



Non Technical Summary

General Introduction:

Sims Group UK Limited currently operates permit EAWML 27202 (EPR/PP3099FM) at Royal Edward Dock, St Andrews Road, Avonmouth, Bristol, BS11 9BT. The site forms a major strategic component of a network of recycling facilities operated by the company throughout England and Wales.

The site receives, processes and recovers ferrous and non ferrous metals from scrap and acts primarily as a source of ferrous feedstock for the steel manufacturing industry in the UK and abroad.

A Fragmentiser (aka shredder) is installed at the facility that produces fragmentised steel and a number of other products. In addition, ferrous metals are treated by sorting, grading, hot, and cold cutting. Storage of fragmentised scrap and other ferrous grades is undertaken at Q Berth.

The yard and dock site is leased from First Corporate Shipping LTD T/A The Bristol Port Co. and comprises of an area of approximately 8.6 acres. Access onto dock property is via port police controlled port security gates. Visitors may only gain access if escorted or with specific permission.

The site undertakes a range of waste management activities including;

- Storage and treatment of ferrous and non ferrous metals;
- Storage and treatment of general mixed scrap metal;
- Storage and treatment of Waste Electrical and Electronic Equipment (WEEE);
- Storage and treatment of depolluted ELVs;
- Storage of polluted ELV (not currently undertaken);
- Storage of tyres (not currently undertaken)
- Storage of hazardous wastes (not currently undertaken)
- Storage and treatment of wastes consisting solely or mainly of dusts, powders or loose fibres e.g. 12 01 02 and 12 01 04 (not currently undertaken)

Relevant Regulations, Technical Guidance Notes and other documentation

In accordance with the Environmental Permitting (England and Wales) Regulations, operators are required to confirm whether their proposed operation will take place in line with standards set by any relevant Environment Agency Sector Guidance Note and legislation. Where the proposed operations will deviate from the relevant Guidance Note or

where there is no guidance for the operation, the permit supporting information must include:

1. Description of the operation that will take place at the site
2. Justification of the measures that will be used to control emissions from the processes.

There is no specific Sector or Technical Guidance Note for all the operations at Avonmouth. However, a number of documents are relevant to the operations and Sims operates in accordance with these:

- Guidance on the Best Available Treatment Recovery and Recycling Techniques (BATRR) and treatment of Waste Electrical and Electronic Equipment Directive, DEFRA
- Environmental Permitting Guidance Waste Electrical and Electronic Equipment Directive, DEFRA
- Environmental Permitting Guidance, the Waste Framework Directive, DEFRA
- Sector Guidance Note EPR5.06: Guidance on the recovery and Disposal of Hazardous and Non-hazardous Waste, Environment Agency

Relevant legislation covering the activities on site is as follows:

- Waste Framework Directive
- WEEE Directive
- Hazardous Waste Directive
- ELV Directive

Variation Application

Sims Group UK Limited is constantly aiming to improve our operations across the world to ensure that we continue to operate at the forefront of the metal recycling industry. We are therefore investing significantly at Avonmouth in a range of modern equipment incorporating some of the latest technology, whilst reconfiguring the operation of some of the on-site facilities and updating our traffic management processes.

In summary, we are proposing to enhance our site and our operational processes in a number of ways via the Avonmouth Improvement Programme, including:

- Development of a replacement 'Downstream' plant, including a new conveyor and stacker at the dockside. This will improve efficiency of the onsite processes, provide a much improved visual appearance, alongside noise and dust mitigation enhancements. The new 'Downstream' plant and the existing shredder plant will be housed within a number of acoustic enclosures. On completion the old plant will be removed.
- Installation of covered storage bays within the 'Downstream'. This will cover outgoing materials, improve dust management and the visual appearance of the site.
- Installation of a new 'pre-shredder'. This will process automotive baled materials before they enter the shredder and greatly reduce the possibility of deflagrations aka shredder energy releases/ explosions.

- Reconfiguring the HGV loading and unloading system. This will avoid long queues of HGVs waiting to enter the site, and will improve the speed at which they can load and unload their cargo. This will not necessarily result in an increased number of HGVs or deliveries, just a quieter, quicker process.

Key Benefits

The proposals will make operations at the site more efficient and cost effective from a business perspective. It will also result in numerous other benefits including:

- Noise reductions due to acoustic housing around the new 'Downstream' and existing shredder plant;
- Much lower chance of deflagrations aka shredder energy releases/ explosions during the shredding process due to new, modern 'pre-shredding' equipment;
- A more efficient traffic management system reducing the possibility of HGVs queuing outside of the site (and a reduction in CO2 emissions as a result of a quicker process to enter and exit the site). This system will include a new logistics area located at Q Berth;
- A cleaner site and improved visual appearance;
- Dust mitigation improvements as a result of covered storage bays and enclosure of 'Downstream' plant;
- Job opportunities due to more efficient shift patterns and additional requirements for skilled machinery operators.

A permit variation application is therefore being submitted in order to:

- Expand the footprint of the site i.e. – increase the area covered by the permit boundary. The replacement 'Downstream' plant will be built alongside the existing Downstream so that there will be no interruptions to the site operations. In order for this additional equipment to be installed, we need to expand our site footprint. The increased footprint will also give the opportunity to improve the layout of the HGV delivery area;
- Update the location of the point source emission to air, (ref point A1 within Schedule 7) which will move as part of the improvement project, the design of which is currently being determined and the exact location of the new point source emission will be provided once this design has been completed. The current permit limit will be complied with;
- Add a new point source emission to air (ref point A6) from the proposed non ferrous treatment building dust extraction system, the design of which is currently being determined and the exact location of the new point source emission will be provided once this design has been completed. The current permit limit will be complied with;
- Update Schedule 7 and Table S3.2 to include additional point source discharges to sewer e.g. (ref point A5). The drainage design is currently being determined and will be provided once confirmed.
- Install a new 'pre-shredder'. The pre-shredder will process automotive baled materials before they enter the shredder and greatly reduce the possibility of deflagrations aka shredder energy releases/ explosions.

Phased Variation Application Details

As the improvement project will consist of many elements, we will be submitting information once designs have been confirmed. In summary, there will be five phases:

- 1) Completion of ground investigations at proposed eastern access road. This area will be used temporarily for storage of waste materials until Phase 5 has been completed (see point 5 below). On completion of Phase 5, this area will be utilised as a transport route as part of the site's one way route.
- 2) Installation of drainage at proposed eastern access road. Drains have been installed in this area and are linked to the existing drainage system. The area is comprised of impermeable concrete. 3 fire hydrants (to BS750) have been installed at the eastern access road area.
- 3) Completion of ground investigation reports for the additional areas to be included within the permit boundary. Reports are currently being completed and will be provided once finalised.
- 4) Completion of surfacing and drainage design for the new downstream area. An updated site layout plan will be provided once the design has been confirmed.
- 5) Completion of updated Fire Prevention Plan, Noise and Dust Management Plans which will be provided once confirmed.

Avonmouth Improvement Programme Timescale: Completion of the improvement programme by May 2019, subject to planning and permitting.

Risk Assessment:

The risk assessment document has considered all potential risks from the site and identified mitigation measures for odour, noise and vibration and fugitive emissions to ensure no significant impact on the environment. A copy of the risk assessment has been included with the application.