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AQUAFORCE RECYCLING

Dust and Emissions Management Plan

Application to Vary Bespoke Environmental Permit (ref: EPR/XP3992FV) for Unit 4a, Sprint Industrial Estate, Four Ashes, Wolverhampton, WV10 7ED

Report Reference: CE-FA-1921-RP06-DMP-Final v2

Report Date: 29 November 2022

Produced by Crestwood Environmental Ltd.

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1 Introduction

1.1 Background

1.1.1 Crestwood Environmental Ltd has been commissioned by Aquaforce Recycling (***the Operator***) to prepare a Dust and Particulate Emission Management Plan (DMP) for a waste transfer, treatment, recovery and storage facility at Unit 4a, Sprint Industrial Estate, Four Ashes, Wolverhampton, WV10 7ED (***the Site***).

1.1.2 The Site has been operating since July 2002 and currently accepts hazardous and non-hazardous waste streams which comprise of WEEE wastes, paint waste, oily rags and protective clothing, airbags, aerosols and minor quantities of asbestos.

1.1.3 This DMP has been produced to support a variation to a Bespoke Permit application for the Site to enable the receipt of additional waste types, to increase the waste quantities accepted from 24,999 tonnes per annum to 29,999 tonnes per annum. In addition, the Client has increased the current footprint of the Site. As such, the existing permit boundary requires amendments to accommodate the presence of an additional storage building (roofed and constructed with brick walls) adjacent to the paint and aerosol plant (A2).

1.1.4 This DMP has been prepared in accordance with the Environment Agency's H5 Dust and Particulate Emission Management Plan Template and Gov.uk Guidance `Control and monitor emissions for your environmental permit` (published 1st February 2016). It provides an assessment of the production of fugitive emissions relating to waste operations on the Site.

1.1.5 South Staffordshire District Council has five Air Quality Management Area`s (AQMA`s) in the local authority in which the Site pertains to. The Site itself does not sit within one of these AQMA`s; the most proximal is the Oak Farm AQMA, which is c.3.25km to the north-east of the Site, for Nitrogen Dioxide (NO^2) designated by the local authority on 01/03/2007. This is as a consequence of the many areas in the UK unlikely to meet the objectives outlined in the Government's Air Quality Strategy.

1.1.6 According to DEFRAs Background Mapping Data and based on the 2018 reference year mapping data, background emission concentrations in the locality of the Site are 13.71µg/m3 and 13.82µg/m3 for NO2 and PM10 respectively. National air quality objectives and European Directive limits and target values stipulate that concentrations of PM10 measured at 24-hour mean levels should not exceed 50 µg/m3 for more than 35 times a year. NO2 concentrations should not exceed 40µg/m3 when measured on an annual mean basis. The background concentrations in the vicinity of the Site are therefore well within these limits and it is unlikely that activities relating to the waste recovery operation will increase concentrations in excess of air quality objectives.

1.1.7 The DMP aims to identify potential sources of dust emissions and the associated potential impacts along with detailed measures to be implemented at the Site to mitigate dust and particulate matter.

1.1.8 Statistics based on observations taken from the nearest weather station at Cosford/Albrigton (c. 12.15km south-west of the Site) between November 2009 and June 2021 indicates that prevailing winds originate predominantly from the west to south-west with an average annual speed of 6.3kts (refer to Diagrams 1 and 2 below).

Diagram 1 Monthly average wind speed statistics

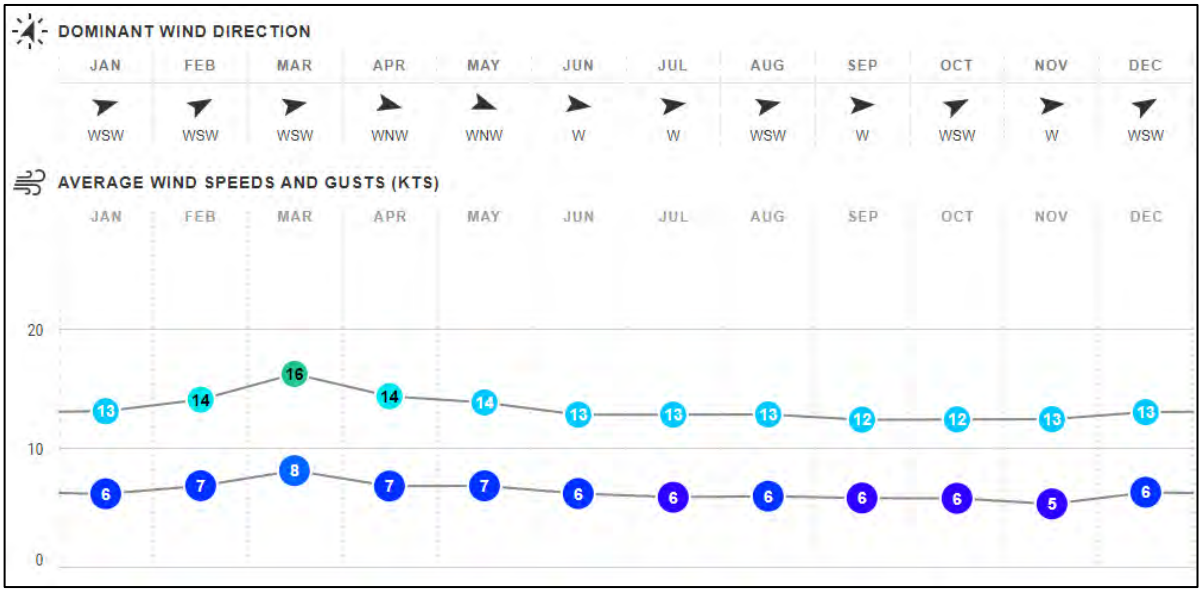
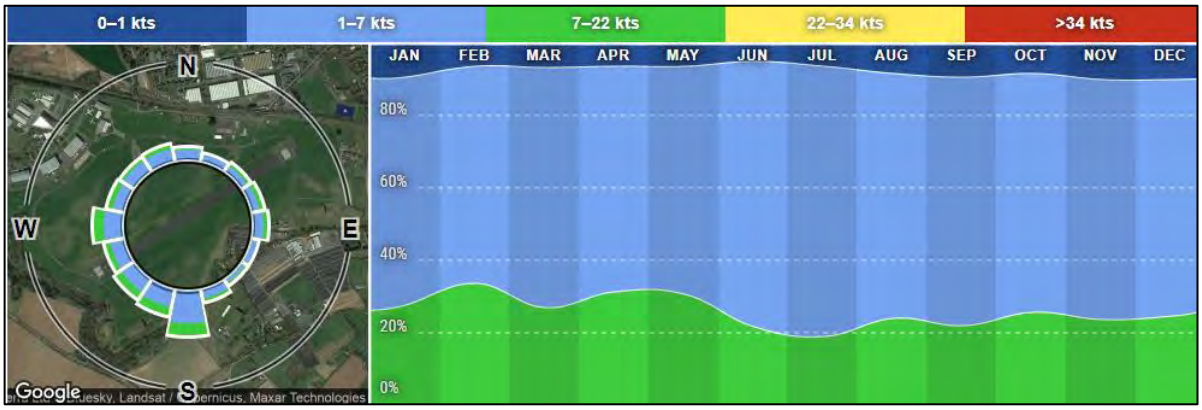


Diagram 2 Monthly wind direction and strength distribution



1.2 Sensitive Receptors

1.2.1 A review of potentially sensitive receptors within a 1km radius of the Site has been undertaken using the hierarchy of hospitals, schools, childcare facilities, elderly housing and convalescent facilities i.e. areas where inhabitants are more vulnerable to the adverse effects of exposure to elevated levels of dust and particulate matter. Food manufacturers, major infrastructure and protected sites such as SSSIs, SPAs and SCAs are also considered (refer to Diagram 3 for details of locations).

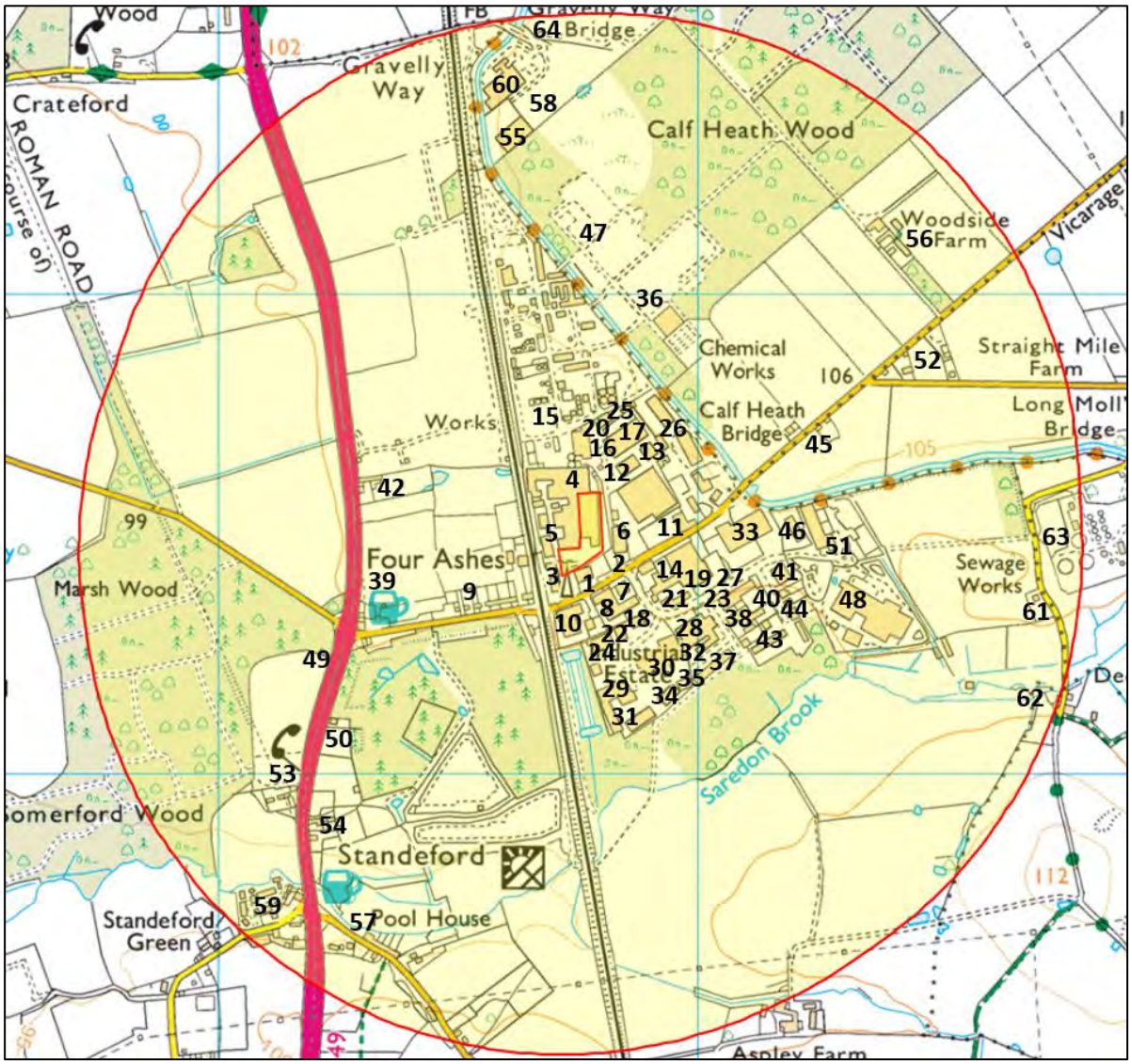
1.2.2 In terms of predicted exposure risk, levels have been determined via a qualitative assessment which evaluates the likelihood of exposure to dust and particulate emissions based on the receptors' proximity to the Site and the location of the sensitive receptors in regard to the prevailing wind direction as depicted in Diagrams 1 and 2 above.

1.2.3 A 1km radius has been applied as a worst-case scenario and it reflects the maximum potential distance that fugitive dust and particulate matter could reasonably be dispersed in extreme meteorological conditions without any mitigation measures in place. Identified sensitive receptors within this range are shown on Diagram 3 below (The Site location is outlined in red, the highlighted circle indicates the 1km radius and the numbers denote location of identified

potential sensitive receptors).

1.2.4 A summary of the identified potentially sensitive receptors along with the overall exposure levels and principal receptor features has been tabulated in Table 1. For each receptor within the categories the determination of the overall risk classification has been based on the dominant risk level. Receptors are denoted by the numbered location points in Diagram 3 for ease of reference. Note that given the absence of hospitals, schools, elderly housing and convalescent facilities in the search area, the sensitive receptors are categorised in terms of distance as opposed to the receptor hierarchy mentioned in paragraph 1.2.1.

Diagram 3 Sensitive receptor locations within a 1km radius of the Site



1.2.5 Institute of Air Quality Management (IAQM) Guidance on the Assessment of Mineral Dust Impacts for Planning (May 2016) states that "it is commonly accepted that the greatest impacts will be within 100 m of a source and this can include both large (>30 µm) and small dust particles. The greatest potential for high rates of dust deposition and elevated PM10 concentrations occurs within this distance. Intermediate-sized particles (10 to 30 µm) may travel up to 400 m, with occasional elevated levels of dust deposition and PM10 possible. Particles less than 10µm have the potential to persist beyond 400 m but with minimal significance due to dispersion." This statement is has been considered in the assessment of

the exposure level for each receptor.

Table 1 Sensitive receptor details

Facility and location point	Distance and Direction from Site (m)	Overall exposure level	Comments
1.Boundary Fencing	Adjacent S	Medium-High	Receptor is located upwind of the dominant wind direction and intervening fencing and vegetation serves as a barrier against emissions.
2.Snack Shack	5m S	Medium-High	As above
3.Click Marketplace	5m W	Medium-High	As above
4.Four Ashes Motor Services	10m N	Medium	Located downwind from the dominant wind direction, however intervening infrastructure and fencing acts as a barrier.
5.Four Ashes Plumbing Supplies	20m W	Medium-Low	Receptor is proximal to the source however it is not located in the direction of the dominant wind and the intervening trees and fencing block the pathway for emissions.
6.OSF Steel Fabricators	25m E	Medium-Low	There is a medium frequency of winds in the direction of the receptor. Fencing and infrastructure provide a barrier between the source and the receptor.
7.MG Accident Repair Centre	50m S	Low	Airbourne emissions are obstructed by the intervening trees and buildings. There is also a low frequency of winds in the direction of the receptor
8.Spillard Safety Systems	50m S	Low	As above
9. Residential Properties on Station Drive	60-260m W	Low	As above
10.Morris Site Machinery	60m S	Low	As above
11. Danescourt Roofing	85m E	Low	The receptor is located relatively remote from the source and there is a medium frequency of winds towards the east.
12.Ginger6 Computers	85m NE	Low	Although the receptor is located directly downwind from the source, fencing and vegetation obstruct the pathway of emissions.
13.SABA Engineering	86m NE	Low	As above
14. C.M.H. Transport	90m SE	Low	There is a low frequency of winds from source to receptor and intervening infrastructure and vegetation serves as a barrier.
15.SI Group UK Ltd	93m N	Low	There is a medium to high frequency of winds in the direction of the receptor and the pathway for emissions is blocked by the bunds, intervening buildings and trees
16.United Bright Bar	105m NE	Low	Directly downwind from the dominant wind but fencing and vegetation block the pathway of emissions.
17.(RS) Four Ashes Limited	115m NE	Low	As above.
18.Energy Bolting	115m S	Low	There is a low frequency of winds in the direction of the receptor but it is considered remote from the source and the intervening fencing and trees offers protection from airbourne emissions

Facility and location point	Distance and Direction from Site (m)	Overall exposure level	Comments
19.C`art Art Transport	120m SE	Low	There is a lack of direct pathways for the airbourne emissions to reach the receptor and it is considered remote from the Site.
20.Molapo	120m N		There is a medium to high frequency of winds in the direction of the receptor and the pathway for emissions is blocked by the bunds, intervening buildings and trees
21.Rolls Freight	125m SE	Low	The receptor is upwind of the prevailing wind direction and it is remote from the source. Trees and the bunds obstruct the pathway of emissions
22.Dressage Mirrors	140m S	Low	Airbourne emissions are obstructed by the bunds, trees and buildings and the source is distal from the source
23.West Midlands American Vehicles	145m SE	Low	There is a low frequency of winds from the source to the receptor and the pathway for emissions is restricted by the bunds on-Site, trees and buildings
24.National Milk Laboratories	152m S	Low	As above
25.Takefood Event Catering	160m N	Low	The receptor is considered distal from the Site, there is a medium frequency of winds and intervening fencing, trees and hedgerows act as a barrier.
26.Veolia Environmental Services	190m E	Low	As above
27.PcP Gratings	210m SE	Low	Infrastructure and vegetation obstruct the pathway of emissions and there is a low frequency of winds from source to receptor
28.Initial Projects Ltd	230m SE	Low	As above
29.Reiter UK	245m S	Low	As above
30.Bow Sports Archery Centre	250m S	Low	As above
31.Dransfields	260m S	Low	As above
32.Cannock Mobile Welders	280m SE	Low	As above
33.Telling Architecture	305m E	Low	As above although there is a medium frequency of winds from source to receptor
34.Lichfield Fire & Safety Equipment	310m S	Low	There is a low frequency of winds in the direction of the receptor but it is considered remote from the source and the intervening fencing and trees offers protection from airbourne emissions
35.De-STA-Co UK	315m S	Low	As above
36.Wolverhampton 450	320m NE	Low	Direct pathways from source to receptor are obstructed by the intervening fencing, trees and buildings. The receptor is also remote from the Site.
37.BM Automotive Solutions	335m SE	Low	Infrastructure and vegetation obstruct the pathway of emissions and there is a low frequency of winds from source to receptor
38.Jackson Lifting	340m SE	Low	As above
39.The Four Ashes Public Inn	345m W	Low	As above
40.P and D York Coach Travel	370m SE	Low	As above
41.Space Seal (Midlands)	380m SE	low	As above

Facility and location point	Distance and Direction from Site (m)	Overall exposure level	Comments
42.Firtree Cottage	395m NW	Low	As above
43.The Print Box Limited	420m SE	Low	As above
44.Allsorts Office Supplies	425m SE	Low	As above
45.Residential Properties	420 – 540m NE	Low	Although the receptor is directly downwind from the dominant wind direction, it is remote from the Site and infrastructure and tall vegetation obstruct the pathway of emissions.
46.Simpsons Commercial Services	480m E	Low	As above but there is a medium to high frequency of winds in the direction of the receptor
47.Gestamp West Midlands	495m NE	Low	Direct pathways from source to receptor are obstructed by the intervening fencing, trees and buildings. The receptor is also remote from the Site.
48.W2R/Veolia	500m SE	Low	Infrastructure and vegetation obstruct the pathway of emissions and there is a low frequency of winds from source to receptor
49.Residential Property	500m SW	Low	The receptor is directly downwind and distal from the source.
50.Residential Property	550m SW	Low	As above
51.Power Electrics – midlands Depot	560m E	Low	The receptor is considered distal from the Site, there is a medium frequency of winds and intervening fencing, trees and hedgerows act as a barrier.
52.Residential Properties	630 – 800m NE	Low	Direct pathways from source to receptor are obstructed by the intervening fencing, trees and buildings. The receptor is also remote from the Site.
53.Standeford Cafe	680m SW	Low	The receptor is directly downwind and distal from the source. An abundance of trees, buildings and infrastructure block the pathway of emissions.
54.Barr House Farm	720m SW	Low	As above
55.Air Liquide Healthcare	760m N	Low	The receptor is considered distal from the Site, there is a medium frequency of winds and intervening fencing, trees and hedgerows act as a barrier.
56.Woodside Farm House	795m NE	Low	Although the receptor is directly downwind from the dominant wind direction, it is remote from the Site and infrastructure and tall vegetation obstruct the pathway of emissions.
57.Residential Properties	800 - 1000m SW	Low	Receptor is downwind from the source and intervening fencing, tall vegetation and buildings serve as barriers.
58.Haulotte UK	846m NE	Low	Although the receptor is directly downwind from the dominant wind direction, it is remote from the Site and infrastructure and tall vegetation obstruct the pathway of emissions.
59.The Harrows Mobile Home Park	850m SW	Low	The receptor is directly downwind and distal from the source. An abundance of trees, buildings and infrastructure block the pathway of emissions.
60.HOPPE UK	870m N	Low	The receptor is considered distal from the Site, there is a medium frequency of winds and intervening fencing, trees and hedgerows act as a barrier.
61.Deepmore Cottages	920m E	Low	The receptor is considered distal from the Site, there is a medium frequency of winds and intervening fencing, trees and hedgerows act as a barrier.

Facility and location point	Distance and Direction from Site (m)	Overall exposure level	Comments
62.Deepmore Farm	996m SE	Low	As above
63.Flare Stack Sewage Works	975m E	Low	As above
64.Gravelly Way Farm	1000m N	Low	As above

1.2.6 Other sources of aerial emissions have been identified in this review and are considered in context within the local industrial estates. Contributing factors include any industry or transportation type that may generate dust and particulate matter from operational processes within a 1km radius of the Site.

2 Operations at Aquaforce Recycling

2.1 Waste Deliveries

2.1.1 All vehicles delivering wastes to the Site stop at the weighbridge and are weighed. The total quantity of waste accepted at the Site is currently up to 24,999 tonnes per annum. It is proposed to increase this under the permit variation to a maximum of 29,999 tonnes per annum.

2.1.2 Checks will be made to establish whether the haulier is a Registered Waste Carrier or has a valid exemption from registration. Only registered carriers or those who are lawfully exempt from registration will be permitted to use the Site.

2.1.3 Waste will not be accepted if for any reason there is insufficient storage capacity available or if the Site is inadequately manned. This is to ensure that all waste is managed effectively to prevent pollution or loss of amenity.

2.1.4 Weighbridge staff will be suitably trained and will follow documented procedures. The weighbridge operator will examine waste descriptions at the weighbridge and the information will be checked against the pre-acceptance documentation, six figure European Waste Catalogue Code(s) and other details on the Waste Transfer Note, Season Ticket or Hazardous Waste Consignment Note (as appropriate) and against the waste types permitted by the Environmental Permit.

2.1.5 Every delivery of waste will be recorded, detailing the date of the transaction, weight, waste type, registered carrier, Waste Transfer Note number, Hazardous Waste Consignment Note number (as appropriate), vehicle registration and other pertinent information against a unique reference number. It will allow for tracking of wastes, the generation of reports and waste returns, as well as providing comprehensive, auditable information.

2.1.6 Additional pre-acceptance procedures will be used to ensure that only suitable waste types are accepted. Customers delivering waste will be required to provide the Operator, in advance, with all necessary information/documentation to satisfy the requirements of the Waste (England and Wales) Regulations 2011 and the Duty of Care. Information required will include specific details of the type of process producing the waste (source), the type of waste (according to the EWC), the quantity of waste, the form the waste takes (e.g. solid, liquid) and any special handling requirements needed.

2.1.7 Only wastes subjected to the pre-acceptance procedures detailed above will be accepted at the Site.

2.1.8 A visual inspection of the contents of all waste loads, including those received in enclosed containers, is made during deposit.

2.1.9 Any discrepancies found, i.e. suspect, non-conforming and/or random loads, as a result of the checks detailed above will result in the vehicle being detained whilst some, or all, of the following supplementary management decisions are taken:

- Referral to the Site Manager or Technically Competent Person (TCP) on Site;
- Referral to the waste producer to confirm the nature of the waste load;
- Referral to the Environment Agency;
- Redirection of delivery vehicle off site, to a suitably authorised facility; and
- If the waste has been discharged, removal of the waste to a secure quarantine area, prior to off-site removal either to the waste producer or suitably authorised facility.

2.1.10 Any waste materials dispatched off site to an authorised facility, will be removed in accordance with the Duty of Care. A registered waste carrier will be used. A 'Record of Non-Conformance' will be made in accordance with Appendix 2 of the Site`s EMS.

2.1.11 Any instances of rejection of loads will be recorded in a Site log, which will be made available for inspection by authorised officers of the Environment Agency at any reasonable time.

2.1.12 Copies of Waste Transfer Notes, Season Tickets and all records required in accordance with the Environmental Permit will be kept either on Site or at a secure location off-Site. Where at all possible, records will be electronic.

2.1.13 Permitted wastes are listed in Table 3 of the Site's Environmental Management System (EMS) which accompanies this application (report reference: CE-FA-1921-RP01-EMS-Final).

2.2 Overview of Waste Processing and Dust Controls

2.2.1 Activities on-Site are limited to those specified in Schedule I, table S1.1 (A1 to A12) of the permit. Of these, activity references A8 to A12 are classified as Directly Associated Activities, the details of which are included in Table 1 below.

Table 2 Directly Associated Activities

Directly Associated Activity	Description
Steam Boiler	For use as a fuel source in relation to activity A1: the treatment of waste refrigeration equipment
Manual pre-treatment of paints	The manual separation of hazardous solvent-based paints from non-hazardous water-based paints
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
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
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

2.2.2 Waste streams currently accepted are listed in Table 2 below and are defined by two distinct

activities, these being WEEE waste treatment and recovery and hazardous waste recovery, transfer and treatment. The WEEE activities undertaken at the Site consists of commercial and domestic fridge treatment, the transfer of hazardous and non-hazardous WEEE wastes such as CRT/TV`s and, the transfer of commercial and domestic source batteries. The hazardous waste activities comprise asbestos waste transfer, the recovery of paint waste and the transfer of oily wastes such as oily rags and protective clothing, and airbag and aerosol treatment.

2.2.3 A vehicle speed limit of 10 mph will be applied to the Site`s internal haul route to minimise dust emissions during vehicle movements. The haul routes will also be dampened down during dry and dusty conditions. Vehicle wheels will be hosed down on exit during dry and dusty conditions, as required. Drop heights from vehicles will be minimised as best practicable.

2.2.4 On-site sweeping will take place when conditions are assessed to warrant such action. If the deposition of excessive quantities of loose material occurs once vehicles have exited the site, shaker grids will be installed at entry and exit points.

2.3 Material exported off-site

2.3.1 All wastes are dispatched from the Site in suitably enclosed or sheeted vehicles to authorised facilities in accordance with the Duty of Care and Waste Transfer Note procedure to ensure dusty emissions are not discarded beyond the boundary of the Site.

2.3.2 Material rejected from the Site is issued with a record stating why, when and from which contract the waste was provided. This record is held on Site for NRW to inspect. In addition, the 'Record of Non-Conformance' (Appendix 2 of the EMS), is completed with the record held on Site.

3 Dust and Particulate (PM10) Management

3.1 Responsibility for Implementation of the DMP

3.1.1 The Site Manager and Technically Competent Manager (TCM) will oversee the implementation of the DMP and ensure that the methods detailed within this DMP provide effective dust mitigation.

3.1.2 Where the responsible individual is unavailable to supervise in the implementation of dust suppression measures, a suitably experienced site operative will be allocated responsibility.

3.1.3 If dust and particulate emissions continue to be observed following the use of the dust suppression measures outlined in section 2.2, the DMP will be reviewed and additional measures such as fixed suppression systems considered.

3.1.4 Amendments of the DMP to reflect any potential improvements will be made during the review process.

3.1.5 The TCM who will administer the implementation of the DMP has been assessed in the implementation of site control measures as part of the Certificate of Technical Competence and therefore is deemed proficient to execute and review this DMP.

3.1.6 During the induction process, all staff members will be trained in the dust suppression measures outlined in this DMP. Refresher training will be provided in the scenario where additional dust suppression measures have been introduced to ensure staff remain competent.

3.1.7 The DMP will be reviewed at least annually or following any adjustments in operations which have the potential to increase the level of exposure to surrounding sensitive receptors.

3.2 Sources and Control of Fugitive Dust/Particulate Emissions

3.2.1 Detailed below are examples of potential sources of fugitive dust and particulate emissions associated with all the operations and activities at Aquaforce recycling:

- Vehicles entering and/or leaving the site with mud on wheels, and tracking dust on to or off the site
- Debris falling off lorries which arrive uncovered
- Vehicles and plant moving around the site kicking up dust
- Road vehicles tipping waste
- Site surfaces (i.e. the ground, plant and equipment)
- Loading any inadvertently accepted non-permitted wastes back on to vehicles for removal off-site to authorised facilities
- Particulate emissions from the exhaust of vehicles/plant/machinery on site.

3.2.2 Table 5 below details the measures to be applied to the Site for each of the sources outlined above to break the source-pathway-receptor routes.

3.2.3 Preventative and remedial measures to integrate on the Site to alleviate potential fugitive dust and particulate emissions are tabulated in Table 6 below. These are grouped in terms of low to high cost and can be used individually or in conjunction.

Table 3 Source-Pathway-Receptor Route

Source	Pathway	Receptor	Type of impact	Where relationship can be interrupted
Mud	Tracking dust on wheels and vehicles. Mud dropping off wheels/vehicles when dry	Sensitive receptors identified in Table 1	Visual build-up and soiling of dust and particulates, also consequent resuspension into the air column	• Inspection of vehicles and, where required, removal of mud prior to exiting the Site via a hose pipe • Where debris is identified as an ongoing issue a road sweeper can be provided by a nearby supplier.
Debris	Falling off lorries	As above	Visual build-up and soiling of dust and particulates, also consequent resuspension into the air column	• Vehicles delivering and collecting waste will be covered. • Efficient and prompt unloading of vehicles directly into allocated areas. • All areas subject to regular housekeeping. • Where debris is identified as an ongoing issue a road sweeper can be provided from a local road sweeper hire company.
Vehicles and plant moving	Atmospheric dispersion	As above	Airbourne particulates	• Site surface is entirely concreted therefore dust generation which may impact surrounding sensitive receptors should be minimal. • All areas, vehicles and plant machinery are subjected to regular housekeeping and removal of loose particles.
Tipping and storage of wastes	Atmospheric dispersion	Surrounding sensitive receptors	Visual soiling and dispersion of airborne particulates	• Site is bounded by fencing and vegetation, including mature trees, which aids as a barrier. • Minimise source strength by means of low drop heights. Dampening down of material during dry periods or where load is identified during the inspection process as `dusty`. • All plant is inspected prior to and after use for dust and debris build-up. • Plant is regularly cleaned down after use to prevent the accumulation of dust and loose material. • All plant used on site is maintained and serviced in accordance with manufacturers guidelines and service agreements. • Wastes are not inherently dusty and activities are carried out internally
Exhaust emissions	Atmospheric dispersion	Surrounding sensitive receptors	Airborne particulates	• Regulatory controls and best-practice measures to minimise source strength. Plant will be switched off when not in use. Delivery and collection vehicles will be required to switch engines off while unloading and loading where possible.

Table 4 Measures used on Site to control dust/particle emissions

Abatement Measure	Description / Effect	Overall consideration and implementation
Preventative Measures		
Low Cost Options		
Site layout in relation to receptors	Locating particulate emitting activities at a greater distance and downwind from receptors may reduce receptor exposure, provided that emissions from the source are not dispersed over significant distances.	Waste types are not inherently dusty an, with the exception of deliveries and exporting materials, all Site operations are conducted indoors. During periods of elevated wind speeds, waste deposit operations will be located away from sensitive receptors.
Site speed limit, 'no idling' policy and minimisation of vehicle movements on site	Reducing vehicle movements and idling should reduce emissions from vehicles. Enforcement of a speed limit may reduce re-suspension of particulates by vehicle wheels.	As stated in Table 5, site speed limit of 10mph will be enforced. Vehicle engines will be switched off when not in use, to minimise any idling.
Minimising drop heights for waste. Use of enclosed chutes for waste drops/end of conveyor transfers and covered skips / storage vessels.	Minimising the height at which waste is handled should reduce the distance over which debris, dust and particulates could be blown and dispersed by winds.	As stated above, Site activities are predominantly carried out internally. Additionally, as stated in Table 5, vehicle drops heights will be minimised.
Ceasing operation during high winds and/or prevailing wind direction	Mobilisation of dust and particulates is likely to be greater during periods of strong winds and hence ceasing operation at these times may reduce peak pollution events.	Procedures will be in place to identify when operations will cease in the event of strong winds. This will be physically gauged by the operating personnel following a dust management induction. This will however be unlikely given that operations are conducted internally.
Minimisation of waste storage heights and volumes on site	Minimising the height at which waste is handled should reduce the distance over which debris, dust and particulates could be blown and dispersed by winds. Reducing storage volumes should reduce the surface area over which particulates can be mobilised.	The majority of the waste material will not be stockpiled over long periods of time and for the whole, are stored internally. Of those stockpiled, a minimum stack height of 4m will be enforced.
Preventative Measures		

Abatement Measure	Description / Effect	Overall consideration and implementation
Medium Cost options		
Sheeting of vehicles	Prevents the escape of debris, dust and particulates from vehicles as they travel.	Whenever feasible, vehicles will be covered to avoid dispersion of emissions.
Hosing of vehicles on exit	May remove some dirt, dust and particulates from the lower parts of vehicles although likely to be less effective than a more powerful wheel wash.	As a preventative measure to reduce the deposition of dust and loose material off site.
Remedial Measures		
Low Cost Options		
On-site sweeping	Sweeping could be effective in managing larger debris, dust and particulates but may also cause the mobilisation of smaller particles. Road sweeping vehicles damp down dust and particulates whilst brushing and collecting dust and particulates from the road surface, particularly at the kerbside. This may generate dust and particulate movement that may become a Health and Safety issue if the filters and spray bars on the sweepers are not maintained.	As stated in table 3.1 and section 2.2, sweeping will form part of the general housekeeping of the Site to minimise the build-up of loose material and thus the generation of potential dust.
Remedial Measures		
Medium Cost Options		
Water suppression with hoses on site	Damping down of site areas using hoses can reduce dust and particulate re-suspension and may assist in the cleaning of the site if combined with sweeping.	Will be predominantly implemented during dry and dusty conditions and for dampening down vehicles.
Water suppression with bowser	Using bowsers is a quick method of damping down large areas of the site with large water jets.	It is not proposed to have a water bowser on the Site, however, this will be implemented if required for the dampening down of larger areas if dusty conditions become persistent.

Abatement Measure	Description / Effect	Overall consideration and implementation
Shaker grids	Similar to cattle grids, these are installed at a site entrance and exit. The movement of vehicles over the grids shakes dust and particulates from the wheels, thus removing them before vehicles enter the site.	If all other strategies fail to immobilise emissions and, in the scenario where complaints are received, shaker grids will be installed to reinforce existing measures.

3.3 Visual Dust Monitoring

3.3.1 Dust monitoring at the Site boundary will be carried out as part of the routine daily Site inspections with any relevant observations recorded and retained on-Site.

3.3.2 All plant will be inspected on a daily basis and cleaned after use, as appropriate, in order to prevent the accumulation of dust and loose materials.

3.3.3 Informal dust monitoring comprising of operational staff remaining vigilant for observable dust and particulate will be carried out during the operational process. Where dust emissions are identified, operations will cease and the Site boundary will be examined to ensure emissions are not dissipating towards sensitive receptors. Dampening down of the source of any fugitive emissions will be undertaken before operational processes resume.

3.3.4 Results for all dust monitoring will be recorded and retained in the Site office or secure location off-Site along with details regarding dates, times, weather conditions, wind direction and the name of the staff member undertaking the monitoring process, see Section 4 below.

3.3.5 Due to the levels of abatement measures to be integrated on the Site as detailed in table 3.2, the likelihood of emissions impacting on the identified sensitive receptors is considered low. Therefore, no other forms of dust monitoring is proposed for the Site.

3.3.6 In the unlikely event that dust emissions are identified as an issue, the operator will review the mitigation measures and monitoring techniques detailed in this DMP in order to reduce exposure levels and inhibit emissions dispersing from the Site. In this scenario, quantitative techniques will be considered as a monitoring process.

4 REPORTING AND COMPLAINTS

4.1.1 Aquaforce Recycling Limited operate and maintain a certified Environmental Management System (EMS). Any complaints received concerning dust and particulate emissions at the Site will be dealt with in accordance with the company`s EMS complaints procedure.

4.1.2 Any complaints received at the Site, e.g. about noise or dust, will be reported to the Site Manager or Technically Competent Person (with appropriate WAMITAB Certificate) who is responsible for the Site management, e.g. in the absence of the Site Manager due to illness or annual leave etc.

4.1.3 The following actions will be taken on receipt of an external complaint:

- The responsible person receiving the complaint at the Site will immediately record the key details, initiating the investigation process. Details will be entered on the Complaint Report Form (see below). The form sets out the key information that should be recorded at this time in order to facilitate further suitable investigation.
- The Site Manager or Technically Competent Person will be informed of the complaint as soon as possible, including the location, time and date of the complaint being lodged.

COMPLAINT RECORD FORM	
Who made the complaint?	
Name:	
Address:	
Phone No:	
Date and time they made the complaint	
What caused it?	
Was anyone else aware of this? If so who?	
What was the source of the problem, what went wrong? If source is unknown contact a suitably qualified person to investigate.	
What have you done to make sure it won't happen again?	
Was there any significant pollution – for example oil entering a surface water drain?	
If there was then you must notify the Environment Agency on 03708 506 506 (open 24hours/day) Have you done so? You must also notify the Environment Agency via email or letter.	Yes/No/not applicable Time: Date: EA Incident number:

Please print name and sign:	

4.1.4 In recognising that some causes of complaints, such as dust and noise, can be transient and short-lived, timely notification of complaints directly from the complainant or the Environment Agency is imperative to allow for appropriate investigation. If the complaint occurs more than 12 hours before notification is provided to the Operator, it may not be possible to substantiate the complaint or pinpoint the cause. The Operator will, however, contact the complainant where possible, review any operations at the time which had the potential to cause the complaint and complete and record a comprehensive complaint investigation. For complaints received within 12 hours of the incident the following actions will be undertaken:

- The Site Manager or Technically Competent Person will visit the complaint location as soon as possible, with the aim of undertaking monitoring within 2 hours if this is possible within the working day. The Site Manager or Technically Competent Person will subjectively determine the presence or absence of the cause of the complaint, e.g. visible dust presence. Opportunities to meet the complainant to discuss the matter directly will be pursued, wherever possible.
- If the cause of complaint, e.g. visible dust, is present, the key 'FIDOR' criteria will be assessed at the complaint location, as follows:
- Frequency – is the cause of the complaint, e.g. dust, intermittent or persistent; is there a history of complaints at this location?
- Intensity – is the cause of complaint faint, moderate, strong, or very strong?
- Duration – how long is the cause of complaint present at this location?
- Offensiveness – provide a description of the cause of complaint; is it high, moderate, or low offensiveness?
- Receptor sensitivity - is the cause of complaint present at a remote or highly sensitive location; is it localised or widespread?

4.1.5 The Site Manager or Technically Competent Person will subsequently undertake the following further assessment process:

- Review of the operations at the Site prior to and at the time of the complaint;
- Review of the environmental control systems prior to and at the time of the complaint;
- Review of the meteorological conditions (wind speed, wind direction, rainfall, atmospheric pressure) prior to and at the time of the complaint – to establish whether a pathway can be established between the Site and the complainant;
- Review of the previous complaint history at the location identified.

4.1.6 Where a significant complaint is substantiated by the Site Manager or Technically Competent Person, the Operator will contact the Environment Agency to discuss the incident as soon as possible following receipt of the complaint details, allowing sufficient time for the above investigation to be completed, and within a maximum target response period of 24 hours from complaint receipt. If the necessary contact details are available and direct feedback has been requested the Operator will also contact the complainant directly to discuss the issue, the findings of the subsequent investigation, and any actions arising.

4.1.7 Once actions have been completed the Site Manager or Technically Competent Person will visit the complaint location to ensure that the cause of complaint has subsided.

5 Summary

5.1.1 This DMP has been produced in accordance with the Environmental Agency`s H5 Dust and Particulate Emissions Management Plan template and Gov.uk guidance `Control and monitor emissions for your environmental permit` (published 1st February 2016).

5.1.2 The DMP has identified the potential sources of dust and particulate emissions on Site, the potential impacts and exposure levels along with measures to be implemented at the Site to mitigate against such discharges.

5.1.3 Sensitive receptors and residential properties were identified within a 1km radius of the Site as determined

by their vulnerability to the adverse effects of exposure to elevated levels of airborne dust and particulate matter.

5.1.4 Other contributing sources of emissions were considered in terms of dust and particulates arising from operational processes within a 1km radius of the Site.

5.1.5 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.

5.1.6 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.

5.1.7 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.

5.1.8 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.

5.1.9 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.

5.1.10 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.

5.1.11 Operations on Site will cease during periods of high winds to aid in the immobilisation of fugitive dust and particulate emissions.

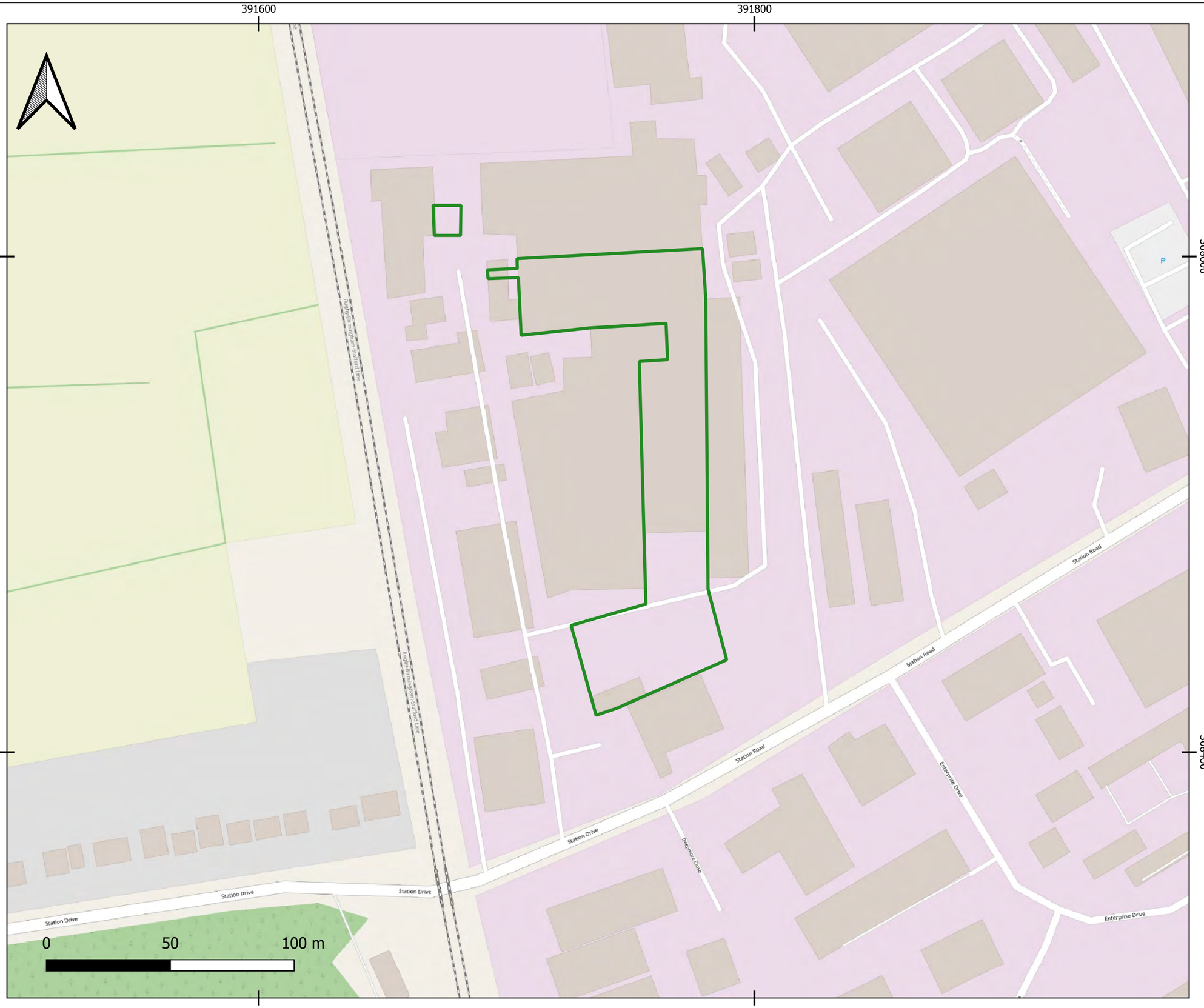
5.1.12 The Site Manager and Technically Competent Person will be responsible for the implementation of the DMP and the application of appropriate, recommended dust suppression measures.

5.1.13 Any complaints received concerning dust and particulate emissions at the Site will be dealt with in accordance with the company's EMS complaints procedure.

5.1.14 The investigation will be instigated by the Site Manager or the Technical Competent Person following the completion of the Complaints Report Form.

DRAWINGS

Drawing No	CE-FA-1921-DW01	Environmental Permit Boundary and Site Layout



Legend:

- Permit boundary

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 WV10 7ED

Drawing title: Permit Boundary Plan

Date:	Scale:	Paper size:
03/07/2023	1:1500	A3 (420×297mm)

Drawn by:	Checked by:	Status:	Final revision
DJ	KB	Final	-

Drawing Ref:	Drawing No:
CE-FA-1921-DW03-Final	DW03

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