GREENWAY ENVIRONMENTAL LTD

BAT ASSESSMENT

EPR/WP3036ZR

***INTRODUCTION***

In order to vary environmental permit EPR/WP3036ZR, Greenway Environmental Ltd have undertaken a BAT Assessment against all proposed new activities container within the application to vary the existing permit. The new BAT standards contained within the Best Available Techniques (BAT) Reference Document for Waste Treatment 2018 (BREF) document, and the Chemical Waste Appropriate Measures have been consulted.

***BAT REVIEW***

The following applicable phases have been assessed:

* Pre-acceptance of waste
* Acceptance of waste
* Waste Storage
* Bulking and repackaging of Waste
* Sorting of Waste
* Odour
* Noise
* Fugitive Emissions
* Management
* Monitoring

Results are listed below against each relevant BAT conclusion

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| BAT CONCLUSION NUMBER | BAT GUIDANCE | EVIDENCE OF COMPLIANCE |
| 1 | In order to improve the overall environmental performance, BAT is to implement and adhere to an environmental management system (EMS) that incorporates all of the following features:   1. commitment of the management, including senior management; 2. definition, by the management, of an environmental policy that includes the continuous improvement of the environmental performance of the installation; 17.8.2018 L 208/45 Official Journal of the European Union EN 3. planning and establishing the necessary procedures, objectives and targets, in conjunction with financial planning and investment; 4. implementation of procedures paying particular attention to:   (a) structure and responsibility,  (b) recruitment, training, awareness and competence,  (c) communication,  (d) employee involvement,  (e) documentation,  (f) effective process control,  (g) maintenance programmes,  (h) emergency preparedness and response,  (i) safeguarding compliance with environmental legislation;  V. checking performance and taking corrective action, paying particular attention to:  (a) monitoring and measurement (see also the JRC Reference Report on Monitoring of emissions to air and water from IED installations – ROM),  (b) corrective and preventive action,  (c) maintenance of records,  (d) 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;  VI. review, by senior management, of the EMS and its continuing suitability, adequacy and effectiveness;  VII. following the development of cleaner technologies;  VIII. 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;  IX. application of sectoral benchmarking on a regular basis;  X. waste stream management (see BAT 2);  XI. an inventory of waste water and waste gas streams (see BAT 3);  XII. residues management plan (see description in Section 6.5);  XIII. accident management plan (see description in Section 6.5);  XIV. odour management plan (see BAT 12);  XV. noise and vibration management plan (see BAT 17) | 1. Greenway Management are committed to the implementation and use of BAT techniques over all aspects of the business with particular focus on the Environment. This is instilled on all employee inductions. Management strive to continually improve by developing current systems, introducing new systems, innovate within the plant and improving work techniques, taking care of the land by continually monitoring and reducing emissions. The Environmental Management System is in place and applies to everyone across the company with a review of the management system taking place every year.   II: Greenway believe that by practicing good environmental techniques, employing best available systems & technology, wherever practicable and operating in a sustainable manner, we can minimise our environmental impact and continually improve our environmental performance. This is an integral and fundamental part of our business strategy and operating methods. We encourage our stakeholders to do the same by entering into and complying with our supplier, customer and staff engagement policy.  III. The day to day objectives and activities of the business and its subsidiaries consider effects on the environmental. Commitment to environmental protection flows throughout the organisation. Systems and procedures are in place to ensure that employees fully understand and abide by Greenway’s Environmental Policy and their designated responsibilities. Budgets for finance and resources are made available as appropriate for environmental protection and improvements. Environmental targets are defined for the business. Greenway takes into account their employee’s capabilities, qualities and other responsibilities when delegating tasks and activities. Greenway promote a positive environmental protection culture.  IV  a) Greenway has a robust management structure which ensures a constant focus on the company’s environmental responsibilities.  b) Greenway ensure that the recruitment, competency and training for environmental protection for all staff is up to date and reviewed periodically.  c) All staff undergo in depth awareness training from induction and initial training through to regular training sessions which include any site improvements identified.  d) Greenway hold monthly environment meetings and distribute any information needed by regular tool box talks. There is also a suggestion box on-site for employees to submit improvement suggestions on any subject.  e) The environmental policy is published on all notice boards along with the latest Health, Safety and Environment meeting minutes.  f) Processes are controlled through Risk Assessments and Work Instruction documents (WI’s) which are reviewed annually or whenever there is a major change / incident.  g) Maintenance is essential to the efficient running of the any plant and equipment. An efficient plant or truck, reduces all emissions to the environment. Greenway monitor, maintain and repair all equipment as soon as practicable, ensuring that any environmental impacts are considered.  h) Greenway personnel are trained in all emergency response procedures, including fire, spills and accidents. Risk assessments are utilized to ensure that the site is prepared for any foreseeable emergencies. Regular fire drills are also completed and documented.  i) Greenway have a dedicated Compliance Manager who takes the lead when ensuring our compliance with legislation. The Compliance Manager and the Assistant Compliance Manager are both WAMITAB and NEBOSH qualified.  V. Greenway pro-actively monitor performance and conduct investigations to establish root cause.  a) No points of emission to air exist at the facility. There is one release to foul sewer which is only used for collected rain waters. Waters are tested for the absence of contaminants before release  b) When equipment fails or an incident occurs, Greenway investigate the situation to find the root cause. By addressing the root cause, we have the best chance of preventing reoccurrence.  c) All activities are recorded. Most records are kept electronically on our server.  d) Greenway’s Compliance Management regularly audits the site to ensure that it is operating correctly.  VI. Greenway Environmental Directors periodically visit the facility to ensure site operations remain compliant.  VII. Greenway are always looking to improve their processes.  VIII. All installation, commissioning and groundwork at the site has been conducted with the intent that it can be put back to its original condition or that it can be left safe and usable for other businesses.  IX. The condition and performance of the site is compared to previous records to identify any potential problems.  X. All waste streams are monitored, measured and recorded in accordance with EA directives.  XI. The site does generate waste water from the activity of container washing. Waters are collected into IBC’s specific to their chemistry and contamination, and these individual containers are labelled with a generated on site reference which is tracked via the stock tracking system. There is no gas used on site, and any gases in waste (such as aerosols), is subject to full stock tracking.  XII. The process does not generate any residues.  XIII. See Management System, Emergency Plan, and all relevant work instructions.  XIV. The process does not create significant odours but an OMP has been produced to account for packaged waste streams that may naturally be odorous and accepted to site.  XV. The activities do not generate noise or vibration and as such a noise and vibration management plan is not necessary. |
| 2 | In order to improve the overall environmental performance of the plant, BAT is to use all of the techniques given below.  a) Set up and implement waste characterisation and pre-acceptance procedures –  b) Set up and implement waste acceptance procedures –  c) Set up and implement a waste tracking system and inventory –  d) Set up and implement an output quality management system  e) Ensure waste segregation –  f) Ensure waste compatibility prior to mixing or blending of waste –  g) Sort incoming solid waste - | a) Incoming loads are only accepted from agreed suppliers with clear specification of material that can be accepted. Only waste streams that exist on the permit, on EWC codes that exist for the intended activity of the permit, will be accepted by the facility. Quotations with all terms and conditions are in place prior to any waste acceptance on site. Each enquiry list is then subjected to in house technical assessment by qualified chemists prior to the waste arriving at the facility, and is detailed by our relevant WI  b) Waste Acceptance Procedure contains further details. Qualified Chemists inspect each waste container against a strict set of caveats designed to confirm the waste identity, and chosen recovery/disposal route. The relevant WI exists detailing this process, along with further detail on relevant checks and tests.  c) Greenway operate a unique job numbering system, whereas every waste load is processed as an individual job, with an individual identification number. This is standard practise at all Greenway facilities  d) All input and output quality is measured, managed and recorded by the procurement team for GRG (parent company). All stock for dispatch to customers is checked for quality prior to loading via on site check forms which verify container quality and paperwork accuracy  e) All waste stored using HSG71. All outgoing waste is also identified by batch number and stored appropriately until dispatched.  f) Waste to be bulked is subjected to compatibility tests, and must follow strict steps as detailed within the relevant WI and Risk Assessment.  g) Greenway processes include visual examination at the acceptance stage, but typically not much sorting is required when handling packaged waste. |
| 3 | In order to facilitate the reduction of emissions to water and air, BAT is to establish and to maintain an inventory of waste water and waste gas streams, as part of the environmental management system (see BAT 1), that incorporates all of the following features:  (i) information about the characteristics of the waste to be treated and the waste treatment processes, including:  (a) simplified process flow sheets that show the origin of the emissions;  (b) descriptions of process-integrated techniques and waste water/waste gas treatment at source including their performances;  (ii) information about the characteristics of the waste water streams, such as:  (a) average values and variability of flow, pH, temperature, and conductivity;  (b) average concentration and load values of relevant substances and their variability (e.g. COD/TOC, nitrogen species, phosphorus, metals, priority substances/micropollutants); (c) data on bioeliminability (e.g. BOD, BOD to COD ratio, Zahn-Wellens test, biological inhibition potential (e.g. inhibition of activated sludge)) (see BAT 52);  (iii) information about the characteristics of the waste gas streams, such as:  (a) average values and variability of flow and temperature;  (b) average concentration and load values of relevant substances and their variability (e.g. organic compounds, POPs such as PCBs);  (c) flammability, lower and higher explosive limits, reactivity;  (d) presence of other substances that may affect the waste gas treatment system or plant safety (e.g. oxygen, nitrogen, water vapour, dust). *Applicability* The scope (e.g. level of detail) and nature of the inventory will generally be related to the nature, scale and complexity of the installation, and the range of environmental impacts it may have (determined also by the type and amount of wastes processed). | The only emissions to water are uncontaminated surface water  drainage from building roofs and run-off water from the Yard. Water from areas that do not contain waste are discharged directly to the storm sewer following confirmation of no contamination by a qualified chemist.  Waste is stored under cover in bunded areas at all times and as such, virtually eliminates the possibility of contaminating the rain water  Yard runoff water does not come into contact with waste, but is monitored through sampling and lab analysis, with results recorded so that any problems can be identified and addressed at the earliest opportunity. No problems have been highlighted so far.  The fueling and weighbridge areas are protected by an interceptor which can only discharge into the foul sewer if the General Manager authorises the opening of the penstock valve  There are no anticipated sources of dust (all waste streams with the potential to cause dust will only be in fully enclosed containers and accepted for storage only eg Carbon Black), or emissions to air. |
| 4 | In order to reduce the environmental risk associated with the storage of waste, BAT is to use all of the techniques given below.  a) Optimised storage location (Generally applicable to new plants) - This includes techniques such as:  — the storage is located as far as technically and economically possible from sensitive receptors, watercourses, etc.;  — the storage is located in such a way so as to eliminate or minimise the unnecessary handling of wastes within the plant (e.g. the same wastes are handled twice or more or the transport distances on site are unnecessarily long).  b) Adequate storage capacity (Generally applicable) - Measures are taken to avoid accumulation of waste, such as:  — the maximum waste storage capacity is clearly established and not exceeded taking into account the characteristics of the wastes (e.g. regarding the risk of fire) and the treatment capacity;  — the quantity of waste stored is regularly monitored against the maximum allowed storage capacity;  — the maximum residence time of waste is clearly established.  c) Safe storage operation (Generally applicable) - This includes measures such as:  — equipment used for loading, unloading and storing waste is clearly documented and labelled;  — wastes known to be sensitive to heat, light, air, water, etc.are protected from such ambient conditions;  — containers and drums are fit for purpose and stored securely.  d) Separate area for storage and handling of packaged hazardous waste (Generally applicable) - When relevant, a dedicated area is used for storage and handling of packaged hazardous waste. | a) The site is located approximately 600m from the river Medway, it is approximately 700m away from any residential receptors. To mitigate any risk to the river, all waste is stored packaged, on slatted racking, within a fully bunded warehouse.  Waste is offloaded to the reception bay, inspected by the chemists, then moved to its storage location. If the waste requires repacking it is done prior to storage.  b) Site has space for around 300 pallets on the internal racking, with further storage designated for prepared loads ready and booked out for despatch. Material movements are planned to ensure that the site remains within limits. The management team monitor and manage all waste quantities daily.  Deliveries and dispatches are planned to ensure waste does not remain on site for longer than necessary, and pallet count calculators are utilised on the Site Diary to allow careful advanced planning of bookings  c) Waste is identified and tracked by the unique load identification “ROC” number.  - Sealed containers are stored in designated locations for the waste type.  - Separated wastes are stored in sealed containers to protect them  from ambient conditions.  - Waste containers are inspected for serviceability whenever used. There is a procedure for reporting problems.  d) There is a designated quarantine bays for any larger problems. Waste is not repackaged or bulked within designate storage areas, the 2 activities are always kept separate. |
| 5 | In order to reduce the environmental risk associated with the handling and transfer of waste, BAT is to set up and implement handling and transfer procedures.  Handling and transfer procedures aim to ensure that wastes are safely handled and transferred to the respective storage or treatment. They include the following elements  — handling and transfer of waste are carried out by competent staff;  — handling and transfer of waste are duly documented, validated prior to execution and verified after execution;  — measures are taken to prevent, detect and mitigate spills;  — operation and design precautions are taken when mixing or blending wastes (e.g. vacuuming dusty/powdery wastes).  Handling and transfer procedures are risk-based considering the likelihood of accidents and incidents and their environmental impact. | All Greenway staff are subject to a full site induction which includes environment, H&S and process training. New employees then go through a period of (documented) competency training to ensure that they are competent on all relevant operational processes, including waste handling and transfer.  Waste handling equipment is regularly assessed for suitability to the relevant waste handling tasks and has resulted in equipment changes since the company started.  - All operators of manual handling equipment are properly trained and assessed with opportunity given to them to maintain their competency.  - Waste processing/transfer progress is tracked and documented by the management team and validated by the compliance team.  - Regular site inspections are in place to identify the potential for, and address any material spills (amongst other things) and training is given to ensure competency, reducing the likelihood of spills  - Powdery or dusty waste streams are not bulked or mixed unless there is a safety concern around the existing packaging condition, and the waste will be re-packaged only.  - All activities are fully covered on the WI system. Each WI has an associated Risk Assessment |
| 6 | For relevant emissions to water as identified by the inventory of waste water streams (see BAT 3), BAT is to monitor key process parameters (e.g. waste water flow, pH, temperature, conductivity, BOD) at key locations (e.g. at the inlet and/or outlet of the pre-treatment, at the inlet to the final treatment, at the point where the emission leaves the installation). | No activity will involve an emission to water. Waste is stored under cover and is fully bunded at all times. Repackaging areas are fully bunded and have no route to foul sewer. Collected surface rain water is only released once it is confirmed by a Chemist that no contamination exists. |
| 7 | BAT is to monitor emissions to water with at least the frequency given below, and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.  See section 1.2 of *Commission Implementing Decision (EU) 2018/1147* for full BAT conclusion 7 table containing frequency and standards and the waste treatment processes they are to be monitored against. | As with BAT 6, no on site activity will fall into this category and as such does not apply to our activities. |
| 8 | BAT is to monitor channelled emissions to air with at least the frequency given below, and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.  Section 1.2 of *Commission Implementing Decision (EU) 2018/1147* has the full BAT table containing frequency and standards and the waste treatment processes they are to be monitored against. | Greenway will not perform any of the activities listed against BAT 8, therefore no assessment against this conclusion is necessary |
| 9 | BAT is to monitor diffuse emissions of organic compounds to air from the regeneration of spent solvents, the decontamination of equipment containing POPs with solvents, and the physico-chemical treatment of solvents for the recovery of their calorific value, at least once per year using one or a combination of the techniques given below.   |  |  |  |  | | --- | --- | --- | --- | | Technique | | Description | | | a | Measurement | | Sniffing methods, optical gas imaging, solar occultation flux or differential absorption. See descriptions in Section  6.2 of *Commission Implementing*  *Decision (EU) 2018/1147*. | | b | Emissions factors | | Calculation of emissions based on emissions factors, periodically validated (e.g. once every two years) by  measurements. | | c | Mass balance | | Calculation of diffuse emissions using a mass balance considering the solvent input, channelled emissions to air, emissions to water, the solvent in the process output, and process (e.g. distillation) residues. | | No proposed activity involves the regeneration of solvents, the decontamination of equipment containing POPs by using solvent, or the treatment of solvents for the recovery of their calorific value. We do not consider assessment against this BAT conclusion relevant. |
| 10 | BAT is to periodically monitor odour emissions. Odour emissions can be monitored using:  - EN standards (e.g. dynamic olfactometry according to EN 13725 in order to determine the odour concentration or EN 16841-1 or  -2 in order to determine the odour exposure);  - when applying alternative methods for which no EN standards are available (e.g. estimation of odour impact), ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality. | The activities applied for do not pose a risk of odour in our opinion. We have submitted an OMP to show the waste streams which produce an odour by their nature. All of these streams are accepted in packages. These packages remain closed at all times, unless open for reception inspection or bulking to tanker. In both cases the length of time open is negligible and will not produce a wider environmental odour. Monitoring for odour is done manually each day via site inspection and is recorded. Removal of clinical waste treatment as an activity reduces the odour profile of the site significantly |
| 11 | BAT is to monitor the annual consumption of water, energy and raw materials as well as the annual generation of residues and waste water, with a frequency of at least once per year.  Monitoring includes direct measurements, calculation or recording, e.g. using suitable meters or invoices. The monitoring is broken down at the most appropriate level (e.g. at process or plant/installation level) and considers any significant changes in the plant/installation. | Gas is not used on site and is therefore not monitored. Electricity and water usage is monitored by way of meters, and is to be reported annually via permit WP3036ZR. |
| 12 | In order to prevent or, where that is not practicable, to reduce odour emissions, BAT is to set up, implement and regularly review an odour management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements:  - a protocol containing actions and timelines;  - a protocol for conducting odour monitoring as set out in BAT 10;  - a protocol for response to identified odour incidents, e.g. complaints;  - 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. | OMP produced and submitted with the proposed permit variation. We do not believe our activities will generate odour but the document will be reviewed annually, or in the event of a change of process on site. Our OMP shows the waste streams which produce an odour by their nature. All of these streams are accepted in packages. These packages remain closed at all times, unless open for reception inspection or bulking to tanker. In both cases the length of time open is negligible and will not produce a wider environmental odour. Monitoring for odour is done manually each day via site inspection and is recorded. Removal of clinical waste treatment as an activity reduces the odour profile of the site significantly |
| 13 | In order to prevent or, where that is not practicable, to reduce odour emissions, BAT is to use one or a combination of the techniques given below.   1. Minimising residence times 2. Using Chemical treatment 3. Optimising aerobic treatment | None applicable to our activities. Site storage requires waste in packages to be moved off site quickly to allow continued waste acceptance. The maximum period for any waste to be stored on site is 6 months, and no malodorous streams will be accepted. |
| 14 | In order to prevent or, where that is not practicable, to reduce diffuse emissions to air, in particular of dust, organic compounds and odour, BAT is to use an appropriate combination of the techniques given below.  a) Minimising the number of diffuse emission sources.  b) Selection and use of high-integrity equipment.  c) Corrosion prevention.   1. Containment, collection and treatment of diffuse emissions. 2. Dampening   f) Maintenance.  g) Cleaning of waste treatment and storage areas.  h) Leak detection and repair | The waste accepted onto site is accepted in packages Dust/powder bearing streams are accepted within closed containers and is not repackaged or bulked unless there is a safety concern around the existing packaging condition.  a) Not applicable within the activities.  b) Equipment is constantly assessed for integrity and Greenway are always seeking to improve reliability. High wear items (such as FLT tyres) are always being assessed to see if there are higher integrity items that will wear out more slowly.  c) No process equipment on site. Any future additions to the facility will be protected from the weather and treated with corrosion inhibitors.  d) Not applicable, not necessary within our activities and waste profile.  e) Not deemed necessary within our activities as no waste is stored within piles  f) Greenway follow a robust maintenance program to maintain the efficiency and reliability of all plant and equipment.  g) Waste storage bays are cleaned out whenever a package is moved. The yard, main building and processing area (and equipment) are subject to regular housekeeping and inspections.  h) Although organic compounds are not considered a concern, the packaged waste is stored within closed packages, inside a closed building |
| 15 | BAT is to use flaring only for safety reasons or for non-routine operating conditions (e.g. start-ups, shutdowns) by using both of the techniques given below. | Greenway do not use flaring. Not applicable. |
| 16 | In order to reduce emissions to air from flares when flaring is unavoidable, BAT is to use both of the techniques given below. | Greenway do not use flaring. Not applicable. |
| 17 | In order to prevent or, where that is not practicable, to reduce noise and vibration emissions, BAT is to set up, implement and regularly review a noise and vibration management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements:   1. a protocol containing appropriate actions and timelines;   II. a protocol for conducting noise and vibration monitoring;   1. a protocol for response to identified noise and vibration events,   e.g. complaints;  IV. a noise and vibration reduction programme designed to identify the source(s), to measure/estimate noise and vibration exposure, to characterise the contributions of the sources and to implement prevention and/or reduction measures. | None of the activities produce vibrations or excess noise. As a matter of procedure, we assess each process for noise levels annually. |
| 18 | In order to prevent or, where that is not practicable, to reduce noise and vibration emissions, BAT is to use one or a combination of the techniques given below.  a) Appropriate location of equipment and buildings.  b) Operational measures.  c) Low-noise equipment.  d) Noise and vibration control equipment.  e) Noise attenuation | None of the activities produce vibrations or excess noise. As a matter of procedure, we assess each process for noise levels annually. |
| 19 | In order to optimise water consumption, to reduce the volume of waste water generated and to prevent or, where that is not practicable, to reduce emissions to soil and water, BAT is to use an appropriate combination of the techniques given below.  a) Water management.  b) Water recirculation.  c) Impermeable surface.  d) Techniques to reduce the likelihood and impact of overflows and failures from tanks and vessels  e) Roofing of waste storage and treatment areas.  f) Segregation of water streams.  g) Adequate drainage infrastructure.  h) Design and maintenance provisions to allow detection and repair of leaks.  i) Appropriate buffer storage capacity. | a) Water is only used for essential functions such as ablutions, hygiene and housekeeping.  b) Water is not normally used in the waste treatment process.  c) The entire site is covered with an impermeable concrete surface which effectively prevents emissions to soil.  d) The site diesel stocks are contained within an IBC, within a fully bunded and fire rated cabinet to prevent spillage.  e) No waste is stored outside.  f) The site has three separate water streams.  1. Water from the Main Warehouse roof.  2. Water from the Main Yard.  3. Water from the Waste Reception building roof.  g) There main building does not have a drainage facility.  The external impermeable areas, where waste is stored has a drainage system controlled by a penstock valve.  h) Site drainage is inspected by operating personnel daily and by a third party annually.  i) Water storage capacity is available and adequate in case of a fire. |
| 20 | In order to reduce emissions to water, BAT is to treat waste water using an appropriate combination of the techniques given below. | No process waters are generated requiring further treatment, and none of the listed methods are applicable within our activities. Waters from container washing are kept within IBC’s and disposed of via a suitable treatment facility |
| 21 | In order to prevent or limit the environmental consequences of accidents and incidents, BAT is to use all of the techniques given below, as part of the accident management plan (see BAT 1).  a) Protection measures.  b) Management of incidental/accidental emissions.  c) Incident/accident registration and assessment system. | The site operates with an Emergency Plan  a. a) Greenway retains a 24hr, 7 day monitoring presence on site, through as combination of on site presence, monitored alarm systems, and CCTV cameras..  The main building is protected by a fire detection system, personnel are trained in the fire procedure and fire fighting equipment is provided throughout the facility.  Spill kits are available in relevant locations throughout the facility.  b. Any emissions from accidents / spillages etc are cleared using Greenway trained staff, using spill kits which are available throughout the site.  c. b) Incidents and accidents are reported through the relevant reporting system and investigated by the management team.  Results are discussed at regular meetings and any necessary improvements to procedures or equipment are agreed and implemented. Necessary changes are made and communicated to the workforce. |
| 22 | In order to use materials efficiently, BAT is to substitute materials with waste. | No activity exists within the varied permit that can be substituted with waste, therefore we cannot assess against this conclusion |
| 23 | In order to use energy efficiently, BAT is to use both of the techniques given below.  a) Energy efficiency plan.  b) Energy balance record. | No processes within the activities are driven by electrical machinery therefore this is not applicable. However, Greenway always strive to utilize the most environmentally friendly approach to all waste management activities and will undertake a program of replacing older items such as lights, with more modern and energy efficient upgrades throughout the offices and warehouse. Any future developments on the facility will be designed around energy efficiency and monitored as such. |
| 24 | In order to reduce the quantity of waste sent for disposal, BAT is to maximise the reuse of packaging, as part of the residues management plan (see BAT 1). | One of the activities applied for is the specific repackaging of waste streams. We intend to use this for safety reasons and for the purposes |
| 25 | In order to reduce emissions to air of dust, and of particulate-bound metals, PCDD/F and dioxin-like PCBs, BAT is to apply BAT 14d and to use one or a combination of the techniques given below. | Not applicable to any proposed activities. |
| 26 | In order to improve the overall environmental performance, and to prevent emissions due to accidents and incidents, BAT is to use BAT 14g and all of the techniques given below:  (a) implementation of a detailed inspection procedure for baled waste before shredding;  (b) removal of dangerous items from the waste input stream and their safe disposal (e.g. gas cylinders, non-depolluted EoLVs, non- depolluted WEEE, items contaminated with PCBs or mercury, radioactive items);  (c) treatment of containers only when accompanied by a declaration of cleanliness | a) Not applicable, no shredding of bales will take place on site  b) The proposal includes the allowance to repack. The site procedures requires inspection of every container, which when combined, will see all non-conforming items removed from waste streams. All waste streams which require specific disposal requirements or storage conditions will be separated. All of the items within this point are included in that.  c) Containers are not treated on site. We propose to crush empty steel drums if they cannot be re-used, and only once clean. |
| 27 | In order to prevent deflagrations and to reduce emissions when deflagrations occur, BAT is to use technique a. and one or both of the techniques b. and c. given below.  a) Deflagration management plan.  b) Pressure relief dampers.  c) Pre shredding | a) The Fire Prevention Plan contains all details of how Greenway will manage a fire should one occur, including management of fire water.  b) Not applicable.  c) Not applicable due to no shredding taking place. |
| 28 | In order to use energy efficiently, BAT is to keep the shredder feed stable. | Not applicable due to no shredding taking place. |
| 29 – 53 |  | These sections are not present within the activities list proposed. Not applicable. |

***CHEMICAL WASTE APPROPRIATE MEASURES***

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| GENERAL MANAGEMENT | 2.1 – 2.5 | All compliant, 2.6 not applicable at this stage but will be complied with in the event of plant/machinery installation – DETAILED BELOW |
|  |  | 2.1 All appropriate sections and reports submitted and created. Management system created |
|  |  | 2.2 All staff will hold relevant qualifications for the roles required. Site Management will be CoTC qualified, chemists will be minimum HNC qualified. FLT training and refresher training will be provided to all site required to operate the FLT’s |
|  |  | 2.3 Emergency plan in place. Drills and evacuations performed twice yearly |
|  |  | 2.4 Accident Prevention measures are in place.  SEGREGATION – All waste is stored as per HSG71 guidance  EMISSIONS – No emission points exist, site has a fully closeable shut off valve to prevent liquid escape in the event of spillages or fires.  SECURITY – Site is guarded by intruder alarms and CCTV cameras. These are monitored outside of working hours. Site is locked outside of working hours and surrounded by suitable walls and fences.  FIRE PREVENTION – Site complies with a FPP. This is updated routinely as per changes to process or activity. Fire water source is within 10m of the site. Drainage and spillage collection are separated by hazard to eliminate reaction risk. Thermal cameras detect changes in temperature and are linked to the alarm system. Daily Site Checks are designed to ensure good housekeeping is kept up so as to prevent the build up of litter, or any incorrect storage conditions.  RECORD KEEPING – All records of accidents, incidents, Hot Work Permit to Work etc are logged via our SC2 online portal system and reported through our HSEQ manager. |
|  |  | 2.5 Contingency Plan. Site will be operated within permitted limits. Work procedures are designed to increase efficiency, allowing plans to be covered in the event they cannot work out. In the event site cannot accept waste due to capacity reasons, Greenway operate other waste transfer stations within the UK and these will be assessed against acceptance. |
| WASTE PRE-ACCEPTANCE, ACCEPTANCE AND TRACKING | 3.1 – 3.3 | All compliant as written with exception of 3.2.24, further detail and suggested alternative below – DETAILED BELOW |
|  |  | 3.1 Pre-Acceptance is looked after by a fully qualified Technical team. No bookings are taken to site without full PA being performed by this team. If samples are relevant and required, these samples are analysed via the laboratory (or another GEL laboratory) for suitability prior to booking. |
|  |  | 3.2 Full procedures exist designed around the acceptance of waste to comply with this section of AM. Site infrastructure is designed to comply with the relevant points within 3.2 also. Waste inspection checks are designed to comply fully, with the exception of 3.2.24 which is detailed below |
|  |  | 3.3 GRQ system is built to link waste enquiry, quoting Pre-Acceptance, booking, acceptance, storage on site, and dispatch via a spreadsheet system. System of tracking complies with all points, but 3.3.3 requires original producer and previous holder. In some cases, this information will not be supplied for commercial reasons (for example coming from a hazardous waste transfer company to utilize our in house treatment options at other facilities) as the company will simply send the waste elsewhere (jeopardizing compliance potentially) rather than reveal some information. This is an extreme example as we aim to deal primarily with producers, and most waste brokers supply this information as a matter of course during technical assessment. The rare occasions must be noted as part of this assessment. |
| WASTE STORAGE, SEGREGATION AND HANDLING | 4 (ALL) | All complied with via site procedures and management system – DETAILED BELOW |
|  |  | GENERAL – Systems are designed to minimize handling, separate spillages and prevent them from escaping the site (by way of impermeable concrete and bunding etc). HSG71 segregation applies. All storage is undercover, in packages, and monitored by thermal cameras alongside daily temperature checks. “reactive” waste such as oxidisers, batteries, aerosols etc are stored within metal containers separately to ensure any incidents are contained. Open topped containers are covered with bags to ensure nothing can escape or access the waste. Waste will not be stored or held on vehicles longer than overnight or over a weekend, for example, if a vehicle arrives to site later than operational hours and cannot be offloaded as a result. No storage will take place on trailers under any other circumstance. Regular age checks will be performed on all waste, visually, and by way of monthly stock takes on the cloud stored stock sheet. FLT’s or pallet trucks will be used to move waste around the site.  BULK STORAGE – We will not be storing bulk waste  TRANSFER TO/FROM TANKERS – All points adhered to by way of on-site work instructions and monitoring from site management.  AEROSOLS – All aerosols will be stored in secure containers, within a separate, ventilated, bunded, lockable metal cabinet. Easily accessible by FLT but stored alone. |
|  |  | SORTING AND REPACKING – All points complied with. Only permitted waste types will be sorted, bulked or repacked. In special circumstances, if container integrity is not safe when arriving on site, these streams will be repacked to ensure safety and no emissions/spillages of any kind. We feel it appropriate to do this with all waste types regardless of activity code/allowances. Risk assessments and procedures are in place for all of this process, and no waste shall be repacked or bulked in a storage area. |
|  |  | LAB SMALLS – A dedicated area of the main warehouse exists for this task. Procedures are followed in full and the area is fully bunded to separate from the other area of the warehouse |
| WASTE TREATMENT | 5.1 – 5.3 | No treatment proposed at this stage |
| EMISSIONS CONTROL | 6.2 – 6.5 | 6.1 Not Applicable, 6.2 – 6.5 compliant at this stage – DETAILED BELOW |
|  |  | 6.2 FUGITIVE EMISSIONS TO AIR – All points adhered to where applicable (machinery and treatment do not apply at this stage). Procedures and business model are designed to prevent this by way of packaged waste and safety measures, emergency plans exist and detail responses to rogue emissions or spillages |
|  |  | 6.3 NOISE & VIBRATION – No significant sources of either exist on site. Assessments will be performed if machinery or plant changes during the lifetime of the site, but currently, the noise from FLT’s will not cause a source of noise nuisance or pollution |
|  |  | 6.4 EMISSIONS TO WATER AND SEWER – We have a connection to foul sewer for our welfare waste and rain water. This outlet is closed during operational hours, and during non-operational hours, it is only opened if surface water has been confirmed in the lab as contaminant free. During these non-operational hours, all waste is in it's relevant storage or dispatch bay. These bays are enclosed from the drainage system and cannot escape to sewer. The individual bays are bunded, and contain spillage tanks and drains sunk into the ground to collect any spills or leaks while site staff are not present. No emissions points exist as no waste is discharged |
|  |  | 6.5 FUGITIVE EMISSIONS TO LAND AND WATER – All points regarding site infrastructure, storage, spillage etc are complied with. No bulk storage exists so leak detection and prevention etc are not applicable. Site is made up of impermeable concrete, segregated storage and bunding, and sewer access drains are valve sealed during operational hours. Expansion joints on main yard concrete are re-sealed every 3 years. Most recent was performed April 2025 |
| EMISSIONS MONITORING AND LIMITS | 7.1 – 7.2 | No emissions to Air or Water on site |
| PROCESS EFFICIENCY | 8.1 – 8.4 | All compliant, some detail within sections not applicable – DETAILED BELOW |
|  |  | 8.1 ENERGY EFFICIENCY – Reporting done annually via Permit. Lights are being phased into all LED across site to reduce consumption. Heating limited to occupied rooms. Light sensors fitted in welfare facilities. No machinery on site as yet but in future installations, energy efficiency will be assessed. |
|  |  | 8.2 RAW MATERIALS – Listed within Permit and management systems. Use of raw materials will be limited to the absolute necessity such as Diesel fuel for FLT’s currently, in future electric FLT use will be explored as per other group facilities |
|  |  | 8.3 WATER USE – Kept to a minimum where possible. Yard washing and cleaning is necessary to maintain good housekeeping and reduce the risk of fires etc. Welfare facilities utilize urinals to reduce water consumption |
|  |  | 8.4 WASTE MINIMISATION, RECOVERY AND DISPOSAL – All waste received to site is routed to its best environmental option. R codes are utilized in all possible circumstances. Waste is minimized during transfer activities by utilizing packaging reuse, not just out of this facility, but at other group facilities around the country in order to minimize waste production. |
| WEEE WASTE APPROPRIATE MEASURES | 2.1 – 2.5 | All sections are complied with as above |
|  | 3.1 – 3.3 | All sections are complied with as above, the same details apply to each section |
|  | 4 (ALL) | All sections are complied with as above, the same details apply to each section – some specific differences:   * + 1. – All WEEE waste is stored under cover, within its own metal, bunded, lockable cabinet. This cabinet is separated from all other storage. WEEE Waste arriving to site is also offloaded under cover     2. – Waste storage cabinet is bunded, meaning any spill from any WEEE is contained and secured ready to be acted on via spillage procedures     3. – No liquids are removed or separated from WEEE waste on site     4. - Batteries are stored within their own container, including Lithium batteries as per 4.1.23 |
|  |  | 4.2 – All sections complied with, no small WEEE will be crushed or broken, all tubes, bulbs, screens will be stored in accordance with these measures |
|  | 5 (ALL) | 5.1 – REUSE Where possible, we will reuse our own produced WEEE from site. We will not attempt to reuse WEEE we receive as waste as we do not know the damage history, or the safety checks history. All WEEE will be recovered at an appropriate facility. We will not discharge or remove any refrigerant gases |
|  |  | 5.2 & 5.3 – TREATMENT No WEEE is treated on site. All WEEE is sent to appropriate recovery facilities |
|  |  | 5.4 – PROCESS MONITORING No WEEE is treated on site. All WEEE is sent to appropriate recovery facilities |
|  |  | 5.5 – 5.13 – TREATMENT OF VARIOUS TYPES OF WEEE No WEEE is treated on site. All WEEE is sent to appropriate recovery facilities |
|  | 6 (ALL) | As per section 6 above |
|  | 7.1 – 7.2 | As per section 7 above |
|  | 8.1 – 8.4 | As per section 8 above |
| HEALTHCARE WASTE APPROPRIATE MEASURES |  | We believe the waste we handle does not fall into this specific definition of Healthcare waste. We believe what we accept and dispatch falls much more closely under packaged waste. We have recently discussed the matter with a permitting officer during the regulation 61 review at one of our other facilities, who agreed that as we were preparing medicines and production chemicals for TFS (via license granted by the EA), we needed upwards of 20 tonnes and could not be limited by a 7 or 14 day rule on storage. It was agreed that non-infectious medicines (which can move on the same EWC codes as clinical “healthcare” waste) and “other hazardous chemicals” could be treated with the same limits and conditions as in the regular AM guidance. We wish to keep the appropriate EWC codes to send to an R-coded facility within Europe via TFS license, but we will not be accepting infectious waste. Sharps are coded there to only be allowed for HTI transfer and be non-infectious. They can be coded the same as “healthcare waste” but be produced by laboratories from solvent sampling, or other non-clinical uses. They cannot be limited to 7 or 14 days as the HTI capacity within the UK is limited, and booking slots are very rarely that quick.  We feel this definition of healthcare waste within the guidance doesn’t approach the waste types we will be accepting. Production facilities do, however, use similar EWC codes for the waste types we have had previous EA agreement fall outside of this, and so we feel the codes are necessary for the permit, but the Healthcare Waste AM guidance is not applicable. We feel the waste falls under the General AM guidance, compliance detailed above |

All relevant sections of the chemical waste appropriate measures are adhered to. Throughout the other facilities in the company, we have designed our Work Instructions (WI’s) to ensure this is the case.

There is one clause within the appropriate measures we do not feel it is safe to comply with.

***3.2.34. You should keep acceptance samples on site for at least 2 working days after you have:***

* ***treated a waste and removed its treatment residues from the facility***
* ***transferred a waste from your site***

The site capacity for waste is 750 tonnes. The number of containers this requires therefore could number between 750 (if all waste is stored within IBC’s), and 24,000 (if all waste is stored within 25L kegs). This means that storage of this many samples, would require more cabinets than we have space to store if we are to maintain HGS71 segregation amongst them. We have discussed this problem locally at our other facilities, and it was agreed that the individual containers of waste themselves can be used to take further samples of the waste streams should they be required. All waste containers are subjected to testing upon acceptance, and the results of this testing are kept on file electronically.

We propose the same for permit WP3036ZR.

***CONCLUSION***

We believe that we comply with all requirements (with the notable exception of Chemical Waste Appropriate Measures 3.2.34 on safety grounds), and will continue to monitor our process and procedures against all new legislation and guidance. All assessments will be reviewed annually, or in the event of a change of process or procedure, whichever is sooner. We are committed to operating to best practice for the duration of our control of the permit.