

**Cory Environmental Holdings Limited**  
**Port of Tilbury IWMTS**  
Summary of management systems

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## 1 Management

Cory will demonstrate environmental and social responsibility by operating the Facility to high environmental, health and safety and professional standards. The Facility will be designed and constructed following the latest regulations, standards and guidance. This will incorporate risk management techniques and studies prior to construction and thorough commissioning/testing of the Facility before it is fully operational.

The operation of waste facilities in accordance with a written and effective system of management (an Environmental Management System or EMS) is a key technique for ensuring that all appropriate pollution prevention and control techniques are delivered reliably and on an integrated basis. Cory currently operates its sites in accordance with the ISO 14001 standard for EMS as part of its ongoing commitment to sustainable and responsible development and to regulatory compliance. Measures are undertaken to ensure that this is communicated, understood and effectively maintained throughout the organisation.

Cory regards the ISO 14001 certification to be of considerable importance and relevance to a waste facility. It is an assurance to the local authority, regulator, neighbours, and others alike that the Facility operation is undertaken in strict compliance with the regulations in force and with the management seeking continual improvements. It requires the company to work in a transparent way, to maintain and improve the confidence of regulators and neighbours, and to have a proactive approach to environmental improvement.

It is proposed to extend the scope of Cory's current EMS certification to include for the operation of the Facility. A site-specific EMS will be developed following detailed design, which will contain a set of procedures describing how pollution risk will be minimised from the activities to be undertaken at the Facility. The EMS will form part of the Facility's integrated management systems that establishes an organisational structure, responsibilities, practices, procedures and resources for achieving, reviewing and maintaining the company's commitment to environmental protection. A general summary of the proposed EMS is presented within section 1.1 below in accordance with Environment Agency (EA) guidance '*Develop a management system: environmental permits*'.

In addition to the EMS for the Facility, an operating and maintenance (O&M) manual will be developed for the Facility. The O&M manual will contain the key information required for the operation, maintenance and eventual decommissioning of the Facility over its lifetime. A summary of the key aspects to be included in the O&M manual is presented within section 1.2.

## 1.1 Environmental Management System (EMS)

The EMS will be accredited to the ISO 14001 standard, which will serve as a demonstration to regulators that the Facility is operated to a high standard. A certificate of registration confirming accreditation to ISO 14001 for Cory's current operations was submitted with the original Environmental Permit (EP) application. The scope of the EMS will be extended to allow for the operation of the Facility.

The EMS will enable Cory to maintain compliance with regulatory requirements and manage all significant environmental impacts that may arise from the operation of the Facility. As the Facility will be a 'specified waste management operation', the Operator of the Facility will meet the required technical competencies in accordance with the requirements of EPR5.06.

A summary of the EMS is presented within sections 1.1.1 to 1.1.9 below. The detailed EMS will be developed following detailed design of the Facility and prior to the commencement of operations at the site.

### 1.1.1 Site operations

The Facility will operate as an Integrated Waste Management and Transfer Station, with the main activities to be undertaken being the bulking/compaction and storage of up to 450,000 tonnes of non-hazardous waste each year prior to transfer off-site. All permitted activities will take place within the Site Boundary, with all bulking and compaction activities undertaken within the main building. The following specified waste management activities, as defined in the Waste Framework Directive, will be undertaken at the Facility.

*Table 1: Proposed activities*

Reference	Description
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where it is produced)
D14	Repackaging prior to submission to any of the operations numbered D1 to 13
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)
D13	Blending or mixing prior to submission to any of the operations numbered D1 to D12

The main components (including activities and processes) at the Facility are set out as follows. The steps to be taken to prevent or minimise risks to the environment from each activity/process are described within the Environmental Risk Assessment submitted with the EP application. The environmental risks will be expanded on and incorporated into the final EMS document upon completion of detailed design.

- weighbridges and gatehouse;
  - delivery of non-hazardous waste to the Facility via road (in Refuse Collection Vehicles and articulated lorries).
  - weighing of delivery vehicles at the weighbridge.
- welfare facilities, office and admin buildings;
- car parking;
- main processing building including waste compaction facilities;
  - deposition of non-hazardous waste onto conveyor belt system.

- compaction of non-hazardous waste into containers within the main building.
- storage of empty containers.
- storage of a small quantity of loose, non-hazardous waste within the main building to allow for quick and efficient start-up of the Facility.
- any rejected material (i.e., waste that does not fall under the list of accepted EWC codes) will be transferred off-site.
- logistics corridor and storage yard;
  - storage of non-hazardous waste in containers at the quayside for short periods of time.
- quayside for loading and unloading operations;
  - loading of ‘full’ waste containers onto barges for transfer off-site.
  - unloading of ‘empty’ waste containers from the barges for use at the site.

#### 1.1.1.1 Site plan

Following completion of detailed design, the EMS will include for a detailed plan of the site which highlights where permitted activities are undertaken. The plan will also show the location of the following, in accordance with EA guidance *‘Develop a management system: environmental permits’*:

- buildings and any other main constructions such as security fences;
- storage facilities for hazardous materials (oil or fuel tanks), chemical stores, waste materials;
- the location of items for use in accidents and emergencies, such as spill kits;
- entrances and exits for use by emergency services;
- any points designed to control pollution (e.g., monitoring points for sewer discharge);
- effluent or water discharge points;
- areas vulnerable to pollution such as watercourses, adjacent industrial premises etc;
- drainage facilities; and
- utilities supplies (water, gas, electric) including stop taps, isolating valves, routes etc.

#### 1.1.1.2 Waste storage plan

Upon completion of detailed design of the Facility, a waste storage plan will be incorporated into the EMS for the Facility, in accordance with the requirements of EA guidance *‘Develop a management system: environmental permits’*. Preliminary information in relation to waste storage at the site is set out as follows:

- Non-hazardous waste will be stored at the site (within the main building and by the quayside) for a maximum retention time of 3 days. Waste tracking (including labelling of containers) will ensure these storage times are not exceeded.
- Up to 1,950 tonnes of waste will be stored in containers at the quayside. Less than 450m<sup>3</sup> of loose waste will be stored in the main building for quick and efficient start-up of the Facility.
- Each container at the quayside will have a height of around 6m, and storage provisions will allow for the stacking of containers up to 3 containers high.
- Comprehensive waste acceptance procedures will identify the types of waste to be processed (and subsequently stored) at the site. Paperwork accompanying waste deliveries will identify waste by EWC code(s).
- ‘Incompatible’ waste types will not be accepted or mixed at the site. Therefore, different wastes will not need to be separated from each other.

### 1.1.1.3 Site and equipment maintenance plan

Upon completion of detailed design of the Facility, a site equipment and maintenance plan will be incorporated into the EMS for the Facility, in accordance with the requirements of EA guidance '*Develop a management system: environmental permits*'. Preliminary information in relation to this plan is set out as follows:

- Plant and machinery (including any mobile plant) will be maintained in accordance with the manufacturer's or supplier's recommendations. A preventative maintenance regime will be in place at the site.
- Records will be kept of any maintenance carried out on plant and machinery.

### 1.1.2 General requirements

The scope of the EMS will include, but not be limited to, the following:

- an environmental policy;
- identification of potential environmental impacts;
- documented procedures to control operations that may have an adverse impact on the environment;
- ensuring adequate responsibility, authority and resources to management necessary to support the EMS;
- defined procedures for identifying, reviewing and prioritising items of plant and equipment for which preventative maintenance regimes are appropriate;
- establishing preventative maintenance programmes (and associated auditing) to cover all plant and equipment whose failure could lead to environmental impacts (including infrastructure such as pipework, drainage, bunds etc);
- documented procedures for monitoring relevant emissions or environmental impacts;
- establishing performance indicators to measure the effectiveness of the procedures;
- monitoring, measuring and analysing the procedures for effectiveness; and
- implementing actions as required based on the results of auditing to ensure continual improvements of the processes.

Where applicable, documented procedures will detail specifically how each activity will be controlled. These will be contained in an Environmental Procedures Manual and identified related documents.

Cory will adapt and extend the scope of their current environmental policy to apply to the Facility. The environmental policy acts as a commitment to continual improvement of Cory's operations including a commitment to comply with relevant legislation.

### 1.1.3 Personnel

Cory will ensure that sufficient numbers of staff, of various grades, are provided to manage, operate and maintain the plant on a continuous basis. Staff roles may include, but not be limited to, managers, technical operatives and engineers, security officers, administrators, weighbridge operatives, and shift leaders.

A 'general manager' or similar will have overall responsibility for management of the site and compliance with the operating permit.

An 'operations manager' or similar will have day-to-day responsibility for the operation of the plant, to ensure that the plant is operated in accordance with the permit and that the environmental impact of the plant's operations is minimised.

A 'maintenance manager' or similar will be responsible for the management of maintenance activities, for maintenance planning and for ensuring that the plant continues to operate in accordance with its design.

#### 1.1.4 Competence, training and awareness

Cory aims to ensure that any persons performing tasks for it, or on its behalf, which have the potential to cause significant environmental impact, are competent on the basis of appropriate education and training or experience.

Systems to assess competence and provide training for relevant staff will be provided. These may cover, but not be limited to, the following:

- Awareness and importance of regulatory implications of the EP for the activities and operations undertaken at the site;
- awareness of potential environmental effects from operation under normal and abnormal circumstances (e.g., periods of shutdown);
- awareness of the need to report any significant deviations from the EP;
- prevention of accidental emissions and action to be taken when accidental emissions occur; and
- roles and responsibilities in achieving conformity with the requirements of the EMS.

Skills, competencies and training requirements for staff will be documented and recorded as part of the internal management systems at the site. Where industry standards or codes of practice for training exist (such as WAMITAB), these will be complied with. Cory will identify the minimum competencies required for each role. These will then be applied to the recruitment process to ensure that key roles and responsibilities are satisfied. Particular attention will be paid to potential candidate's experience, qualifications, knowledge and skills.

Staff induction programmes will be location/job role specific but will include, as a minimum, the induction of:

- the Environmental Policy;
- the requirements of the EP;
- the Health and Safety Policy and Procedures; and
- the EMS Awareness Training.

Staff will have access to the EMS via internal computer systems and will be required to understand any sections of the EMS relevant to the activities they carry out.

Cory will be required to train staff during the construction/commissioning of the Facility prior to commencement of full operations. Line Managers will be required to identify and monitor staff training needs as part of the appraisal system. The training needs of employees will be addressed using on-the-job training, mentoring, internal training and external training courses/events. As stated above, records of training will be documented and recorded, with industry standards or codes of practice for training complied with where relevant.

For any contractors working on-site, potential environmental risks will be identified where relevant and instructions provided to the contractors.

### 1.1.5 Accident management

The scope of the EMS will include for an ‘accident prevention and management plan’ or similar in accordance with the requirements of S5.06 and EA guidance ‘*Develop a management system: environmental permits*’, which will identify the likelihood and consequences of any accidents and identify actions or measures to prevent accidents and mitigate any consequences (such as environmental pollution). The accident plan will include for written procedures and forms for recording, handling, investigating, communicating and reporting actual or potential non-compliance (e.g. complaints) with operating procedures/emission limits. Any incidents will be investigated thoroughly and documented, with the regulatory authorities informed if the incident is significant. Near misses will be reported and suitable corrective action/mitigation measures implemented and followed up.

For each potential accident or incident, the following will be identified:

- the likelihood of the accident happening;
- the consequences of the accident happening;
- proposed measures to be taken to avoid the accident happening; and
- proposed measures to be taken to minimise the impact if the accident does happen.

A list of substances stored at the site, and storage facilities, will also be incorporated into the accident management plan (either linked to part of the wider EMS or listed specifically within the accident management plan itself).

The accident plan will be regularly reviewed, no less than once per year, with records kept of the dates that reviews have occurred and planned future review dates. Furthermore, a list of emergency contacts will be included within the accident plan (such as the local fire service, environment agency etc.)

### 1.1.6 Climate change and flood risk

The potential impacts of climate change (including flood risk) have been and will continue to be considered in the context of the design and operation of the Facility. The proposed accident management and contingency plans presented within sections 1.1.5 and 1.1.9 respectively will include for relevant climate change impacts.

A summary of the climate change risk assessment submitted with the EP application is presented below. The risk assessment will be incorporated into the scope of the EMS for the Facility and will continue to be monitored and updated regularly throughout the lifetime of the Facility.

Table 2: Climate change risk assessment

Variable	Impact	Likelihood	Severity	Risk	Mitigation	Likelihood	Severity	Residual risk
Increase in summer temperatures	Increased odour, fire risk, more ventilation required, plant overheating.	2	2	4	Odour management and mitigation as set out within the Odour Management Plan. Fire prevention and mitigation measures	1	1	1

Variable	Impact	Likelihood	Severity	Risk	Mitigation	Likelihood	Severity	Residual risk
					as set out within the Fire Prevention Plan. Regular maintenance and inspection of plant. Monitoring of ventilation within the main building.			
Increase in winter temperatures	No negative impacts expected.	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Increase in peak rainfall intensity	Localised flooding. Site lies in flood zone 3 but benefits from flood defences. Small portion of site shown to be at high risk of groundwater and surface water flooding, but EA flood risk map indicates site is at very low risk of flooding overall.	2	3	6	Site benefits from flood defences already. No additional mitigation proposed.	2	3	6
Increase in average winter rainfall	Localised flooding. Site lies in flood zone 3 but benefits from flood defences. Small portion of site shown to be at high risk of groundwater and surface water flooding, but EA flood risk map indicates site is at very low risk of flooding overall.	2	3	6	Site benefits from flood defences already. No additional mitigation proposed.	2	3	6
Increase in sea level	Localised flooding. Site lies in flood zone 3 but benefits from flood defences. EA flood risk map indicates site is at	1	3	3	Site benefits from flood defences already. No additional mitigation proposed.	1	3	3

Variable	Impact	Likelihood	Severity	Risk	Mitigation	Likelihood	Severity	Residual risk
	very low risk of flooding.							
Drier summers (less rain)	Increase in dust emissions.	2	1	2	Mitigation measures to minimise fugitive emissions of dust and litter (set out within Environmental Risk Assessment).	1	1	1
Reduced flow in watercourses	No impact identified	1	1	1	N/A	1	1	1

### 1.1.7 Keeping records

Any records required by the permit will be kept in accordance with the relevant timescales indicated within the permit. Should the permit not identify timescales for certain records, these will be defined within the EMS. Records will be kept as part of the EMS for the site.

The records that will be kept will include, but not be limited to, the following:

- the EP for the site;
- other legal requirements for the site;
- environmental risk assessments;
- environmental management plans;
- EMS plans;
- operating procedures;
- staff competence and training (such as qualifications, courses attended);
- emissions and any monitoring undertaken as required by the permit;
- compliance checks, findings of investigation and actions taken;
- complaints made, findings of investigation and actions taken;
- audits of management system, findings (reports) and actions taken;
- management reviews and changes made to the management system;
- where applicable, certification audit reports and any actions carried out;
- records of pre-acceptance and acceptance checks on waste delivered to the site (including quantity, EWC codes, origin, producer, date of arrival, any unacceptable wastes);
- records to show that the duty of care requirements are being met.

Copies of the approved plans (such as an odour management plan or noise management plan) will be kept with the EMS and records will be maintained of any updates to these plans. Furthermore, the Site Condition Report will be kept with the EMS and records will be maintained of any updates to the Site Condition Report.



A hard copy of the EMS will be kept at the gatehouse, with electronic copies of the EMS and supporting documents (including records) accessible to staff via internal computer systems.

### 1.1.8 Review of management systems

The EMS will be reviewed and updated regularly in response to changing internal and external factors, with records kept on any checks carried out and updates made (refer to section 1.1.7). Updates may be made, for example, when changes are made to operations and activities carried out at the site, if new equipment is installed, if the permit is varied, following any accidents or complaints, or if a new environmental risk is identified. As a minimum, the EMS will be reviewed once per year.

### 1.1.9 Contingency

A contingency plan will be developed as part of the EMS following completion of detailed design at the Facility. This will incorporate measures and procedures for the following scenarios in order to minimise environmental risk:

- breakdown scenarios;
- enforced shutdowns;
- planned shutdowns;
- any other abnormal operation (e.g. due to flooding or extreme weather – refer to section 1.1.6).

The EA will be provided with a copy of the EMS (or relevant parts thereof) for the site if requested.

#### 1.1.9.1 Contact information for the public

A notice board will be displaced at (or near) the gatehouse which tells the public key information about the site. This will include, but not be limited to, the following:

- the permit holder's name (Cory Environmental Holdings Ltd);
- an emergency contact name and telephone number;
- a statement that the site is permitted by the Environment Agency;
- the permit number;
- the Environment Agency telephone number 03708 506506 and the incident hotline 0800 807060.

#### 1.1.9.2 Complaints

A complaints procedure will be in place and will form part of the EMS to record any complaints received in relation to activities covered by the permit. The procedure will include details on how complaints will be investigated, and any actions to be taken following complaints.

## 1.2 Operating and maintenance procedures

In addition to the EMS described above, an operating and maintenance (O&M) manual or similar will be developed for the Facility. The O&M procedures will include, but not be limited to the following aspects:

- comprehensive description of the Facility including operating hours and design details;
- as-built drawings of the Facility;

- maintenance and service plans;
- staffing and staff responsibilities;
- waste acceptance and pre-acceptance procedures;
- waste storage and handling procedures;
- copies of any guaranties/warranties/certificates; and
- health and safety procedures.