

CEL 5 – Summary Environmental Management System - Collins Earthworks Limited, Plot 7a, Park Lane Business Park, Park Lane, Kirkby In Ashfield, Nottinghamshire, NG17 9LE - EAWML – 102963

The Environmental management systems aims to help Collins Earthworks Limited maintain and improve environmental performance, minimise risk and reduce business overheads.

Collins Earthworks Limited also operate an externally audited and accredited ISO 14001 Management System.

Once permitted and operational the waste transfer and treatment operation will be incorporated into the current EMS.

The EMS employs the Plan, Do, Check, Act principal allowing all Environmental risks to be identified and mitigated, but also allows the effectiveness of the EMS to be assessed, measured and reviewed and improvements and corrective actions employed to improve environmental performance.

The PDCA model ensures environmental issues are systematically identified, controlled and monitored in accordance with an organisation's environmental policy, which is periodically reviewed and updated.

The EMS uses the PDCA model and incorporates the following elements.

The EMS aims to identify all relevant environmental risks, sources of pollution and receptors and show how these risks are managed.

Contents

Site Description and History

The EMS will contain a site description and history of the site for context

Auditing

The EMS will be internally audited by Collins Earthworks Hire Limited.

Document Management

Documents will be managed in the following information being recorded on all documents –

- Date of review
- Author
- Document reference number
- Document version
- Next review date

Site plan

The site plan will include the following –

- buildings, and other main constructions, fixed plant, fences
- storage facilities for hazardous materials like oil and fuel tanks, chemical stores, waste materials
- location of items for use in accidents and emergencies, like absorbents for chemical spills
- entrances and exits that can be used by emergency services
- points designed to control pollution, for example inspection or monitoring points

Engineered Site Surface and Drainage System

The EMS will include details of the sites drainage both surface water and foul and contain a drainage plan.

Non-Conforming waste

Non-conforming wastes if identified will be –

- Stopped from tipping and turned away
- Tipped in quarantine area

Security

Details of the sites security will be recorded including –

- Fencing and gates
- CCTV

Leaks and Spills

The EMS will contain information on how leaks and spills are to be managed including

- Locations of spill kit
- Training required
- How to respond to incident

Contractors and visitors

Contractors and visitors will be made aware of the EMS via Collins Earthworks Limited's environmental statement.

Waste Acceptance

- All waste will have gone through a pre-acceptance process with all waste being booked in before it can come to the site.
- All incoming waste must report to the site weighbridge office;
- A completed waste transfer note must be provided to show the description and origin of the waste.
- The vehicle is then directed to the relevant area to tip.
- If there is a variation in the waste compared to its description this must be discussed with the site office and the waste carrier.
- If the description requires changing this will be completed if it the waste can be accepted under the environmental permit.
- If not the waste will be reloaded and removed from site.
- Any rejected loads, quarantined loads or loads where the description has changed from the original waste transfer note will be noted in the site diary.
- All waste will be assessed in line with [Guidance on the classification and assessment of waste \(1st Edition v1.2.GB\) Technical Guidance WM3](#)
- All waste movements will be recorded on the company's electronic system.

Waste treatment

- The existing recycling process is simple as the site deals predominantly with construction and demolition wastes to produce soil, soil substitutes and secondary aggregates.
- Wastes that are in line with those set out in the proposed wastes and will only be accepted at the site. Wastes will be delivered to the site and tipped in specific tipping areas in stockpiles. When construction and demolition wastes arrives at the site it will be stored on an impermeable concrete pad, that forms parts of a sealed drainage system awaiting processing, with the exception of road sweepings.
- Soils again will be stored in stockpiles when delivered to the site, they are then run through a screen to remove stones and larger items such as bricks and tiles, these in term are run through the crusher and the stones stored in stockpiles. The screened soil again is then stored in distinct stockpiles.
- The site will employ a wash plant to screen and wash road sweeper wastes s to produce a recycled product with all smaller fine particles removed.
- The wash plant will be self-contained, being sat on an impermeable concrete pad. The washing process is water intensive with water evaporating from the washed stockpiles. With this in mind all run-off is contained and collected and wash waters are recycled. The collected water drains to a central sump to be pumped back into the plants water treatment system.

Sampling of wash waters

- The wash plant that is being installed at Collins Earthworks and most wash plants we install have a full closed loop water treatment plant.
- The dirty water from the wash plant is fed into a large thickener tank to separate the solids from the water so the water can be reused in the washing process.
- A flocculant solution is added to the dirty water as it enters the thickener tank which causes the silt particles to clump together and settle within the tank.
- A large rake in the bottom of the thickener tank rotates slowly to plough the settled particles to the centre of the tank so a thickened sludge can be pumped out of this tank into a sludge buffer tank.
- From the sludge buffer tank, the sludge is pumped through a filter press so that the flocculated silt particles can be separated from the water. The clean water is then returned to the washing process.
- The filter press monitors the flow of clean water coming out of the sludge and when the desired moisture content has been reached the filter press will open and automatically discharge the solid filter cakes.
- The water treatment plant has an automatic sampling system which takes samples every few minutes of the dirty water entering the thickener system. This system measures the settlement rate of the silt particles and automatically adjusts the flow rate of the flocculant solution which is added to the dirty water. This ensures that the dirty water is not over or under flocculated and maintains the clarity of the water overflowing the thickener to be reused in the washing process.
- The anionic flocculant is stored in powder form in 20kg bags and is added to an automatic mixing and dosing system to make up a small batch of liquid solution which is then dosed into the thickener.
- This system makes up a batch of liquid solution and only creates another batch when the previous one has been used.
- Wash waters will be sampled on a monthly basis for the presence of hazardous substances.
- The recycled aggregates are also tested on a monthly basis as part of the end of waste testing regime. This aggregate is tested for the presence of hazardous substances.
- The filter cake will be tested on a monthly basis in line with WM3 requirements. Any hazardous substances that are identified within the cake will be trigger wash waters to be sampled on a more frequent basis.
- At the point where any wash water needs to be removed it will be removed from the site via tanker to a permitted waste facility that can accept it.
- Any visual pollution within the wash water such as oils, fuels or grease creating an Iridescence will mean the washing process has be stopped whilst the water system drained and cleaned with the removed liquids being transferred to a permitted waste facility.

Drainage and spillages

- There are no point source emissions to surface and ground waters.
- The sites drains to the foul sewer and has a trade discharge consent for this activity from Severn Trent Water
- All washing activities will take place on an impermeable surface forming part of a sealed drainage system.
- The concrete pad drains to a sealed sump which has a capacity of 4m³ and remains at a low level as water is required within the wash plant as water is lost to evaporation from washed aggregates and remains within the filter cake. As a result, water is constantly pumped to the plant.
- There will be no hazardous wastes delivered to site.
- Road sweepings will be stored on a sealed concrete pad and drain to the sealed sump.
- Spill kits will be strategically located around site. These are subject to regular checks in the planned preventative maintenance system.
- The wash plant employs a water treatment facility that aims to remove suspended solids from the wash waters to use them again within the washing process.
- If in the event of additional liquid capacity being required a tanker would be employed to remove the liquids to a permitted waste facility. This would also happen when the water treatment system is cleansed for maintenance or contamination is observed or identified during testing.
- Road sweepings will de-water via gravity and the resulting solids will be washed within the wash plant to recover the sand, grit and stones within them. The sweepers will tip there loads onto the sealed concrete pad and allow the water drain to the sump with the other liquids.
- Immediate action to be taken in event of any major spills. Spillage to be cleared immediately and placed in containers for offsite disposal at an appropriate facility. EA to be informed.
- The anionic flocculant is stored in powder in a bulk 1,000 litre IBC of premixed solution common on other wash plants. This is in turn stored on a drip tray with a capacity of 110% of the IBC and site on the sealed drainage system.
- The use of a road sweeper on the main road outside the site will remove any debris that may not have been removed by the wheel wash, this will prevent any run-off to surface water drains and watercourses.
- The wash plant and mobile plant for loading requires oils, grease and fuel to operate. None of these potentially polluting liquids are stored within the permitted area.
- The quarantine area will be located on the sealed concrete pad and within the sealed drainage system. This area will stay clear from waste. In the event of any waste, that requires quarantining; it will be stored in the area and fenced off to prevent mixing with other wastes.
- There are no plans for secondary containment as the sealed drainage system acts as containment for any run-off. This includes surface water and rainwater as the washing process is a water negative process due to evaporation and moisture within the washed

materials and filter cakes. All collected water is pumped to the water treatment system for the washing process.

Flooding

According to the EA's 'Flood Map for Planning', the site is located in Flood Zone 1.

The operator has signed up for Floodline, which provide free flood warning by phoning 0345 988 1188.

In the event of a flood the following actions will be taken:

- Flooding potential will be monitored by flood alerts in the local press or from the Inspecting Officer of the Environment Agency.
- With advanced notice all liquid waste will be discharged to the foul sewer or tankered off of site to a suitable permitted facility.
- Waste will not be accepted at the site whilst flood risk remains and will be diverted to suitable permitted facility.
- Staff will be communicated with regarding travel to and from work in times of flooding and informed not to enter the flood water.
- Records of flooding will be retained by the site manager and will include details on location of the flood water on site including photographs and annotated maps.
- Details of actions taken with regard to this flood action plan will be recorded in the site diary.
- In the event of a localised flood there may be localised power outages that may mean the site is unable to operate. If this is the case the site would be closed. In addition, flooding to local roads may also mean the site has to shut.

Waste Storage

The storage plan will include -

- the longest amount of time that you will store each type of waste
- how you will make sure you will not exceed these time limits – you need to consider your emissions when deciding how long you can store types of waste for
- the maximum amount of each type of waste you will store in terms of volume
- the maximum height of each storage pile on site
- how you will identify the specific types of waste you are storing
- how you will separate different types of waste if required, for example how far apart you will keep waste types that cannot be mixed
- how you will make sure your site only takes waste that your permit allows you to store

Site and equipment maintenance plan

Plant and equipment will be maintained according to the manufacturer's or supplier's recommendations

Maintenance such as servicing and calibration will be recorded.

Contingency plans

The EMS will show how Collins Earthworks Limited will minimise the impact on the environment of any:

- breakdowns
- enforced shutdowns
- any other changes in normal operations, for example due to flooding or other extreme weather
- Read flood planning guidance to help you comply with your environmental permit.

Accident prevention and management plan

The accident prevention plan will show how Collins Earthworks Limited will deal with any incidents or events that could result in pollution.

The plan will identify potential accidents, for example equipment breakdowns, enforced shutdowns, fires, vandalism, flooding, or any other incident which causes an unexpected change to normal operations, such as bad weather.

For each potential incident, it will state:

- likelihood of the accident happening
- consequences of the accident happening
- measures Collins Earthworks Limited will take to avoid the accident happening
- measures Collins Earthworks Limited will take to minimise the impact if the accident does happen
- The accident plan will also record, investigate and respond to accidents or breaches of your permit.

The accident plan will be reviewed annually or after an accident when it will next be reviewed

The accident plan will also contain -

- a list of emergency contacts and how to reach them
- a list of substances stored at your site, and your storage facilities
- forms to record accidents on

Consider taking the following actions, if you think they are relevant to the operations you carry out at your site:

Contact information for the public

The site notice board will include -

- Collins Earthworks Limited's name (company name at least)
- an emergency contact name and telephone number
- a statement that the site is permitted by the Environment Agency
- the permit number

Environment Agency telephone number 03708 506506 and the incident hotline 0800 807060

Complaints procedure

The Collins Earthworks Limited complaint procedure will deal with any complaints that are received in relation to activities covered by the permit (for example complaints from neighbours about noise, odour or dust from your site)

It will include -

- how Collins Earthworks Limited investigate those complaints
- any actions taken as a result of complaints
- Managing staff competence and training records
- You need to have enough staff and resources to make sure the site is run effectively in order to comply with your permit.

Technical Competency and training

Collins Earthworks Limited's management system will explain who is responsible for what procedures and who is technically competent.

Collins Earthworks Limited will also check that staff and contractors have taken the training or qualifications required for the work they carry out and record any training, refresher training or qualifications taken by your staff or contractors

Keeping records

Collins Earthworks Limited will keep any records required by the permit.

Collins Earthworks Limited will keep records to show that the management system is being implemented in line with the requirements of the permit.

Documents on site

Collins Earthworks Limited will ensure the following are on site -

- permits issued to the site

- other legal requirements
- your risk assessment
- all management system plans
- any plans required by the application or permit depending on your type of activity (for example odour management plan at waste sites)
- all operating procedures
- staff competence and training (for example qualifications, courses attended)
- emissions and any other monitoring undertaken (for example water samples)
- 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

Waste input and outputs

Each delivery of waste at the site will be recorded, including -

- its quantity (weight or volume)
- its EWC code
- its origin (for example, the location the waste sent from)
- the identity of the producer of the waste (for example the company name)
- the date the waste arrives at your site
- any quarantined materials that are part of the delivery, and what you did with them

Record will be kept to show that Collins Earthworks Limited are meeting their duty of care

Site closure / diversion of waste

In the event of a site closure either planned or in the event of an emergency Collins Earthworks Limited will divert waste to other identified permitted waste facilities and notify customers.

Specific plans

In the event of Odour, noise, dust or pest becoming an issue a specific plan will be produced.

Review

The EMS will be reviewed annually or if there is

- a change to the maximum amount of waste stored on your site
- new waste treatment equipment
- implementation of new control measures
- implantation of specific management plan such as noise

Access to EMS and staff briefing

Collins Earthworks Limited staff will have access to and understand any sections of the management system that deal with activities they carry out.