms are available in the site stores for deployment across the doorways to contain oil which may be disturbed during any firefighting activities. These will also increase the effective volume of the bunded area, containing most of the firewater.

A Fire Prevention and Mitigation Plan (FPP) has been prepared to support Aquaforce's application to vary the permit. The details of the FPP can be found in CE-FA-1921-RP08-FPP-Final v3.

8. The location of the present chemical waste storage will expand and include those areas shown on Drawing CE-FA-1921-DW01 Rev A. The storage matrix within the Waste Storage Procedure outlines the procedure by which the Operator identifies wastes which require segregation and the type of segregation required. The Waste Storage Procedure is included within the EMS.

Any diffuse emissions of dust or odour will be controlled through the measures stipulated in the respective dust and odour management plans.

9. The site is bounded by hedgerows and fencing and CCTV is installed near the Site entrance as well as in strategic positions throughout the Site, both internal and external, which detect vehicles and people entering the premises. In the event of unauthorised public access to the Site, security measures will be reviewed and increased in the event of unlawful entry.

10. The site is bounded by hedgerows and fencing and CCTV is installed near the Site entrance as well as in strategic positions throughout the Site, both internal and external, which detect vehicles and people entering the premises. In the event of unauthorised public access to the Site, security measures will be reviewed and increased in the event of unlawful entry.

11. A Fire Prevention and Mitigation Plan (FPP) has been prepared to support Aquaforce's application to vary the permit. The details of the FPP can be found in CE-FA-1921-RP08-FPP-Final v3.

This plan sets out control measures which aim to:

- Minimise the likelihood of a fire happening
- Aim for a fire to be extinguished within 4 hours
- Minimise the spread of fire within the site and to neighbouring sites

12. A Fire Prevention and Mitigation Plan (FPP) has been prepared to support Aquaforce's application to vary the permit. The details of the FPP can be found in CE-FA-1921-RP08-FPP-Final v3.

13. A Fire Prevention and Mitigation Plan (FPP) has been prepared to support Aquaforce's application to vary the permit. The details of the FPP can be found in CE-FA-1921-RP08-FPP-Final v3.

14. Within the container washing area, there will be a total of seven foam fire extinguishers, six each containing CO2 and powder, and two water fire extinguishers positioned in strategic, easily accessible locations around the internal areas of the Site and staff are trained in their use. A fire extinguisher will be positioned in a similarly strategic location in the waste storage building. Records of training testing and maintenance of fire extinguishers are kept in the Site`s office. Fire extinguishers meet the requirements of BS 5036.

15. There is nil drainage so fire may not pass between storage areas via this system.

16. A Dust and Emissions Management Plan has been prepared to support Aquaforce's application to vary the permit. The details of this plan can be found in CE-FA-1921-RP06-DMP-Final v2.

All equipment and infrastructure on Site will be inspected, serviced and maintained as per manufacturer guidance and 'Preventative Maintenance Checklist'. Any maintenance works required will be recorded on the 'Maintenance Record'. These can be seen in the site's EMS.

17. The Fire Prevention and Mitigation Plan (FPP) which has been prepared to support Aquaforce's application to vary the permit will also be shared with the local fire and rescue service.

The site's accident management plan will also be shared with the local fire and rescue service.

18. Activities prohibited in waste storage areas to prevent fire:

- Smoking is banned across that whole site.
- Welding or metal working or any maintenance or activity that generates heat or sparks can only be carried out when that storage area or containment system being worked in or on is empty and clean – ensuring any adjacent storage areas are made safe.

19.The plant is designed to shut down immediately should any emissions outside benchmark levels be detected. It cannot be restarted until the cause of the emissions have been investigated and rectified. Authorisation for re-start is the responsibility of the Plant Manager, who holds the only Lock-out key. Any alarm triggers are automatically recorded, and will be reported, along with rectification measures taken, to the Environment Agency without delay. Details will be recorded in the Site diary.

20. The plant is designed to shut down immediately should any emissions outside benchmark levels be detected. It cannot be restarted until the cause of the emissions have been investigated and rectified. Authorisation for re-start is the responsibility of the Plant Manager, who holds the only Lock-out key. Any alarm triggers are automatically recorded, and will be reported, along with rectification measures taken, to the Environment Agency without delay. Details will be recorded in the Site diary.

21. The site's EMS which has been developed for this proposed variation contains an environmental accident and incident form. A maintenance checklist and record is also contained within this EMS.

The site also make use of a waste tracking system which contains the following information:

- Waste storage area;
- Date of arrival;
- Job number (refers to producer deceleration);

- EWC code;
- Waste description;
- Components and concentration;
- Quantity;
- Container type;
- Disposal point;
- Price and quote number;
- Lab analysis required;
- Unique ID number;
- Bay number;
- Verification completed by;
- Non conformance reference;
- HP codes; and
- Activity

Wastes to be bulked will be tested prior to bulking to ensure compatibility. This procedure is detailed in the site's waste acceptance procedure (EMS) and will not change following the proposed variation. Aquaforce implement a storage plan (EMS). Included in this plan is a storage matrix which identifies the wastes which require segregation and the type of segregation required.

Documentation and all records required in accordance with the environmental permit will be kept in the site office. Where at all possible, records will be electronic.

6.1.5 Contingency Plan and Procedures

1. The Site are committed to preparing a Site contingency plan. This will include information on how permit conditions and operating procedures will be complied with during maintenance or shutdown.

2. The contingency plan will include provisions and procedures to ensure the site:

- Do not exceed storage limits in your permit and continue to apply appropriate measures for storing and handling waste;
- Stop accepting waste unless there is a clearly defined method of recovery or disposal and enough permitted storage capacity;
- As far as possible, know in advance about any planned shutdowns at waste management facilities where waste is sent.

3. Customers will be made aware of the contingency plan, and of the circumstances in which waste would not be accepted.

4. It has been considered whether sites or companies which are relied on:

- Can take the waste at short notice; and
- Are authorised to do so in the quantities and types likely to be needed – in addition to carrying out their existing activities

5. Where circumstances mean that the site could exceed the permitted storage limits or compromise storage procedures, alternative disposal or recovery options will be evaluated. Disposal or recovery options based on extra cost or geographical distance will not be discounted.

6. Unauthorised capacity has not been included in the contingency plan.

7. The contingency plan and management procedures:

- Identify known or predictable malfunctions associated with your technology and the procedures, spare parts, tools and expertise needed to deal with them;
- Include a record of spare parts held, especially critical spares;
- Have a defined procedure to identify, review and prioritise items of plant which need a preventative regime;

- Include all equipment or plant whose failure could directly or indirectly lead to an impact on the environment or human health;
- Identify 'non-productive' or redundant items such as tanks, pipework, retaining walls, bunds, reusable waste containers, ducts, filters and security systems; and
- Make sure the site has the spare parts, tools, and competent staff needed before starting maintenance.

8. The site do not produce end-of-waste material.

9. The EMS system developed for this proposed variation includes procedures for auditing performance against all contingency measures and reporting these audit results to the site manager.

6.1.6 Plant Decommissioning

1.The Site are committed to preparing a decommissioning plan for to minimise risks during later decommissioning.

2. Potential decommissioning risks have been addressed for existing plant. Changes and design improvements will be made as and when the plant is upgraded, or when construction and development works are carried out.

3. The site have implemented, as part of the proposed variation, a decommissioning plan to demonstrate that:

- Plant will be decommissioned without causing pollution; and
- The site will be returned to a satisfactory condition.

4. The decommissioning plan includes details on:

- Whether pipelines and vessels will be flushed and how they will be emptied of any potentially harmful contents;
- Site plans showing the location of all underground pipes and vessels;
- How asbestos materials will be removed;
- Methods for dismantling buildings and other structures, and for protecting surface water and groundwater during construction or demolition at the site;
- Soil testing needed to check for any pollution caused by the site activities, and information on any remediation needed to return the site to a satisfactory state when activities are ceased, as defined by the initial site condition report;
- The measures proposed, once activities have definitively stopped, to avoid any pollution risk and to return the site of operation to a satisfactory state; and
- The clearing of deposited residues, waste and any contamination resulting from the waste treatment activities.

5. Equipment taken out of use will be decontaminated and removed from the site.

6.2 Waste Pre-acceptance, Acceptance and Tracking Appropriate Measures

6.2.1 Waste Pre-acceptance

1. The site implements a waste pre-acceptance procedure (EMS).

2. The site implements a waste pre-acceptance procedure (EMS).

3. The site implements a waste pre-acceptance procedure (EMS).

4. The site implements a waste pre-acceptance procedure (EMS).

5. The site implements a waste pre-acceptance procedure (EMS).

6. The site implements a waste pre-acceptance procedure (EMS).

7. The site implements a waste pre-acceptance procedure (EMS).

8. The site implements a waste pre-acceptance procedure (EMS).

9. The site implements a waste pre-acceptance procedure (EMS).

10. The site implements a waste pre-acceptance procedure (EMS).

11. The site implements a waste pre-acceptance procedure (EMS).

12. The site implements a waste pre-acceptance procedure (EMS).

13. The site implements a waste pre-acceptance procedure (EMS).

14. The site implements a waste pre-acceptance procedure (EMS).

15. The site implements a waste pre-acceptance procedure (EMS).

16. The site implements a waste pre-acceptance procedure (EMS).

17. The site implements a waste pre-acceptance procedure (EMS).

18. The site implements a waste pre-acceptance procedure (EMS).

19. The site implements a waste pre-acceptance procedure (EMS).

6.2.2 Waste Acceptance

1. The site implements a waste acceptance procedure (EMS).

2. The site implements a waste acceptance procedure (EMS).

3. The site implements a waste acceptance procedure (EMS).

4. The site implements a waste acceptance procedure (EMS).

5. The site implements a waste acceptance procedure (EMS).

6.The site implements a waste acceptance procedure (EMS).

7.The site implements a waste acceptance procedure (EMS).

8.The site implements a waste acceptance procedure (EMS).

9.The site implements a waste acceptance procedure (EMS).

10. The site implements a waste acceptance procedure (EMS).

11. The site implements a waste acceptance procedure (EMS).

12. The site implements a waste acceptance procedure (EMS).

13. The site implements a waste acceptance procedure (EMS).

14. Waste containers requiring sampling will be offloaded into the site’s waste reception area.

15. All waste containers must be:

- In sound condition;
- Undamaged;
- Not corroded, if metal;
- Have well-fitting lids;
- Suitable for the contents;
- With caps, valves and bungs in place and secure.

All waste containers will be risk assessed if they have exceeded the manufacturer's use by date.

All non-conforming wastes will be transferred to the site's quarantine area and dealt with immediately and appropriately. The site's waste tracking system will be updated with this information.

16. All wastes will be checked, and where appropriate, sampled and analysed within one working day of receipt. Compliant wastes will then be transferred to the relevant appropriate storage area.

17. A quarantine area will be clearly identified and marked on site to allow the segregation of unsuitable or combusted material. The quarantine area has a 6m separation distance around it and is shown on Drawing No: CE-FA-1921-DW01.

Waste sent to quarantine storage will be stored there for a maximum of fourteen working days before being removed from site. Quarantined waste will be removed, as soon as practicable in appropriate vehicles and properly disposed of at a suitably permitted site.

Quarantine procedures are detailed in the site's storage procedures in EMS. The quarantine area will be marked so they can be easily identified prior to storing them in the usual storage bays with other compatible chemicals.

Details of all waste sent to the site's quarantine area will be recorded in the site's waste tracking system.

An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

18. Quarantine procedures are detailed in the site's storage procedures in EMS. Quarantine storage will be for a maximum of 14 working days.

19. The site implements a waste acceptance procedure (EMS).

20. The site implements a waste acceptance procedure (EMS)

21. If waste received in shrink wrap is split, each individual container will be labelled with all relevant information.

22. Bar code systems are not used for labelling at the site.

23. Wastes are tested for compatibility during the site's acceptance procedure, should it be found that wastes are non-conforming due to compatibility, they will be segregated immediately.

24. Wastes will be bulked on site following the results of compatibility testing.

25. Wastes will be bulked on site following the results of compatibility testing.

26. Wastes will be bulked on site following the results of compatibility testing.

27. The site implements a waste acceptance procedure (EMS)

28. The site implements a waste acceptance procedure (EMS)

29. The site implements a waste acceptance procedure (EMS)

30. The site implements a waste acceptance procedure (EMS)

31. The site implements a waste acceptance procedure (EMS)

32. Stocks of oil-absorbent granules, brooms and shovels, PPE and a clip-top 45- gallon drum are kept within the office/stores for use in cleaning up any spillage.

33. Details of the site's waste tracking system are contained within the EMS.

34. The site implements a waste acceptance procedure (EMS).

35. The site implements a waste acceptance procedure (EMS)

The sampling and analysis procedure used is based on the following risk factors:

- The type of waste;
- Knowledge of the customer;
- The impact of potential mixing or blending and the possibilities for subsequent treatment.

36. Any relevant physico-chemical parameters will be checked prior to sampling.

37. The sampling procedures are customised for:

- Bulk liquid;
- Large and small containers or vessels;
- Laboratory smalls

38. All information, including the following, relevant to sampling will be recorded by the site:

- The sampling regime for each load, together with your justification for selecting each option where and how the sample was taken;
- The capacity of the sampled vessel;
- The number of samples and degree of consolidation; and
- The operating conditions at the time of sampling.

39. Waste will be sampled in compliance with the appropriate guidance.

40. Each waste is tested according to the parameters decided at pre-acceptance, plus any additional checks. The results of all tests are stored in the site's waste tracking system. Any discrepancies are noted down and investigated.

41. The site implements a waste acceptance procedure (EMS).

6.2.3 Waste Tracking

1. The site's waste acceptance procedure (EMS) contains information regarding the waste tracking system and inventory in place at the site, it is ensured that the information within this system is kept up-to-date. This system will be updated to allow for the inclusion of the proposed additional waste codes and waste treatment route.

2. The site's waste acceptance procedure (EMS) contains information regarding the waste tracking system and inventory in place at the site, it is ensured that the information within this system is kept up-to-date. This system will be updated to allow for the inclusion of the proposed additional waste codes and waste treatment route.

The site's waste tracking system contains the following information:

- Waste storage area;
- Date of arrival;

- Job number (refers to producer deceleration);
- EWC code;
- Waste description;
- Components and concentration;
- Quantity;
- Container type;
- Disposal point;
- Price and quote number;
- Lab analysis required;
- Unique ID number;
- Bay number;
- Verification completed by;
- Non conformance reference;
- HP codes; and
- Activity

Copies of Waste Transfer Notes, Consignment Notes, Season Tickets, Pre-Acceptance Declaration Documentation and all records required in accordance with the Environmental Permit will be kept in the Site office. Where at all possible, records will be electronic.

3. The site's waste acceptance procedure (EMS) contains information regarding the waste tracking system and inventory in place at the site, it is ensured that the information within this system is kept up-to-date. This system will be updated to allow for the inclusion of the proposed additional waste codes and waste treatment route.

The site's waste tracking system contains the following information:

- Waste storage area;
- Date of arrival;
- Job number (refers to producer deceleration);
- EWC code;
- Waste description;
- Components and concentration;
- Quantity;
- Container type;
- Disposal point;
- Price and quote number;
- Lab analysis required;
- Unique ID number;
- Bay number;
- Verification completed by;
- Non conformance reference;
- HP codes; and
- Activity

4. The site's waste acceptance procedure (EMS) contains information regarding the waste tracking system and inventory in place at the site, it is ensured that the information within this system is kept up-to-date. This system will be updated to allow for the inclusion of the proposed additional waste codes and waste treatment route.

The site's waste tracking system contains the following information:

- Waste storage area;
- Date of arrival;
- Job number (refers to producer deceleration);
- EWC code;
- Waste description;
- Components and concentration;
- Quantity;

- Container type;
- Disposal point;
- Price and quote number;
- Lab analysis required;
- Unique ID number;
- Bay number;
- Verification completed by;
- Non conformance reference;
- HP codes; and
- Activity

5. Backup copies of computer records are stored off-site.

6. Acceptance records are kept for 2 years after the waste has been treated or removed off site. Hazardous waste consignment notes are kept for 5 years.

6.3 Waste Storage, Segregation and Handling Appropriate Measures

1. Although additional waste codes are proposed within this variation, these wastes are similar to what is already accepted at the site and therefore, there will be no change to the handling and transfer procedures used on site.

It is ensured that handling and transfer procedures:

- Are carried out by competent staff;
- Are duly documented, validated prior to execution and verified after execution; and
- Include measures to prevent, detect and mitigate spills.

2. The site are looking to alter the layout of their waste storage areas, the proposed waste storage layout can be seen in EMS. It has been ensured that all waste storage locations will be located as far as technically possible from sensitive receptors.

The site is bounded by hedgerows and fencing and CCTV is installed near the Site entrance as well as in strategic positions throughout the Site, both internal and external, which detect vehicles and people entering the premises. In the event of unauthorised public access to the Site, security measures will be reviewed and increased in the event of unlawful entry.

3. The site have developed a storage plan (EMS). In line with HSG71, HSG76 and HSG51 this plan sets out the control measures storage locations. The matrix pages, 11 and 12, will be followed to ensure incompatible waste are stored in line with the correct minimum levels of segregation.

4. The site is proposing to increase their waste throughput from 24,999 tonnes per annum (tpa) to 29,999 tpa.

The site make use of a waste tracking system which is used to determine the quantity of waste on site and therefore, the remaining waste capacity. The quantity of incoming waste is verified during the waste pre-acceptance and waste acceptance procedures. This waste tracking system and inventory takes into account the hazardous properties of the waste, the risks posed by the waste in terms of process safety, occupational safety and environmental impact, as well as the information provided by the previous waste holder(s).

The site also maintain a stock inventory of wastes, inspection of storage areas is performed so as to assess waste quantities on site. Waste will not be accepted if there is insufficient storage capacity available or if the site is inadequately manned.

The calculations used to determine the maximum storage of individual storage areas is included in the storage procedure document (EMS).

5. On all hazardous waste storage bays, the bund wall will be:

- Labelled with the bay number
- Have a list of the quantity and type of waste on a clip board.
- Labelled with hazard designation contained within the bay

6. Storage, quarantine, bulking and reception areas for wastes are:

- Indoors so run off from precipitation will not occur.
- On impervious surface.
- Bunded therefore containing all contaminated run off.
- Are performed in an area with nil drainage with no access to discharge to watercourse or sewer, storm or foul.

Storage bay areas are fitted with 150mm wide precast concrete bund walls 2400mm high and sealed at the bottom to prevent leaking into adjacent bunds.

7. All secondary containment systems conform to CIRIA guidance: C736 Containment systems for the prevention of pollution.

8. Although additional waste codes are proposed within this variation, there will be no wastes with additional hazardous properties accepted by the site and therefore, the current waste storage conditions are deemed acceptable.

9. The site do not accept wastes with the potential for self-heating or self-reactivity.

10. All wastes will be stored indoors.

11. All hazardous wastes will be stored in enclosed containers, inside the installation.

12. Wastes will not be stored or held on site in vehicles or vehicle trailers unless they are being received or prepared for imminent transfer.

13. Inspection for leaks is continuous during normal operation and takes place formally each day as part of the site inspection procedures.

A Fire Prevention and Mitigation Plan (FPP) has been prepared to support Aquaforce's application to vary the permit. The details of the FPP can be found in CE-FA-1921-RP08-FPP-Final v3.

14. Storage, quarantine, bulking and reception areas for wastes are:

- Indoors so run off from precipitation will not occur.
- On impervious surface.
- Bunded therefore containing all contaminated run off.
- Are performed in an area with nil drainage with no access to discharge to watercourse or sewer, storm or foul.

Storage bay areas are fitted with 150mm wide precast concrete bund walls 2400mm high and sealed at the bottom to prevent leaking into adjacent bunds.

There are additional free-standing bunds to prevent mixing of chemically incompatible wastes. Some wastes do not contain any free liquid and are not readily chemically reactive and therefore when containerised will not require additional drainage or bunding.

15. All wastes will be removed from the site within 6 months of receipt.

16. All stored containers will keep the labelling they had at acceptance. Should the label be damaged or no longer legible, the label will be replaced with the same information.

17. All containers will be handled and stored so the label is easily visible and continues to be legible.
18. All solid waste will be kept dry due to the segregation measures employed by the site. These will also ensure that no hazardous waste is diluted.

19. The site will not store clean rainwater or clean cooling water.

20. Storage bay areas are fitted with 150mm wide precast concrete bund walls 2400mm high and sealed at the bottom to prevent leaking into adjacent bunds.

There are additional free-standing bunds to prevent mixing of chemically incompatible wastes. Some wastes do not contain any free liquid and are not readily chemically reactive and therefore when containerised will not require additional drainage or bunding.

In addition to the bay storage of packaged wastes there are additional areas of lockable bunded cages where small quantities of hazardous wastes may be processed and stored.

There is nil drainage so fire may not pass between storage areas via this system.

Storage bay areas include fireproofing with a burn time of 1 hour 30 minutes.

21. There is pedestrian and vehicular access to all storage areas.

22. All waste containers are stored in a way that allows for easy inspection. A gap of 0.7m between rows of bulk containers will be maintained.

23. The movement of drums and mobile containers follows written procedures. All waste movements are recorded in the site's waste tracking system.

24. The site's storage layout and maximum capacity calculations can be seen in Storage Procedure and FPP (EMS).

25. The site's storage layout and maximum capacity calculations can be seen in Storage Procedure and FPP (EMS).

26. The site's storage layout and maximum capacity calculations can be seen in Storage Procedure and FPP (EMS).

27. All stacked containers will be stable and secured. Any shrink wrap used will be clear or transparent so that the waste type, damaged containers, leaks or spillages and incorrectly stacked containers can be identified.

28. All equipment and infrastructure on Site will be inspected, serviced and maintained as per manufacturer guidance and 'Preventative Maintenance Checklist'. Any maintenance works required will be recorded on the 'Maintenance Record'. These can be seen in the site's.

29. Waste or its packaging will not be handled in a way that might damage its integrity.

30. Organic liquid waste with a flashpoint of less than 21^{o}C will not be accepted by the site.

31. Asbestos waste will be wrapped and stored in enclosed roll on off bins. Mechanical equipment will not be used to move asbestos waste.

32. Wheeled containers will not be stacked on top of one another.

33. All containers which require them will have well fitting lids, caps and valves secured in place.

34. Skips containing waste will not be stacked. All skips will be unloaded immediately in the site's reception area.

The site will not store loose hazardous waste.

35. Racking systems will not be used to store waste.

36. Storage, quarantine, bulking and reception areas for wastes are:

- Indoors so run off from precipitation will not occur.
- On impervious surface.
- Bunded therefore containing all contaminated run off.
- Are performed in an area with nil drainage with no access to discharge to watercourse or sewer, storm or foul.

37. Due to the nature of the waste materials accepted at the Site, i.e. WEEE, hazardous and non-hazardous waste, the risk from pests as a result of the operation of the proposed variation is considered insignificant.

38. All equipment and infrastructure on Site will be inspected, serviced and maintained as per manufacturer guidance and 'Preventative Maintenance Checklist'. Any maintenance works required will be recorded on the 'Maintenance Record'. These can be seen in the site's.

39. Forklift drivers are trained in the handling of waste, to minimise forklift truck damage to the integrity of containers or individual appliances.

40. Activities prohibited in waste storage areas to prevent fire:

- Smoking is banned across that whole site.
- Welding or metal working or any maintenance or activity that generates heat or sparks can only be carried out when that storage area or containment system being worked in or on is empty and clean – ensuring any adjacent storage areas are made safe.

41. Bulk storage systems conform to:

- C736 Containment systems for the prevention of pollution

42. The majority of bulk storage will be in the form of IBCs. Any tanks used to store bulk wastes will be suitably designed, constructed and maintained. Risk assessments will be performed to validate the design and operation of bulk storage systems.

All new tanks and equipment will be checked to ensure they are working correctly. Tanks will be periodically examined and tested to ensure they meet the standards set out in EEMUA Publication 231: The mechanical integrity of plant containing hazardous substances.

All equipment and infrastructure on Site will be inspected, serviced and maintained as per manufacturer guidance and 'Preventative Maintenance Checklist'. Any maintenance works required will be recorded on the 'Maintenance Record'. These can be seen in the site's EMS.

43. The majority of bulk storage will be in the form of IBCs. Water based paint will be stored in a tank and therefore, there is no requirement for venting or abatement.

44. Storage, quarantine, bulking and reception areas for wastes are:

- Indoors so run off from precipitation will not occur.
- On impervious surface.
- Bunded therefore containing all contaminated run off.
- Are performed in an area with nil drainage with no access to discharge to watercourse or sewer, storm or foul.

Sealed construction joints are in place throughout the site, there will be no additional buildings constructed following the proposed variation.

There are additional free-standing bunds to prevent mixing of chemically incompatible wastes. Some wastes do not contain any free liquid and are not readily chemically reactive and therefore when containerised will not require additional drainage or bunding.

In addition to the bay storage of packaged wastes there are additional areas of lockable bunded cages where small quantities of hazardous wastes may be processed and stored.

There is nil drainage so fire may not pass between storage areas via this system.

45. All tanks containing liquids will be suitably bunded, in compliance with CIRIA C736 and:

- Be impermeable, stable and resistant to the stored materials;
- Have no outlet and drain to a blind collection point;
- Have pipework routed within bunded areas with no penetration of contained surfaces
- Be designed to catch leaks from tanks or fittings;
- Have a capacity calculated following the relevant CIRIA guidance;
- Have regular visual inspections;
- Have programmed engineering inspections;

46. There should be no sludge or foam build up in tanks, this is ensured through the site's compatibility testing.

47. Any bulk storage tanks are equipped with an automatic level monitoring system and associated alarm system. These systems are sufficiently robust and regularly maintained. Tanks are fitted with suitable overfill protection.

There are no liquid treatment tanks on site.

48. All containers which require them will have well fitting lids, caps and valves secured in place.

49. There will be no overflow pipes on storage tanks.

50. All equipment and infrastructure on Site will be inspected, serviced and maintained as per manufacturer guidance and 'Preventative Maintenance Checklist'. Any maintenance works required will be recorded on the 'Maintenance Record'. These can be seen in the site's EMS.

All inspections will be undertaken by a competent person.

51. All bulk loading and unloading systems, along with bulk storage is undertaken in a safe manner.

52. No bulk storage tank will be open topped.

53. Bulked waste is transferred to tankers using the system installed on the tanker. The loading activities will be overseen by site staff to ensure safe operation and no spillages.

54. Site staff will supervise loading and unloading activities either directly or through CCTV.

55. Waste will only be transferred from tankers once the waste pre-acceptance and acceptance procedures have been followed (EMS).

Waste will only be transferred to tankers with the approval of the site chemist or manager. It will be specified:

- Which batch or load of material is to be transferred;
- The receiving storage vessel;
- The equipment required, including spillage control and recovery equipment; and
- Any special provisions relevant to that batch or load including minimising odour and other fugitive emissions

56. The site have systems in place to prevent 'tanker drive-off'

57. It is ensured that the transfer of waste from tankers is carried out by competent staff. Staff are given time so they are not under pressure to work more quickly than is deemed acceptable.

58. Measures are in place to make sure couplings are a correct fit. Couplings are provided, maintained and cleaned by the site to guarantee integrity and fitness.

The site:

- Make sure that special care is taken so that a coupling is able to withstand the maximum shut valve pressure of the transfer pump;
- Maintain a sound coupling at each end of the transfer hose, even when a gravity feed system is in place, and protect the transfer hose; an
- Control potential leaks from coupling devices by using simple systems such as drip trays

59. It is ensured that transfers into and from tankers only take place in bunded areas designed to contain a worst case spillage. The site provide emergency storage for leaking vehicles to minimise any acute incidents caused by a seal on a tanker failing.

60. Systems and procedures are in place to make sure that wastes due to be transferred comply with the carriage of dangerous goods when they are packaged and transported.

61. It is ensured that the transfer of waste from a tanker to a drum or vice versa is done in a dedicated area. A minimum of 2 trained and competent staff, working to formal written instructions, perform all transfers. Pipes and valves are checked before and during the transfer. Dip pipes with a shut-off valve to control the dispensing into containers and prevent overfilling are fitted.

62. Any spillages other than minor occurrences will be reported to the EA immediately and recorded in the site diary. All spillages will be retained by the bunded areas.

Stocks of oil-absorbent granules, brooms and shovels, PPE and a clip-top 45- gallon drum are kept within the office/stores for use in cleaning up any spillage.

63. Tankers will not be used as blending or reaction vessels.

64. Operational and design precautions are taken when mixing or blending wastes.

65. Rotary pumps are not routinely used on site.

66. No sludges will be stored on site.

67. When loading and offloading odorous, flammable or volatile liquids between bulk storage tanks and tankers, vapour balance lines are used to transfer the displaced vapours from the receiving vessel to the vessel being pumped from.

68. Safe operating procedures designed to reduce the risk of explosion and fugitive emissions are used when transferring waste from powder tankers into silos. Trained and competent personnel are used.

69. All equipment and infrastructure on Site will be inspected, serviced and maintained as per manufacturer guidance and 'Preventative Maintenance Checklist'. Any maintenance works required will be recorded on the 'Maintenance Record'. These can be seen in the site's EMS.

70. The site's waste tracking system that began at the pre-acceptance stage is used for the whole time waste is kept at the site.

71. Although aerosols will be stored on site, there will be no alterations to the aerosol storage with the proposed variation.

72. Although aerosols will be stored on site, there will be no alterations to the aerosol storage with the proposed variation.

73. Although aerosols will be stored on site, there will be no alterations to the aerosol storage with the proposed variation.

74. Although aerosols will be stored on site, there will be no alterations to the aerosol storage with the proposed variation.

75. Although aerosols will be stored on site, there will be no alterations to the aerosol storage with the proposed variation.

76. Although aerosols will be stored on site, there will be no alterations to the aerosol storage with the proposed variation.

77. Although aerosols will be stored on site, there will be no alterations to the aerosol storage with the proposed variation.

78. The site's permit contains both D15 and R13 codes, this will not change with the proposed variation.

79. The site's permit contains both D14 and R12 codes, this will not change with the proposed variation.

80. The site's permit contains both D15 and R13 codes, this will not change with the proposed variation.

81. Wastes will only be bulked or repackaged together should the compatibility tests undertaken as part of the site's pre-acceptance and acceptance procedures deem this appropriate.

82. The resulting waste mixtures from mixing will not have significantly different characteristics, this is ensured by compatibility tests.

83. The site will not mix hazardous waste with:

- Non-hazardous waste;
- Hazardous waste in a different category; or
- Non-waste.

84. The site will not mix, bulk or repackage:

- Wastes which could be recovered with other wastes if this means that the waste must now be sent for disposal or a lower form of recovery;
- Liquid wastes or infectious wastes with other wastes for the purpose of landfilling;
- Oils where this could affect their regeneration or recycling;
- Wastes containing Persistent Organic Pollutants (POPs) with another material solely to generate a mixture below the defined low POPs content; or
- Waste to deliberately dilute it.

85. Wastes will be transferred from containers via a dip pipe.

86. Repackaging or mixing will only occur in the waste reception area.

87. Forklifts are used on site to minimise waste handling.

88. Repackaged or mixed wastes will be relabelled so that their contents and origin can be identified through the site's waste tracking system.

After repackaging, wastes will be moved to the appropriate storage area.

89. Compatibility testing is carried out during the site's pre-acceptance and acceptance procedures, (EMS).

90. Laboratory smalls will be sorted and segregated at source where possible.

91. Any sorting of laboratory smalls will be undertaken in the waste reception area.

The reception area for wastes is:

- Indoors so run off from precipitation will not occur.
- On impervious surface.
- Bunded therefore containing all contaminated run off.
- Performed in an area with nil drainage with no access to discharge to watercourse or sewer, storm or foul.

92. The site's pre-acceptance and acceptance procedures are contained in the EMS.

6.4 Waste Treatment Appropriate Measures

6.4.1 General Waste Treatment

1. Although it is proposed that a non-hazardous waste treatment process is added to the site's permit, this process will be very similar to what is already carried out on site, however, will treat water-based paint

instead of solvent-based paint. Therefore, the benefits of the waste treatment undertaken at the site will remain the same.

The treated output material from the WTEE waste treatment plant goes through extensive monitoring procedures as seen in Working Plan (EMS) to ensure the expectations of output material are met and is suitable for its intended disposal or recovery.

The waste output from the proposed attritor system which will be used to treat non-hazardous paints will go through analysis to identify its composition and weight, ensuring the expectations of output material are met and is suitable for its intended disposal or recovery. The same process will be used for the treatment of non-hazardous and hazardous waste in the paint and aerosol plant. Although it is proposed that this plant is moved location, all treatment processes undertaken within this plant will remain the same.

The permit currently lists three air emission points, A1, A2 and A3. These emission points are shown on Drawing No. CE-FA-1921-DW01. It is proposed that the paint and aerosol treatment plant moves location, the location of emission point A2 will also move.

Emission point A1 comprises an exhaust stack emission to atmosphere from the WEEE plant. Emission point A2 is from a combined single stack from the aerosol and paint plant and paint processing plant and emission point A3 from the steam raising boiler.

2. The site's waste pre-acceptance and acceptance procedures will ensure that the only waste accepted by the site is suitable for the appropriate treatment. The site also maintain a waste tracking system which contains information on all relevant waste characteristics. This system will be updated to allow for the inclusion of the proposed additional waste codes and attritor treatment route.

The following information will be kept by the site and updated regularly:

- Simplified process flowsheets that show the origin of any emissions;
- Details of emission control and abatement techniques for emissions to air;
- Diagrams of the main plant items where they have environmental relevance;
- Details of physical treatment processes;
- An equipment inventory, detailing plant type and design parameters;
- Waste types to be subjected to the process;
- The control system philosophy and how the control system incorporates environmental monitoring information;
- Process flow diagrams (schematics);
- Venting and emergency relief provisions;
- A summary of operating and maintenance procedures;
- Process instrumentation diagrams; and
- Monitoring points and monitoring schedules.

3. The site maintain up to date written details of the measures taken during abnormal conditions to make sure permit conditions are complied with.

4. The site's waste pre-acceptance and acceptance procedures will ensure that the only waste accepted by the site is suitable for the appropriate treatment. The site also maintain a waste tracking system which contains information on all relevant waste characteristics. This system will be updated to allow for the inclusion of the proposed additional waste codes and attritor treatment route.

The site's waste pre-acceptance and acceptance procedures considers:

- The hazardous properties of the waste;
- The restricted chemicals in the waste;
- The risks posed by the waste in terms of process safety;
- Occupational safety and environmental impact; and
- Knowledge of the previous waste holders.

Although additional waste codes are proposed within this variation, all new wastes will be similar to what is already treated on site and therefore, the current waste treatment processes will not change with the proposed variation.

A Dust and Emissions Management Plan has been prepared to support Aquaforce's application to vary the permit. The details of this plan can be found in CE-FA-1921-RP06-DMP-Final v2.

The permit currently lists three air emission points, A1, A2 and A3. These emission points are shown on Drawing No. CE-FA-1921-DW01. It is proposed that the paint and aerosol treatment plant moves location, the location of emission point A2 will also move.

Emission point A1 comprises an exhaust stack emission to atmosphere from the WEEE plant. Emission point A2 is from a combined single stack from the aerosol and paint plant and paint processing plant and emission point A3 from the steam raising boiler.

Although it is proposed that emission point A2 moves location, the same abatement and emission prevention measures will be in place. The same monitoring requirements are also stipulated for this emission point.

Although the attritor is essentially a sealed unit, there is the potential for the emission of particulate matter at the end of the process. As such, emissions abatement for particulate matter will be incorporated into the plant.

The site will develop a residues management plan as part of this proposed variation.

5. Treatment will not go ahead if the site's risk assessment indicates that losses from a process will cause:

- The breach of an environmental quality standard;
- The breach of a benchmark; or
- A significant environmental impact.

6. The site's waste pre-acceptance and acceptance procedures identify which wastes are suitable for different treatments. The waste tracking system helps to account for any variables.

The treated output material from the WTEE waste treatment plant goes through extensive monitoring procedures as seen in the Working Plan (EMS) to ensure the expectations of output material are met and is suitable for its intended disposal or recovery.

The waste output from the proposed attritor system which will be used to treat non-hazardous paints will go through analysis to identify its composition and weight, ensuring the expectations of output material are met and is suitable for its intended disposal or recovery. The same process will be used for the treatment of non-hazardous and hazardous waste in the paint and aerosol plant. Although it is proposed that this plant is moved location, all treatment processes undertaken within this plant will remain the same.

7. There will be no new reactions with this variation. The proposed variation looks to add a non-hazardous waste treatment system which will not have any reactions associated.

8. There will be no new reactions with this variation. The proposed variation looks to add a non-hazardous waste treatment system which will not have any reactions associated.

9. Contained within this EMS is a written procedure for proposing, considering and approving changes to technical developments, or to procedural or quality changes.

10. The permit currently lists three air emission points, A1, A2 and A3. These emission points are shown on Drawing No. CE-FA-1921-DW01.

11. There will be no new reactions with this variation. The proposed variation looks to add a non-hazardous waste treatment system which will not have any reactions associated.

6.4.2 Aerosol Canister Treatment

1. Although the treatment of aerosol canisters is undertaken on site and proposed to move with the proposed variation, there will be no alterations to this process with the proposed variation.

2. Although the treatment of aerosol canisters is undertaken on site and proposed to move with the proposed variation, there will be no alterations to this process with the proposed variation.

3. Although the treatment of aerosol canisters is undertaken on site and proposed to move with the proposed variation, there will be no alterations to this process with the proposed variation.

4. Although the treatment of aerosol canisters is undertaken on site and proposed to move with the proposed variation, there will be no alterations to this process with the proposed variation.

5. Although the treatment of aerosol canisters is undertaken on site and proposed to move with the proposed variation, there will be no alterations to this process with the proposed variation.

6. Although the treatment of aerosol canisters is undertaken on site and proposed to move with the proposed variation, there will be no alterations to this process with the proposed variation.

7. Although the treatment of aerosol canisters is undertaken on site and proposed to move with the proposed variation, there will be no alterations to this process with the proposed variation.

8. Although the treatment of aerosol canisters is undertaken on site and proposed to move with the proposed variation, there will be no alterations to this process with the proposed variation.

9. Although the treatment of aerosol canisters is undertaken on site and proposed to move with the proposed variation, there will be no alterations to this process with the proposed variation.

10. Although the treatment of aerosol canisters is undertaken on site and proposed to move with the proposed variation, there will be no alterations to this process with the proposed variation.

11. Although the treatment of aerosol canisters is undertaken on site and proposed to move with the proposed variation, there will be no alterations to this process with the proposed variation.

12. Although the treatment of aerosol canisters is undertaken on site and proposed to move with the proposed variation, there will be no alterations to this process with the proposed variation.

13. Although the treatment of aerosol canisters is undertaken on site and proposed to move with the proposed variation, there will be no alterations to this process with the proposed variation.

14. Although the treatment of aerosol canisters is undertaken on site and proposed to move with the proposed variation, there will be no alterations to this process with the proposed variation.

6.4.3 Record Keeping for All Treatment Residues

1. The site's waste acceptance procedure (EMS) contains information regarding the waste tracking system and inventory in place at the site, it is ensured that the information within this system is kept up-to-date. This system will be updated to allow for the inclusion of the proposed additional waste codes and waste treatment route.

It will be ensured that the following is recorded in the waste tracking system:

- That the WEEE has been treated or consigned to another WEEE treatment facility;
- What WEEE has been consigned to a preparing for reuse operator; and
- What the treatment residues, treated components and fractions are.

6.5 Emissions Control Appropriate Measures

6.5.1 Point Source Emissions to Air

There will be no additional point source emissions to air following the proposed variation.

6.5.2 Fugitive Emissions to Air (Including Odour)

1. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP.

There have been no substantiated odour complaints at the facility throughout its operation under environmental permit. However, it is not anticipated that there will be odour nuisance at sensitive receptors, as a result of the site activities due to;

- Improved process control,
- Robust pre-acceptance measures,
- Enhanced training (both odour management and process control).

A Dust and Emissions Management Plan has been prepared to support Aquaforce's application to vary the permit. The details of this plan can be found in CE-FA-1921-RP06-DMP-Final v2.

In summary, the Dust and Emissions Management Plan contains the following control measures:

- Wastes delivered will mainly comprise of WEEE, waste paints, aerosols, airbags and hazardous liquids that are not inherently dusty. With the exception of receipt of the waste and exporting wastes off-Site, all Site activities are carried out within the confines of the building. Records of all incoming loads stored on Site or in a secure off Site location in accordance with the Duty of Care requirements of the Environmental Permit.
- Waste producers are required to provide details of any precautions that should be taken at the Site to abate emissions as part of the Waste Acceptance Procedure. Only waste material stipulated in the Environmental Permit will be accepted with inherently dusty waste (e.g. incinerator ash) refused.
- Preventative and remedial measures to implement on the Site include a vehicle speed restriction of 10mph and drop heights from the vehicles will be minimised as best practicable.
- Vehicles and plant will be hosed on exit from the Site as required in order to minimise the dispersion of emissions to sensitive receptors off Site.
- On Site sweeping will take place when conditions require. All areas and plant will be subjected to general housekeeping to prevent the accumulation of dust and loose material.
- Any waste that may be stockpiled will not exceed 4m in height to alleviate the potential of emissions becoming airborne. Stockpiles and vehicle loads will also be covered whenever this does not impinge on operations.
- Operations on Site will cease during periods of high winds to aid in the immobilisation of fugitive dust and particulate emissions.
- The Site Manager and Technically Competent Person will be responsible for the implementation of the DMP and the application of appropriate, recommended dust suppression measures.
- Any complaints received concerning dust and particulate emissions at the Site will be dealt with in accordance with the company's EMS complaints procedure.
- The investigation will be instigated by the Site Manager or the Technical Competent Person following the completion of the Complaints Report Form.

2. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

A Dust and Emissions Management Plan has been prepared to support Aquaforce's application to vary the permit. The details of this plan can be found in CE-FA-1921-RP06-DMP-Final v2.

Although additional waste codes are proposed within this variation, there will be no wastes with additional hazardous properties accepted by the site and therefore, the waste storage currently in place at the site is

deemed acceptable. There should no additional fugitive emissions of dust as a result of this proposed variation.

As emissions abatement for particulate matter will be incorporated into the attritor plant, there will be minimal emissions of particulate matter to air. Although it is proposed that the current solvent-based paint treatment plant is moved, the same measures to prevent dust and odour will be in place. Additionally, the chemical waste storage will partially be moving location with the proposed variation, however, the same storage measures will be in place to prevent the fugitive emissions of dust and odour.

3. Although the attritor is essentially a sealed unit, there is the potential for the emission of particulate matter at the end of the process. As such, emissions abatement for particulate matter will be incorporated into the plant.

There will be no changes to any other waste treatment undertaken on site following the proposed variation. Although it is proposed that the paint and aerosol treatment plant is moved, the same processes will be in place.

4. The site's waste pre-acceptance and acceptance procedures will be used to characterise waste and therefore, will identify any wastes which could case fugitive emissions to air. The site also undertake storage area inspection which will assist with this characterisation.

There should no additional fugitive emissions of dust as a result of this proposed variation.

An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

5. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

There have been no substantiated odour complaints at the facility throughout its operation under environmental permit. However, it is not anticipated that there will be odour nuisance at sensitive receptors, as a result of the site activities due to;

- Improved process control,
- Robust pre-acceptance measures,
- Enhanced training (both odour management and process control).

A Dust and Emissions Management Plan has been prepared to support Aquaforce's application to vary the permit. The details of this plan can be found in CE-FA-1921-RP06-DMP-Final v2.

In summary, the Dust and Emissions Management Plan contains the following control measures:

- Wastes delivered will mainly comprise of WEEE, waste paints, aerosols, airbags and hazardous liquids that are not inherently dusty. With the exception of receipt of the waste and exporting wastes off-Site, all Site activities are carried out within the confines of the building. Records of all incoming loads stored on Site or in a secure off Site location in accordance with the Duty of Care requirements of the Environmental Permit.
- Waste producers are required to provide details of any precautions that should be taken at the Site to abate emissions as part of the Waste Acceptance Procedure. Only waste material stipulated in the Environmental Permit will be accepted with inherently dusty waste (e.g. incinerator ash) refused.
- Preventative and remedial measures to implement on the Site include a vehicle speed restriction of 10mph and drop heights from the vehicles will be minimised as best practicable.
- Vehicles and plant will be hosed on exit from the Site as required in order to minimise the dispersion of emissions to sensitive receptors off Site.
- On Site sweeping will take place when conditions require. All areas and plant will be subjected to general housekeeping to prevent the accumulation of dust and loose material.

- Any waste that may be stockpiled will not exceed 4m in height to alleviate the potential of emissions becoming airborne. Stockpiles and vehicle loads will also be covered whenever this does not impinge on operations.
- Operations on Site will cease during periods of high winds to aid in the immobilisation of fugitive dust and particulate emissions.
- The Site Manager and Technically Competent Person will be responsible for the implementation of the DMP and the application of appropriate, recommended dust suppression measures.
- Any complaints received concerning dust and particulate emissions at the Site will be dealt with in accordance with the company's EMS complaints procedure.
- The investigation will be instigated by the Site Manager or the Technical Competent Person following the completion of the Complaints Report Form.

6. Inspection for leaks or spillages is continuous during normal operation and takes place formally each day as part of the site inspection procedures.

All equipment and infrastructure on Site will be inspected, serviced and maintained as per manufacturer guidance and 'Preventative Maintenance Checklist'. Any maintenance works required will be recorded on the 'Maintenance Record'. These can be seen in the site's EMS.

7. All waste storage and treatment areas, equipment and containers are regularly cleaned.

All equipment and infrastructure on Site will be inspected, serviced and maintained as per manufacturer guidance and 'Preventative Maintenance Checklist'. Any maintenance works required will be recorded on the 'Maintenance Record'. These can be seen in the site's EMS.

8. The site's inspection, maintenance and cleaning schedules ensure that tanks and plant are regularly cleaned to avoid large-scale decontamination issues.

9. Although additional waste codes are proposed within this variation, there will be no wastes with additional hazardous properties accepted by the site and therefore, the current waste storage procedures are deemed acceptable for use with this proposed variation.

10. Containers and tanks are not washed with substances which could give rise to fugitive emissions to air.

11. All pre and post treatment shredder plant is fully enclosed and have been designed and are operated using appropriate process interlocks. Shredders will not operate unless they are fully enclosed and contained. All shredder plants vent emissions to an appropriate particulate matter abatement system.

Although it is proposed that the paint and aerosol treatment plant is moved, the same emissions abatement will be in place.

12. A Dust and Emissions Management Plan has been prepared to support Aquaforce's application to vary the permit. The details of this plan can be found in CE-FA-1921-RP06-DMP-Final v2.

13. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

14. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

15. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

16. Although the site will treat water-based liquid wastes, there should be no potential for contaminated waters with the proposed variation.

17. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

18. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

19. An Odour Management Plan (OMP) has been prepared to support Aquaforce's application to vary the permit. The details of the OMP can be found in CE-FA-1921-RP07-OMP-Final.

6.5.3 Emissions of Noise and Vibration

1. The site has not received any noise complaints during the time that the permit has been in place. Although the proposed variation does include the addition of a non-hazardous WEEE waste treatment system, this system will be located indoors and therefore, the noise from this system at sensitive receptors will be minimal. Additionally, as the site is located in a heavily industrialised area, it is far away from noise sensitive receptors.

All other proposed variations will not impact the noise generated by the site and therefore, a noise and vibration management is not required.

2. The site has not received any noise complaints during the time that the permit has been in place. Although the proposed variation does include the addition of a non-hazardous WEEE waste treatment system, this system will be located indoors and therefore, the noise from this system at sensitive receptors will be minimal. Additionally, as the site is located in a heavily industrialised area, it is far away from noise sensitive receptors.

All other proposed variations will not impact the noise generated by the site and therefore, a noise and vibration management is not required.

The following noise control measures are used on site:

- All vehicles, plant and machinery operated at the Site will be maintained in accordance with the manufacturer's specification and fitted with effective silencers. Any breakdown or malfunction of silencing equipment will be treated as an emergency and dealt with immediately. Where a repair cannot be affected immediately the equipment will be taken out of service until the repair is made.
- The Site will only be operated during the hours specified in the planning permission. No un-sociable or night-time working will be carried out. The additional activities carried out under the permit variation i.e. the attritor and drum washer are sealed units that will be installed indoors to minimise risk of noise or vibration emitted during operating. They will be located on concreted flooring and roller shutter doors are kept shut at all times except for the entry and egress of loads.
- Any complaints received at the Site about noise will be monitored and logged in accordance with the EMS. Mitigation measures will be implemented, as appropriate, to ensure a high level of control.

3. The site has not received any noise complaints during the time that the permit has been in place. Although the proposed variation does include the addition of a non-hazardous WEEE waste treatment system, this system will be located indoors and therefore, the noise from this system at sensitive receptors will be minimal. Additionally, as the site is located in a heavily industrialised area, it is far away from noise sensitive receptors.

All other proposed variations will not impact the noise generated by the site and therefore, a noise and vibration management is not required.

4. The site has not received any noise complaints during the time that the permit has been in place. Although the proposed variation does include the addition of a non-hazardous WEEE waste treatment system, this system will be located indoors and therefore, the noise from this system at sensitive receptors will be minimal. Additionally, as the site is located in a heavily industrialised area, it is far away from noise sensitive receptors.

All other proposed variations will not impact the noise generated by the site and therefore, a noise and vibration management is not required.

6.5.4 Point Source Emissions to Water and Sewer

There will be no point source emissions to water or sewer.

6.5.5 Fugitive Emissions to Land and Water

1. The floor of the operational area is of concrete, of unknown, but substantial, thickness. All spillages are contained by this impervious surface. The whole operational area is bunded by its walls, with the exception of the entrance doors, which are protected by a 40mm cement lip.

Storage, quarantine, bulking and reception areas for wastes are:

- Indoors so run off from precipitation will not occur.
- On impervious surface.
- Bunded therefore containing all contaminated run off.
- Are performed in an area with nil drainage with no access to discharge to watercourse or sewer, storm or foul.

There are additional free-standing bunds to prevent mixing of chemically incompatible wastes. Some wastes do not contain any free liquid and are not readily chemically reactive and therefore when containerised will not require additional drainage or bunding.

Bunding will encompass the attritor plant and will comprise of a 22 cm sleeping policeman capable of containing 110% of the maximum capacity of the attritor contents i.e. 10 m^3. The walls of the building will additionally serve as secondary containment for any spillages from the plant.

Stocks of oil-absorbent granules, brooms and shovels, PPE and a clip-top 45- gallon drum are kept within the office/stores for use in cleaning up any spillage.

Although additional waste codes are proposed within this variation, there will be no wastes with additional hazardous properties accepted by the site and therefore, the current waste storage procedures are deemed acceptable for use with this proposed variation.

2. The floor of the operational area is of concrete, of unknown, but substantial, thickness. All spillages are contained by this impervious surface. The whole operational area is bunded by its walls, with the exception of the entrance doors, which are protected by a 40mm cement lip.

There are additional free-standing bunds to prevent mixing of chemically incompatible wastes. Some wastes do not contain any free liquid and are not readily chemically reactive and therefore when containerised will not require additional drainage or bunding.

Sealed construction joints are in place throughout the site, there will be no additional buildings constructed following the proposed variation.

Storage, quarantine, bulking and reception areas for wastes are:

- Indoors so run off from precipitation will not occur.
- On impervious surface.
- Bunded therefore containing all contaminated run off.
- Are performed in an area with nil drainage with no access to discharge to watercourse or sewer, storm or foul.

3. All storage tanks will be located on suitable bunding.

In addition to the bay storage of packaged wastes there are additional areas of lockable bunded cages where small quantities of hazardous wastes may be processed and stored.

There are additional free-standing bunds to prevent mixing of chemically incompatible wastes. Some wastes do not contain any free liquid and are not readily chemically reactive and therefore when containerised will not require additional drainage or bunding.

4. The only water which has the potential to be collected at the installation is from leaks or spillages.

5. There are additional free-standing bunds to prevent mixing of chemically incompatible wastes. Some wastes do not contain any free liquid and are not readily chemically reactive and therefore when containerised will not require additional drainage or bunding.

Container washing equipment will be located in a designated area of the facility, on suitable bunding, to collect and contain any wash waters, including spray.

6. The floor of the operational area is of concrete, of unknown, but substantial, thickness. All spillages are contained by this impervious surface. The whole operational area is bunded by its walls, with the exception of the entrance doors, which are protected by a 40mm cement lip.

7. The maximum capacity of the site's bunding system will be calculated to account for potential abnormal operating scenarios and incidents and the nature of any polluting substances and their impact on the receiving environment. Absorbent booms are available in the site stores for deployment across the doorways to contain oil which may be disturbed during any firefighting activities. These will also increase the effective volume of the bunded area, containing most of the firewater.

Bunding will encompass the attritor plant and will comprise of a 22 cm sleeping policeman capable of containing 110% of the maximum capacity of the attritor contents i.e. 10 m^3. The walls of the building will additionally serve as secondary containment for any spillages from the plant.

Although it is proposed that the paint and aerosol treatment plant is moved, the same bunding will be in place.

8. All wastewater from buffer storage will be entirely contained and not discharged to ground, surface water or sewer.

9. Measures will be taken to prevent emissions from washing and cleaning activities, including:

- Collecting liquid effluent and wash waters in a sealed system for off site disposal;
- Using biodegradable and non-corrosive washing and cleaning products;
- Storing all detergents, emulsifiers and other cleaning agents in suitable bunded or containment facilities, within a locked storage area; AND
- preparing cleaning or disinfection solutions in contained areas of the site and never in areas that drain to the surface water system.

10. Although the site store oils and fuels, there will be no alterations to this storage with the proposed variation and therefore, the current storage procedures in place for oils are deemed acceptable.

A refuelling and emergency spillage procedure has been included as part of the EMS.

11. The site will implement a spillage response plan, staff have been trained to follow it.

12. All leaks or spills will be dealt with immediately.

13. Stocks of oil-absorbent granules, brooms and shovels, PPE and a clip-top 45- gallon drum are kept within the office/stores for use in cleaning up any spillage. Spillage equipment is located close to locations where spillages could occur.

14. The maximum capacity of the site's bunding system will be calculated to account for potential abnormal operating scenarios and incidents and the nature of any polluting substances and their impact on the receiving environment. Absorbent booms are available in the site stores for deployment across the

doorways to contain oil which may be disturbed during any firefighting activities. These will also increase the effective volume of the bunded area, containing most of the firewater.

15. The site's spillage response plan includes information on how to handle and correctly dispose of waste produced from a spillage.

16. Container washing equipment will be located in a designated area of the facility, on suitable bunding, to collect and contain any wash waters, including spray.

Staff will be trained to operate, inspect and maintain it regularly.

17. There will be no sub-surface structures on site.

18. The floor of the operational area is of concrete, of unknown, but substantial, thickness. All spillages are contained by this impervious surface. Although additional waste codes are proposed within this variation, there will be no wastes with additional hazardous properties accepted by the site and therefore, this surface is deemed acceptable for the proposed variation.

Bunding will encompass the attritor plant and will comprise of a 22 cm sleeping policeman capable of containing 110% of the maximum capacity of the attritor contents i.e. 10 m^3. The walls of the building will additionally serve as secondary containment for any spillages from the plant.

The bund will also:

- Be impermeable and resistant to the stored materials;
- Have no outlet and drain to a blind collection point;
- Have pipework routed within bunded areas with no penetration of contained surfaces;
- Be designed to catch leaks from tanks or fittings;
- Have regular visual inspections; and
- Have programmed engineering inspections

The liquid storage will be located indoors and therefore, this is no potential for rainwater to enter the bund.

There will be no changes to any other above-ground tanks with the proposed variation.

19. All equipment and infrastructure on Site will be inspected, serviced and maintained as per manufacturer guidance and 'Preventative Maintenance Checklist'. Any maintenance works required will be recorded on the 'Maintenance Record'. These can be seen in the site's EMS.

6.6 Emissions Monitoring and Limits Appropriate Measures

1. The permit currently lists three air emission points, A1, A2 and A3. These emission points are shown on Drawing No. CE-FA-1921-DW01. It is proposed that the paint and aerosol treatment plant moves location, the location of emission point A2 will also move.

Emission point A1 comprises an exhaust stack emission to atmosphere from the WEEE plant. Emission point A2 is from a combined single stack from the aerosol and paint plant and paint processing plant and emission point A3 from the steam raising boiler.

Emission points A1 and A2 are monitored quarterly for total particulate matter, particulate matter fraction PM10 & PM2.5, CFCs, and volatile organic compounds. Flowrate and temperature will also be monitored at these emission points. There are no set parameters or limits for the monitoring of A3.

Although it is proposed that emission point A2 moves location, the same monitoring requirements are also stipulated for this emission point.

The site will comply with the emission limits and monitoring requirements set out in their environmental permit.

2. The site maintain an emissions inventory of the point source emissions to air. It is proposed that the paint and aerosol plant moves location, the location of emission point A2 will also move.

There are no point source emissions to water on site.

6.6.1 Emissions to Air

There will be no additional point source emissions to air following the proposed variation.

6.6.2 Emissions to Water or Sewer

There will be no point source emissions to water or sewer.

6.7 Process Efficiency Appropriate Measures

1. Aquaforce monitor the annual consumption of water, energy and raw materials at the site for submission to the EA through a Resource Efficiency Physical Index (REPI). This REPI also includes the annual waste transferred for disposal and recovery in terms of hazardous and non-hazardous waste (see the 2023 REPI, Appendix 2)

6.7.1 Energy Efficiency

1. The Operator is committed to preparing an energy efficiency plan for the site. This plan:

- Defines and calculates the specific energy consumption of the activities undertaken on site and waste streams treated;
- Sets annual key performance indicators; and
- Plans periodic improvement targets and related actions.

2. This energy efficiency plan is regularly reviewed and updated as part of the site's EMS.

3. The site will maintain an energy balance record which will provide a breakdown of energy consumption and generation by the type of source. Sankey diagrams will be provided to show how energy is used in waste treatment processes.

4. This energy balance record is regularly reviewed and updated as part of the site's EMS.

5. The site has operating, maintenance and housekeeping measures in place for relevant areas, including:

- Air conditioning, process refrigeration and cooling systems;
- The operation of motors and drives;
- Compressed gas systems;
- Space heating and hot water systems;
- Lubrication to avoid high friction losses; and
- boiler operation and maintenance.

6. The site also makes use of insulation, seals and self-closing doors to avoid gross energy inefficiencies.

7. Wherever possible, the site will look to implement additional energy efficiency measures.

6.7.2 Raw Materials

1. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume raw materials. This will continue following the proposed variation.

2. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume raw materials. This will continue following the proposed variation.

3. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume raw materials. This will continue following the proposed variation.

4. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume raw materials. This will continue following the proposed variation.

6.7.3 Water Use

1. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume water. This will continue following the proposed variation.

2. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume water. This will continue following the proposed variation.

3. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume water. This will continue following the proposed variation.

4. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume water. This will continue following the proposed variation.

5. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume water. This will continue following the proposed variation.

6. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume water. This will continue following the proposed variation.

7. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume water. This will continue following the proposed variation.

8. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume water. This will continue following the proposed variation.

9. As can be seen in the site's REPI submission to the EA (see the 2023 REPI, Appendix 2), the site does not typically consume water. This will continue following the proposed variation.

6.7.4 Waste Minimisation, Recovery and Disposal

1. The site will develop a residues management plan as part of the proposed permit variation

2. No waste is disposed of on site. This will continue following the proposed variation.

3. All wastes are transported off site for recovery. This will continue following the proposed variation.

391800

308600

Paint & aerosol plant
A2a

Waste for dispatch - empty ROROs

Waste Reception

Paint processing plant

Boiler & substation

Airbag, WEEE

A2b

A1

Waste chemical storage

Fridge storage

Skip tipping bay

Fridge Plant

Dirty lab & sample store

Maintenance room

Rugby-Birmingham-Stafford Line

Waste bulk, sort, segregate

Attrittor

Filter cake (x2)
Skip tipping bays

Waste Storage Skips

Contam. packaging & absorbs (x1)

Vehicle access ramp

Roller shutter doors

Service road

Weighbridge

Office & lab

Station Road

IBC containers in the chemical storage bays**
IBC's in storage bays are at maximum 20 deep, 2 across with a 70cm gap in between stacked 2 high concrete fire walls on two sides with 10mm bund across either end.

0 10 20 m

308400

391800

OpenStreetMap contributors (2024)

Legend

- Permit boundary
- Emission points (A1-A3)
- Storage
- Plant
- Skip tipping bays
- Waste reception
- Airbag deployment and WEEE
- Fire hydrant
- Fire extinguishers
- Waste processing areas
- Bays
- Concrete wall
- One way internal routing
- 40mm bund
- 10mm bund per bay

Consultant:

Crestwood Environmental Ltd. Science, Technology And Prototyping Centre
University Of Wolverhampton Science Park Glaisher Drive Wolverhampton
WV10 9RU

Client:

Aquaforce Special Waste Ltd

Site: Unit 4a Sprint Industrial Estate, Four Ashes, Wolverhampton

Drawing title: Site Layout Plan

Date:	Scale:	Paper size:
26/07/2024	1:900	A3 (420×297mm)

Drawn by:	Checked by:	Status:	FInal revision
DJ	KB	Final	A -

Drawing Ref:	Drawing No:
CE-FA-1921-DW01-Final	DW01

Appendix 1
ISO Accreditation

British Assessment Bureau
Part of the Amtivo group

CERTIFICATE OF REGISTRATION

The management system of certificate number **232806**

Aqua Force Special Waste Ltd

Unit 4A, Sprint Industrial Estate, Station Road, Four Ashes, Wolverhampton, WW10 7DB, United Kingdom

has been assessed and certified as meeting the requirements of:

ISO 9001:2015

The recycling of electrical items, fluorescent tube disposal, air bag deployment, WEE directive recycling and end of life vehicle recyclers. Special waste collection, haulage of drum waste, house clearance, disinfestation and disinfection within the UK.

Further clarifications regarding the scope of this certificate and the applicability of requirements may be obtained by consulting the certifier.

UKAS MANAGEMENT SYSTEMS
8289

Valid from:
Initial certification: 21 July 2011
Latest issue: 08 July 2024
Expiry date: 21 July 2026
Subject to annual assessments.

Authorised by

Mike Tims
Chief Executive Officer

british-assessment.co.uk

Certificate issued by Amtivo Group Limited T/A British Assessment Bureau Ltd.
Certification is conditional on maintaining the required performance standards throughout the certified period of registration.
Amtivo Group Limited. 30 Tower View, Kings Hill, Kent, ME19 4UY.

Appendix 2

2023 REPI report

Permit number	XP3992FV	Operator and facility	Aquaforce Special Waste Limited
Reporting of of other performance indicators for	2023	Form Number	Performance 1

Parameter	Units Tonnes
Total raw material used	0

Comments: Permitted activities require no raw material. No change in usage from 2022. No intended change for 2024.

Signed 

Date 23/02/2023

ENVIRONMENT AGENCY

Pollution Inventory reporting form

Annual releases to air, land, controlled waters, off-site transfers in wastewater, and off-site waste transfers

Pollution Prevention and Control Act 1999
The Pollution Prevention and Control (England and Wales) Regulations 2000 (SI 2000 No.1973) Regulation 28(2)

The form consists of eight parts
Part 1 About the operator and site
Part 2 Releases to air
Part 3 Releases to land
Part 4 Releases to controlled waters
Part 5 Off-site transfers in wastewater
Part 6 Off-site waste transfers
Part 7 Overseas waste transfers

Qualification Notes:
As a waste transfer station we take materials in as our customers require. Wastes vary as we gain and lose contracts. Waste types vary and recovery and disposal outlets vary with capacity. We have disposed of a large quantity of isocyanates 08 04 09* in 2023 as outlets have reopened in Europe for the transfer of these chemicals.

Part 1 About the operator and site

About the operator

1.1 Calendar year this report covers

2023

1.2 Authorisation,licence or permit number

XP3992FV

1.3 Operator's details

Aqua Force Special Waste Limited

Address Aqua Force Special Waste Ltd- Unit 4a Station Road Sprint Industrial Estate Four Ashes West Midland

Postcode WV10 7DB

1.4 Contact details

Title Mr | First Alex

Surname Husbands

Position Director

Phone 01902798599

Fax

Email alex@aquaforce-recycling.co.uk

About the site and its operation

1.5 NACE/NOSE-P

4-figure NACE code for the main economic activity	38.22
5-figure NOSE-P code for the main polluting process carried out on site	105.14
Other relevant NOSE-P codes for other polluting processes on the site	109.07

1.6 How many employees did you have at 31 December of the reporting year?

31

1.7 How long was the facility operational during the period?

3042 hours

1.8 Please give email and/or web address for enquiries from the public

Email info@aquaforce-recycling.co.uk

Web

1.9 Is some or all of the information confidential information?

No

1.10 E-EPRTR codes

Main E-EPRTR code	5. (a) Installations for the recovery or disposal of hazardous waste
Other relevant E-EPRTR codes	

1.11 Releases to air

Yes

1.12 Releases to controlled waters

Yes

1.13 Releases to land

No

1.14 Off-site transfers in wastewater

No

1.15 Off-site waste transfers

Yes

1.16 Overseas waste transfers

No

PIEDC: Pollution Inventory EDC reporting form

			Releases to air						
			Total releases		Method	Notifiable releases*			
CAS no.	Substance common name [alternative name]	Reporting threshold	n/a,brt or releases	Metric unit	M,C or E	Releases only	Metric Unit	Commercial in confidence?
7664-41-7	Ammonia	1000 kg	n/a					
1332-21-4	Asbestos	1 kg	n/a					
124-38-9	Carbon dioxide	1.0E+7 kg	n/a					
124-38-9	Carbon Dioxide From Qualifying Renewable Fuel Sources	0 kg	n/a					
630-08-0	Carbon monoxide	100000 kg	n/a					
74-90-8	Hydrogen cyanide	100 kg	n/a					
10024-97-2	Nitrous oxide	10000 kg	n/a					
2551-62-4	Sulphur hexafluoride	10 kg	n/a					
309-00-2	Aldrin	1 kg	n/a					
120-12-7	Anthracene	10 kg	n/a					
71-43-2	Benzene	1000 kg	n/a					
50-32-8	Benzo(a)pyrene	1 kg	n/a					
205-99-2	Benzo(b)fluoranthene	1 kg	n/a					
207-08-9	Benzo(k)fluoranthene	1 kg	n/a					
106-99-0	Butadiene (1,3-Butadiene)	100 kg	n/a					
56-23-5	Carbon tetrachloride (Tetrachloromethane)	10 kg	n/a					
57-74-9	Chlordane	1 kg	n/a					
143-50-0	Chlordecone	1 kg	n/a					
67-66-3	Chloroform (Trichloromethane)	100 kg	n/a					
50-29-3	Dichlorodiphenyltrichloroethane (DDT)	1 kg	n/a					
75-09-2	Dichloromethane (DCM) (Methylene chloride)	1000 kg	n/a					
60-57-1	Dieldrin	1 kg	n/a					
117-81-7	Di(2-ethylhexyl)phthalate (DEHP)	10 kg	n/a					
72-20-8	Endrin	1 kg	n/a					
107-06-2	Ethylene dichloride (1,2-Dichloroethane)	1000 kg	n/a					
75-21-8	Ethylene oxide (1,2 Epoxyethane)	1000 kg	n/a					
76-44-8	Heptachlor	1 kg	n/a					
36355-01-8	Hexabromobiphenyl	0.1 kg	n/a					
118-74-1	Hexachlorobenzene (HCB)	1 kg	n/a					

PIEDC: Pollution Inventory EDC reporting form

CAS no.	Substance common name [alternative name]	Reporting threshold	Releases to air: Total releases n/a,brt or releases	Metric unit	Method M,C or E	Notifiable releases* Releases only	Metric Unit	Commercial in confidence?
608-73-1	Hexachlorocyclohexane (HCH) -all isomers	1 kg	n/a					
193-39-5	Indeno(1,2,3-cd)pyrene	1 kg	n/a					
58-89-9	Lindane	1 kg	n/a					
74-82-8	Methane	10000 kg	n/a					
71-55-6	Methyl chloroform (1,1,1-Trichloroethane)	10 kg	n/a					
2385-85-5	Mirex	1 kg	n/a					
91-20-3	Naphthalene	100 kg	n/a					
608-93-5	Pentachlorobenzene	1 kg	n/a					
87-86-5	Pentachlorophenol (PCP)	1 kg	n/a					
79-34-5	Tetrachloroethane (1,1,2,2-Tetrachloroethane)	10 kg	n/a					
127-18-4	Tetrachloroethylene (PER)	100 kg	n/a					
8001-35-2	Toxaphene	1 kg	n/a					
12002-48-1	Trichlorobenzene - all isomers	1 kg	n/a					
79-01-6	Trichloroethylene	1000 kg	n/a					
75-01-4	Vinyl chloride	1000 kg	n/a					
7440-38-2	Arsenic	1 kg	n/a					
7440-43-9	Cadmium	1 kg	n/a					
7440-47-3	Chromium	10 kg	n/a					
7440-50-8	Copper	10 kg	n/a					
7439-92-1	Lead	100 kg	n/a					
7439-97-6	Mercury	1 kg	n/a					
7440-02-0	Nickel	10 kg	n/a					
7782-49-2	Selenium	100 kg	n/a					
7440-66-6	Zinc	100 kg	n/a					
	Brominated diphenylethers - penta-, octa- and deca- BDE	10 kg	n/a					
	Chlorine and inorganic chlorine compounds - as HCl	10000 kg	n/a					
	Chlorofluorocarbons (CFCs)	1 kg	8.44	kg	E			
	Dioxins and furans (PCDDs/PCDFs) - as WHO TEQ	0.00001 kg	n/a					
	Dioxins and furans (PCDDs/PCDFs) - as ITEQ	0.00001 kg	n/a					

			Releases to air						
			Total releases		Method	Notifiable releases*			
CAS no.	Substance common name [alternative name]	Reporting threshold	n/a,brt or releases	Metric unit	M,C or E	Releases only	Metric Unit	Commercial in confidence?
	Fluorine and inorganic fluorine compounds - as HF	1000 kg	n/a					
	Halons	1 kg	n/a					
	Hydrochlorofluorocarbons (HCFCs)	1 kg	n/a					
	Hydrofluorocarbons (HFCs)	100 kg	n/a					
	Nitrogen oxides (NO and NO2) as NO2	100000 kg	n/a					
	Non-methane volatile organic compounds (NMVOCs)	10000 kg	n/a					
	Particulate matter - PM2.5	1000 kg	n/a					
	Particulate matter - PM10	1000 kg	n/a					
	Particulate matter - total	10000 kg	n/a					
	Perfluorocarbons (PFCs)	10 kg	n/a					
	Polychlorinated biphenyls (PCBs)	0.1 kg	n/a					
	Polychlorinated biphenyls (PCBs) - as WHO TEQ	0.00001 kg	n/a					
	Sulphur oxides (SO2 and SO3) as SO2	100000 kg	n/a					
	Other Individual Organic Compounds	n/a	n/a					
	Other Individual Halogens	n/a	n/a					
	Other Individual Acid Forming Gases	n/a	n/a					

PIEDC: Pollution Inventory EDC reporting form

CAS no.	Substance common name [alternative name]	Reporting threshold	Media	Releases to controlled waters: Total releases n/a,brt or releases	Total releases Metric unit	Method M,C or E	Notifiable releases* Releases only	Notifiable releases* Metric Unit	Commercial in confidence?
1332-21-4	Asbestos	0.1 kg		n/a					
15792-60-8	Alachlor	0.1 kg		n/a					
309-00-2	Aldrin	0.0005 kg		n/a					
120-12-7	Anthracene	0.1 kg		n/a					
1912-24-9	Atrazine	0.05 kg		n/a					
71-43-2	Benzene	10 kg		n/a					
50-32-8	Benzo(a)pyrene	1 kg		n/a					
205-99-2	Benzo(b)fluoranthene	1 kg		n/a					
191-24-2	Benzo(g,h,i)perylene	0.1 kg		n/a					
207-08-9	Benzo(k)fluoranthene	1 kg		n/a					
56-23-5	Carbon tetrachloride (Tetrachloromethane)	1 kg		n/a					
57-74-9	Chlordane	0.1 kg		n/a					
143-50-0	Chlordecone	0.1 kg		n/a					
470-90-6	Chlorfenvinphos	0.1 kg		n/a					
67-66-3	Chloroform (Trichloromethane)	5 kg		n/a					
2921-88-2	Chlorpyrifos	0.1 kg		n/a					
52315-07-8	Cypermethrin	0.005 kg		n/a					
50-29-3	Dichlorodiphenyltrichloroethane (DDT)	0.0005 kg		n/a					
75-09-2	Dichloromethane (DCM) (Methylene chloride)	10 kg		n/a					
62-73-7	Dichlorvos	0.0005 kg		n/a					
60-57-1	Dieldrin	0.0005 kg		n/a					
117-81-7	Di(2-ethylhexyl)phthalate (DEHP)	0.1 kg		n/a					
330-54-1	Diuron	0.05 kg		n/a					
115-29-7	Endosulfan	0.0005 kg		n/a					
72-20-8	Endrin	0.0005 kg		n/a					
100-41-4	Ethyl benzene	10 kg		n/a					
107-06-2	Ethylene dichloride (1,2-Dichloroethane)	10 kg		n/a					
75-21-8	Ethylene oxide (1,2 Epoxyethane)	1 kg		n/a					
206-44-0	Fluoranthene	0.1 kg		n/a					

PIEDC: Pollution Inventory EDC reporting form

CAS no.	Substance common name [alternative name]	Reporting threshold	Media	Releases to controlled waters: Total releases n/a,brt or releases	Total releases Metric unit	Method M,C or E	Notifiable releases* Releases only	Notifiable releases* Metric Unit	Commercial in confidence?
76-44-8	Heptachlor	0.1 kg		n/a					
36355-01-8	Hexabromobiphenyl	0.1 kg		n/a					
25637-99-4	Hexabromocyclododecane	0.1 kg		n/a					
118-74-1	Hexachlorobenzene (HCB)	0.01 kg		n/a					
87-68-3	Hexachlorobutadiene	0.1 kg		n/a					
608-73-1	Hexachlorocyclohexane (HCH) -all isomers	0.01 kg		n/a					
193-39-5	Indeno(1,2,3-cd)pyrene	1 kg		n/a					
465-73-6	Isodrin	0.0005 kg		n/a					
34123-59-6	Isoproturon	0.01 kg		n/a					
58-89-9	Lindane	0.1 kg		n/a					
2385-85-5	Mirex	0.1 kg		n/a					
91-20-3	Naphthalene	1 kg		n/a					
608-93-5	Pentachlorobenzene	0.1 kg		n/a					
87-86-5	Pentachlorophenol (PCP)	0.05 kg		n/a					
	Perfluoro octanyl sulphate (PFOS)	0.1 kg		n/a					
122-34-9	Simazine	0.01 kg		n/a					
127-18-4	Tetrachloroethylene (PER)	1 kg		n/a					
108-88-3	Toluene	10 kg		n/a					
8001-35-2	Toxaphene	0.1 kg		n/a					
12002-48-1	Trichlorobenzene - all isomers	0.01 kg		n/a					
79-01-6	Trichloroethylene	1 kg		n/a					
1582-09-8	Trifluralin	0.001 kg		n/a					
75-01-4	Vinyl chloride	1 kg		n/a					
1330-20-7	Xylene - all isomers	10 kg		n/a					
7440-38-2	Arsenic	5 kg		n/a					
7440-43-9	Cadmium	1 kg		n/a					
7440-47-3	Chromium	20 kg		n/a					
7440-50-8	Copper	20 kg		n/a					
7439-89-6	Iron	1000 kg		n/a					

PIEDC: Pollution Inventory EDC reporting form

CAS no.	Substance common name [alternative name]	Reporting threshold	Media	Releases to controlled waters: Total releases n/a,brt or releases	Total releases Metric unit	Method M,C or E	Notifiable releases* Releases only	Notifiable releases* Metric Unit	Commercial in confidence?
7439-92-1	Lead	20 kg		n/a					
7439-97-6	Mercury	0.1 kg		n/a					
7440-02-0	Nickel	20 kg		n/a					
7440-66-6	Zinc	100 kg		n/a					
	Brominated diphenylethers - penta-, octa- and deca- BDE	0.1 kg		n/a					
16887-00-6	Chlorides - as Cl	2000000 kg		n/a					
57-12-5	Cyanides - as CN	50 kg		n/a					
	Dioxins and furans (PCDDs/PCDFs) - as WHO TEQ	0.0001 kg		n/a					
	Dioxins and furans (PCDDs/PCDFs) - as ITEQ	0.0001 kg		n/a					
	Fluorides - as F	2000 kg		n/a					
	Halogenated organic compounds - as AOX	1000 kg		n/a					
	Nitrogen - as total N	50000 kg		n/a					
	Nonylphenols and nonylphenol ethoxylates	1 kg		n/a					
1806-26-4	Octylphenols and octylphenol ethoxylates	1 kg		n/a					
	Organotin compounds - as Sn	5 kg		n/a					
	Phenols - total as C	20 kg		n/a					
	Phosphorus - as total P	5000 kg		n/a					
	Polychlorinated biphenyls (PCBs)	0.001 kg		n/a					
	Polychlorinated biphenyls (PCBs) - as WHO TEQ	0.0001 kg		n/a					
	Short chain (C10-13) chlorinated paraffins (SCCPs)	0.1 kg		n/a					
	Total organic carbon (TOC)	50000 kg		n/a					
	Tributyltin and compounds - as TBT	0.005 kg		n/a					
	Triphenyltin and compounds - as TPT	0.1 kg		n/a					

PIEDC: Pollution Inventory EDC reporting form

Waste transferred in tonnes

EWC codes	WFD disposal and recovery codes						C in C
	D14	D15	R13	R4	R3	D5	
02 01 08	0.7						
08 01 11		2.1					
08 01 12			24.5				
08 01 13			10.5				
08 01 17			4.2				
08 01 21			0.2				
08 02 01			0.1				
08 03 17			0.4				
08 04 09			29.2				
08 05 01			32.2				
10 13 14			30.5				
12 01 14			5.7				
12 01 16			0.5				
13 01 10			310.0				
13 02 05			0.9				
13 07 01			2.0				
15 01 02			66.3				
15 01 10			80.6				
15 02 02			311.6				
16 01 03		0.8					
16 01 17				1096.5			
16 02 11				70.8			
16 02 13			10.1				
16 02 15			2.2				
16 02 16				263.4			
16 03 03		3.5					
16 03 04		25.4					
16 03 05					288.8		
16 03 06					50.7		
16 05 04				16.9			
16 05 05				0.7			
16 05 06						0.5	
16 05 07	0.1						
16 06 01			1.7				
16 06 02			1.7				
17 06 01						220.5	
17 06 03			0.1				
19 02 03							
19 02 04	15.4						

PIEDC: Pollution Inventory EDC reporting form

Waste transferred in tonnes

EWC codes	WFD disposal and recovery codes						C in C
	D14	D15	R13	R4	R3	D5	
19 12 04			234.4				
19 12 11	45.5						
19 12 12							
20 01 01			1.9				
20 01 02			68.5				
20 01 14							
20 01 21				5.5			
20 01 25			18.4				
20 01 27			4.2				
20 01 29					12.6		
20 01 30	7.3						
20 01 33			2.0				
20 01 35				74.0			
20 01 38			37.4				

PIEDC: Pollution Inventory EDC reporting form

Waste transferred in tonnes

WFD disposal and recovery codes

EWC codes	D9	C in C					
02 01 08							
08 01 11							
08 01 12							
08 01 13							
08 01 17							
08 01 21							
08 02 01							
08 03 17							
08 04 09							
08 05 01							
10 13 14							
12 01 14							
12 01 16							
13 01 10							
13 02 05							
13 07 01							
15 01 02							
15 01 10							
15 02 02							
16 01 03							
16 01 17							
16 02 11							
16 02 13							
16 02 15							
16 02 16							
16 03 03							
16 03 04							
16 03 05							
16 03 06							
16 05 04							
16 05 05							
16 05 06							
16 05 07							
16 06 01							
16 06 02							
17 06 01							
17 06 03							
19 02 03	516.1						
19 02 04							

PIEDC: Pollution Inventory EDC reporting form

Waste transferred in tonnes

EWC codes	WFD disposal and recovery codes D9	C in C					
19 12 04							
19 12 11							
19 12 12	1390.4						
20 01 01							
20 01 02							
20 01 14	0.1						
20 01 21							
20 01 25							
20 01 27							
20 01 29							
20 01 30							
20 01 33							
20 01 35							
20 01 38							