OUTLINE CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN (OCEMP)

Replacement Sea Wall, Largs, North Ayrshire

OCEMP
Replacement Sea Wall,
Largs,
North Ayrshire
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1 INTRODUCTION

1.1 Purpose of this Document

This document is an Outline Construction and Environmental Management Plan (OCEMP) and contains all the appropriate environmental mitigation and management techniques to help ensure no significant impacts are caused to the environment during the construction phase of the Proposed Development. It is a **'live'** document and may be updated as the project progresses. This OCEMP sets out the minimum requirements which will be adhered to during the construction phase of the Proposed Development.

1.2 The Proposed Development

The Proposed Development Site is located at Largs Promenade, situated in the coastal town of Largs, which is located due west of Glasgow, within North Ayrshire Council area. The location of the Proposed Development and associated construction area is shown in Figure 1. Details of the application are detailed below.

Location: Largs Promenade, Largs, North Ayrshire, Scotland, KA30 8BG

Client: North Ayrshire Council

Proposed Development: *The proposed development works involve the replacement/encapsulation of the existing 300m long seawall at Largs Promenade, Largs, North Ayrshire.*

Figure 1: Location of Proposed Development

The existing seawall at Largs retains the promenade and protects the shore side buildings and infrastructure from wave action and coastal erosion. It is c.300m in length, with the height varying along its length following the profile of the beach below. The retained height varies from approx. 1.0m to 4.0 m, and the top level of the seawall is approx. +5.16mCD along the full length. The public have access to the seawall and the beach below when the tide allows.

1.3 Key Components of the Proposed Development

The proposed seawall replacement scheme comprises the replacement/encapsulation of the existing 300m long Largs seawall. The preliminary proposal is outlined in detail in **Appendix A: General Arrangement**.

Proposed Seawall Replacement Works consist of the following main elements;

- Controlled removal of existing steps which are unsafe for use.
- Installation of precast concrete caissons along the front of the existing seawall to act as a foundation to facilitate the placement of precast concrete seawall units.
- Placement of granular infill in the concrete caisson units,
- The precast caisson base unit will be filled with granular material. The base will be topped with a mortar layer, with the concrete seawall units then installed (Example of proposed seawall units shown in Figure 2). The precast units will be shaped for them to interlock, then grouted and sealed to both sides, thus avoiding the requirement for dowels or protruding reinforcement
- Placing of granular backfill between the front face of the existing seawall structure, and the rear face of the new precast structure. Suitable drainage to be provided within the backfill. Surfacing of backfill with concrete or asphalt pavement to tie into existing promenade. New / reinstatement of handrail along the promenade.
- Placement of rock armour scour protection in-front of the new precast concrete seawall units to prevent undermining of the toe of the new structure.
- Installation of steps at required intervals along seawall structure.

Figure 2: Example of Proposed Precast Seawall Units

The form of foundation and structure varies along the length of the seawall to account for the varying profiles of the existing seawall structure. The preliminary sketches in Figures 3 and 4 below show indicative cross sections of the proposed construction.

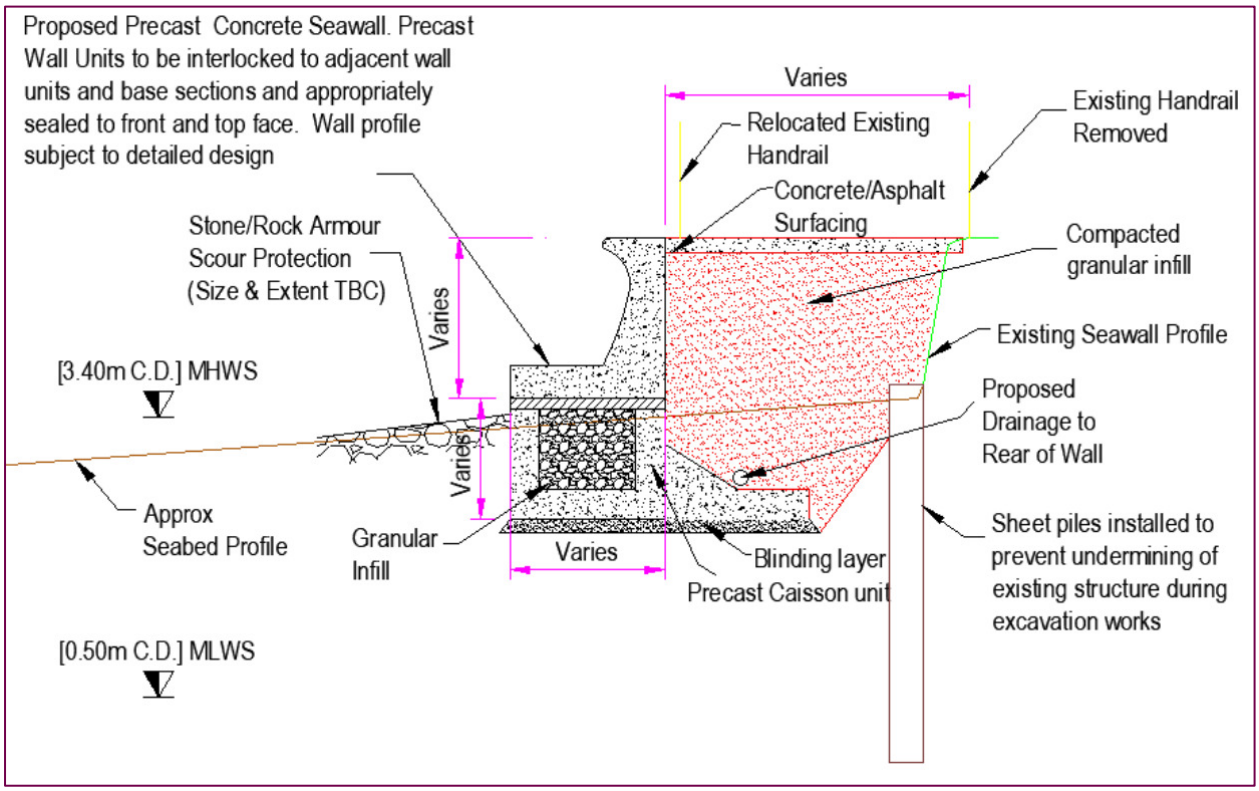


Figure 3: Proposed Section for Northern and Southern Section of Seawall

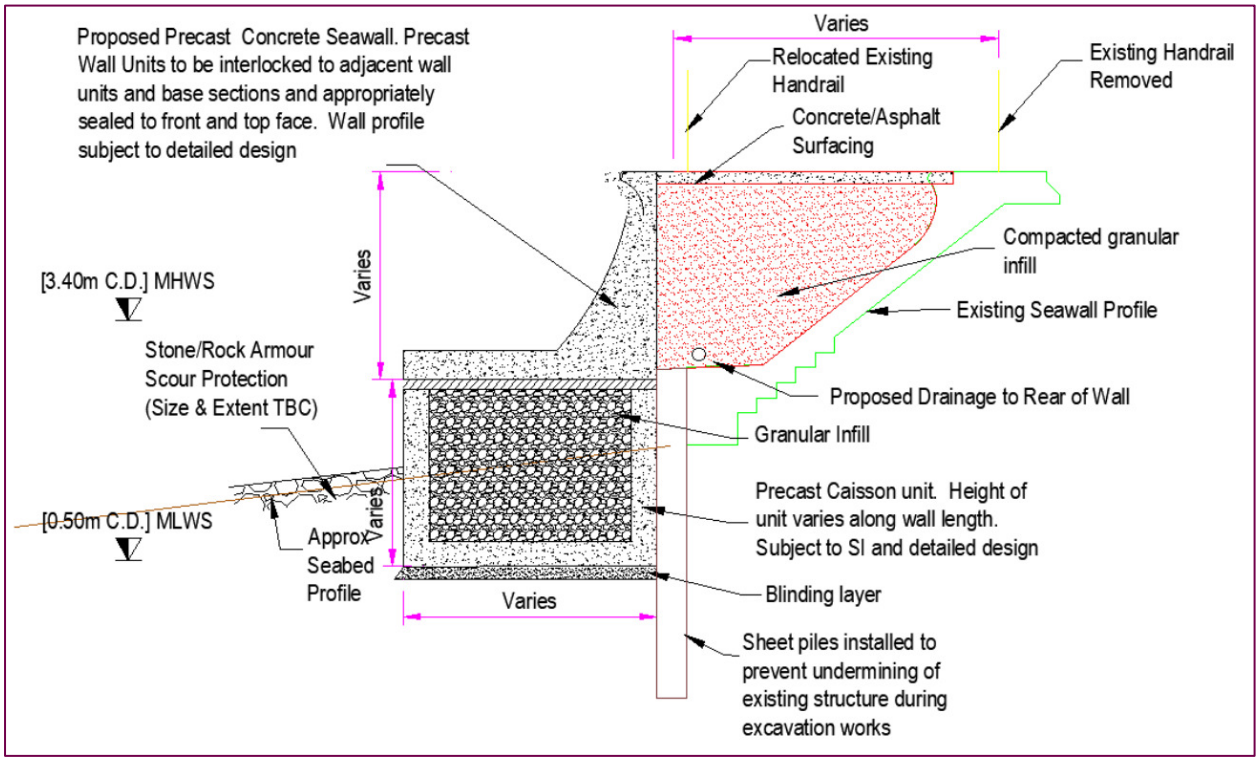


Figure 4: Proposed Section for Middle Section of Proposed Seawall

The height of the replacement seawall structure will be as per the existing seawall (refer to Section 1.2). The length of the proposed seawall will be 300m, and the footprint of the structure covers 0.24ha / 2400sqm. The red line boundary of the proposed works, illustrated in **Appendix A: General Arrangement**, totals 0.3ha in area. The area of proposed terrestrial works above the Mean Low Water Springs (MLWS) is c.0.297ha, and the area of proposed marine works below the Mean High Water Springs (MHWS) is c.0.227ha.

2 DEFINING THE OCEMP

2.1 Purpose of the OCEMP

An OCEMP is a key tool for delivering environmental management during the construction phase. It sets out the mechanisms by which the various construction activities would be managed to comply with the relevant environmental legislation and best practice to minimise the impacts and effects on human receptors and environmental receptors.

It provides the framework for recording environmental risks and also defines the measures required to mitigate and monitor construction effects, including the mitigation measures set out in the associated supporting environmental documents and assessments. It also outlines provisions for auditing and reporting and sets out action to be taken to resolve any corrective actions arising during the course of construction. The purpose of the OCEMP is to:

1. **record environmental risks and identify how they would be managed during the construction period;**
2. **provide a means of identifying environmental commitments, objectives and targets;**
3. **provide a means of monitoring and reporting performance against the objectives and targets;**
4. **provide a framework to ensure that all parties are aware of their responsibilities;**
5. **establish a checklist of control procedures which can then be integrated into an overall environmental management protocol;**
6. **describe how construction activities would be undertaken and managed in accordance with the obligations of environmental legislation and policy, and the requirements of environmental regulatory authorities;**
7. **provide detailed environmental mitigation measures for reducing the potential for environmental impacts during pre-construction and construction;**
8. **highlights that some activities may require consents or licences;**
9. **act as a link and main document reference for environmental issues between the design, and construction stages; and,**
10. **ensure the mitigation requirements of the associated environmental assessments (contained in supporting environmental documents for the planning application) are met.**

The Contractor is required to develop and implement a CEMP to help ensure that construction activities are planned and managed in accordance with the environmental requirements. The contractor will use this OCEMP as the template for their own individual CEMP.

2.2 Scope of the OCEMP

The scope of the OCEMP covers all environmental effects related to the construction of the Proposed Development. The term 'construction' in the OCEMP includes all site preparation, earthworks, waste removal and related engineering and construction activities as authorised by the local authority and associated permissions.

The OCEMP will document the Contractor's plans to ensure compliance with their legal and contractual obligations as well as implement best practice in construction environmental management. The OCEMP will be applicable to all works associated with the Proposed Development including those carried out by sub-contractors.

2.3 Status of the OCEMP

The status of the OCEMP is as follows:

1. **This document comprises the OCEMP and has been prepared during the preliminary design and in parallel with submission of full planning application stage of the Proposed Development.**
2. **The OCEMP (and adopted version before onsite works i.e. CEMP) is a 'live' document that can be reviewed on a regular basis and updated where necessary to include the further requirements from the local authority.**
3. **The CEMP would identify any further mitigation methods and control measures to be agreed with key stakeholders, including SEPA and North Ayrshire Council and would be in place before construction begins.**
4. **During construction, the CEMP may be revised to take into account any modifications to the design, changes in external factors (for example, regulations or standards), any unforeseen circumstances, and any failings in environmental performance arising from routine inspections.**
5. **The provisions of the OCEMP would be incorporated into the contracts for construction of the Proposed Development. It would be a mandatory requirement for both the Principal Contractor and all subcontractors to comply with the OCEMP to ensure that best practice is implemented during construction and to safeguard the environment.**
6. **The requirements of the OCEMP do not remove or overwrite the legal duties, responsibilities or obligations of the Principal Contractor (and subcontractors) and other parties in accordance with the contract documents and legislation.**
7. **The CEMP is the mechanism for ensuring that the Proposed Development adopts relevant best practice management techniques for sustainable construction.**

2.4 Structure of the OCEMP

The OCEMP comprises of the following Sections and Appendices:

3. **ROLES AND RESPONSIBILITIES**
4. **COMMUNICATIONS**
5. **GENERAL POLLUTION CONTROL AND CONTINGENCY PLAN**
6. **ENVIRONMENTAL PERFORMANCE MANAGEMENT**
7. **WORK PROGRAMME**
8. **ENVIRONMENTAL MITIGATION MEASURES**

- **Appendix A: General Arrangement**
- **Appendix B: Environmental Inspection Schedule**
- **Appendix B1 : Complaints Form**
- **Appendix C: Incident Report Form**
- **Appendix D: Example Site Waste Management Plan**
- **Appendix E: Construction Method Statement**
- **Appendix F: Pollution Prevention Plan**
- **Appendix G: Emergency Response & Environmental Plan**

3 ROLES AND RESPONSIBILITIES

3.1 Introduction

The Project Manager/Construction Manager would have overall responsibility for the construction of the Proposed Development. A full-time Environmental Manager would be responsible for developing the OCEMP and implementing the CEMP (and its various potential iterations as it is a **'live'** document) during construction.

Other members of the project team would be assigned specific roles to assist the Project Manager in the implementation of the OCEMP and individual specialists would be appointed to provide expert advice. The key environmental roles and responsibilities are in the sections that follow.

The assigned environmental roles and responsibilities for the relevant project personnel are detailed in this section.

For a project like this development the environmental officer role maybe combined with the site manager role due to the size of the project and development area. All roles are still listed for completeness.

3.2 Construction Director

The Construction Director will have an overall responsibility for the organisation and execution of all related environmental activities as appropriate, in accordance with regulatory and project environmental requirements. The principal duties and responsibilities of this position will include:

1. Overall responsibility for the Proposed Development and implementation of the CEMP;
2. Allocating resources to ensure the implementation of the CEMP;
3. Participates in the management review of the CEMP for suitability, adequateness and effectiveness; and,
4. Sets the focus of environmental policy, objectives and targets for the Contractor.

3.3 Construction Manager/Site Manager

The Construction Manager/Site Manager is directly responsible to the Construction Director for the successful execution of the project. The principal duties and responsibilities of this position will include:

1. To report to the Construction Director on the on-going performance of the CEMP;
2. To discharge his/her responsibilities as outlined in the CEMP; and,
3. To support and augment the Environmental Officer through the provision of adequate resources and facilities in the implementation of the CEMP.

3.4 Environmental Officers

The Environmental Officer will be responsible for, but not limited to, the following activities:

1. Ensuring that the requirements of the CEMP are developed and environmental system elements (including procedures, method statements and work instructions) are implemented and adhered to with respect to environmental requirements;
2. Reviewing the environmental responsibilities of other managed Contractors in scoping their work and during contract execution;
3. To ensure that advice, guidance and instruction on all CEMP matters are provided to all their managers, employees, construction contractors and visitors on site;

4. Report to the Construction Manager on the environmental performance of Line Management, Supervisory Staff, Employees and Contractors;
5. Advise site management (including, but not limited to, the site Construction/Commissioning Manager) on environmental matters;
6. Maintaining environmental records;
7. Providing guidance for the site team in dealing with environmental matters, including legal and statutory requirements affecting the works;
8. Reviewing environmental management content of method statements;
9. Reporting environmental performance to the Site Manager;
10. Liaison with statutory and non-statutory bodies and third parties with an environmental interest in the Proposed Development;
11. Implementing environmental controls on site. (Refer to **Appendix B** Environmental Inspection Schedule);
12. Ensuring correct procedures are followed in the event of environmental incidents (Refer to **Appendix C** Incident Report Form);
13. Monitoring and completing the waste register and ensuring the correct waste management procedures are implemented (An example Site Waste Management Plan (SWMP) is set out in **Appendix D**);
14. Implementing and maintaining environmental controls on site (details of which is included in **Appendix E** Construction Method Statement);
15. Attending to any spills or environmental incidents that may occur on site. (Refer to **Appendix F** Pollution Prevention Plan, **Appendix G** Emergency Response & Environmental Plan).

3.5 Site Supervisors

Site Supervisors are required to:

1. Promote a Health & Safety culture on site, to read, understand and implement the CEMP;
2. Know the broad requirements of the relevant law in environmental matters and take whatever action is necessary to achieve compliance;
3. Ensure that environmental matters are taken into account when considering Contractors' construction methods and materials at all stages;
4. Be aware of any potential environmental risks relating to the site, plant or materials to be used on the premises and bring these to the notice of the appropriate management;
5. Ensure plant suggested is environmentally suited to the task in hand;
6. Co-ordinate environmental planning of all construction activities to comply with environmental authorities' requirements and with minimum risk to the environment. Give Contractors precise instructions as to their responsibility to ensure correct working methods where risk of environmental damage exists;
7. Where appropriate, ensure Contractors method statements include correct waste disposal methods;
8. Be aware of any potential environmental risks relating to the Contractors and bring these to the notice of the appropriate management; and,
9. Ensure materials/waste register is completed as appropriate.

3.6 Site Personnel

All Contractors, and other site personnel, on the project will adhere to the following principal duties and responsibilities:

1. To support and promote the Health & Safety culture on site.
2. To co-operate fully with the General Contractor and the Environmental Officer in the implementation and development of the CEMP at the site;
3. To conduct all their activities in a manner consistent with regulatory and best environmental practice;
4. To participate fully in the environmental training program and provide management with any necessary feedback to ensure effective environmental management at the site; and,
5. Adhere fully to the requirements of the site environmental rules.

3.7 Team Structure & Distribution List

All personnel working on the project will be responsible for the environmental control of their own work and will perform their duties in accordance with the requirements of the CEMP (as updated) and in compliance with the controls referenced therein.

A distribution list for the CEMP should be developed when all contact names and companies are known. The purpose of the distribution list is to establish communication channels that will enable more effective control of environmental-related issues. The distribution list should identify individuals and organizations that have received or will receive a copy of the construction stage CEMP for implementation.

Individuals of importance could include the developer, the environmental consultant, lead contractors, subcontractors, and any appointed environmental managers (or other identifiable titles for the persons in charge of implementing the contents of the construction stage CEMP).

The distribution list will be established prior to commencement of construction by the appointed contractor. Prior to commencement of construction, all roles and responsibilities should be confirmed in the CEMP as updated. Table 3.1 shows a template for project roles and responsibilities and can act as a template for the distribution list for the CEMP.

Table 3.1: Role, Company, Named Contact & Contact Details

ROLE	COMPANY	NAMED CONTACT	CONTACT DETAILS
Construction Director	TBC	TBC	TBC
Construction Manager	TBC	TBC	TBC
Environmental Officer	TBC	TBC	TBC
Site Supervisors	TBC	TBC	TBC
Site Personnel	TBC	TBC	TBC
Health & Safety Representative (May be combined with Construction Manager role)	TBC	TBC	TBC
Other specialists as required (e.g. geotechnical , drainage/civil engineer)	TBC	TBC	TBC
SEPA's Pollution Prevention Hotline	**SEPA's Pollution Hotline Number** **0800 80 70 60** **Any spillages / pollution incidents should be reported to the SEPA hotline within 30 minutes of the incident occurring unless it is not safe to do so**		

The Principal Contractor as appointed has ultimate responsibility for the successful environmental performance of the Proposed Development through appointment and management of subcontractors and environmental specialists, as required, as detailed in Table 3.1. Specifically, this includes:

1. Principal Contractor & all sub-contractors will need to c**omply with all** relevant environmental legislation when carrying out work on the site;
2. **Definition** of environmental standards and requirements for the contractors throughout the contract stages;
3. **Acting as a point of contact** for consultation and feedback with landowners/occupiers, statutory and non-statutory consultees, other interested parties and the public;
4. **Auditing** of the performance of sub-contractors;
5. **Environmental monitoring and reporting (in conjunction with Environmental Officer)** - Environmental issues relevant to the project will be discussed during weekly Site Progress Meetings attended by the Site Manager and Environment Manager. Environmental performance will also be discussed at regular HSEQ meetings. This will include dissemination and discussion of the findings of audits, environmental reports and other inspections where appropriate. Other responsibilities are as follows:
6. **Health and Safety** - The site will be managed by a full time project management team who will be responsible for the Health and Safety of all personnel on site.
7. **Site Rules** - All personnel must comply with the rules and regulations laid down in the appropriate site rules.

8. **Induction and signing in and out** - All visitors to the site will be required to sign in and out and all personnel working on the site will be subject to an induction by the Principal Contractor.
9. **Training** - All construction staff, including sub-contractors, would receive structured training on the requirements of the CEMP and the associated environmental control plans, as developed. They would also be required to attend a site induction which would include the key environmental issues identified for the Proposed Development. The briefing would emphasise the methods and working practices which must be employed to protect the environment, including emergency procedures for reporting and dealing with environmental incidents. Records of training and those attended will also be retained.

4 COMMUNICATIONS

Effective communication is essential to ensure the appropriate employment of environmental standards and relaying of information, reports/assessments and data. The following points are some of the key forms of communication required:

1. **Statutory and Non-Statutory Bodies** - During the construction works, communication may be required with external parties such as, statutory authorities, interest groups and the public/business owners. Communication may take the form of scheduled meetings, site visits and written correspondence.
2. As the project progresses, there may be a requirement by the client, his representatives and any appointed contractor to clarify potential issues with relevant statutory bodies – including those with an environmental remit.
3. Detailed in Table 4.1 is a basic list of statutory bodies with an environmental remit within Scotland and the local authority area who may require consultation – in particular during the construction phase of the project. Also provided is a link to their internet sites from which useful information and contact details of these organisations can be obtained.
4. This list will be reviewed by the contractor, added to or amended if required. This list therefore should not be seen as a definitive list.
5. It should also be noted that there are a wide range of non-statutory bodies within Scotland who play an active role in protecting the environment. All these organisations are not listed in this OCEMP as yet but will be if required e.g. perhaps to seek further clarification.
6. **Public/businesses** - The Site Manager shall ensure that the public/businesses are kept informed of operations that may have an effect upon them. This may involve letter drops and meetings to keep local commercial premises owners up to date with progress with the Proposed Development and any new operations that are to be carried out. The Site Manager will provide details of contacts within the project team for the public/businesses to contact should any issues arise;
7. **Consents, Licences and Permits** - The provisions for controlling, pumping and discharging water will be agreed with Scottish Water. The Contractor will ensure that any licences required are in place;
8. **Changes in legislation or guidance** - Legislative changes or proposed improvements to manage processes on site that have a bearing on the commitments given in the supporting environmental documents or other consultations will be communicated by the Site Manager to the Client and;
9. **Meetings & Records** - Environmental issues relevant to the project will be discussed during weekly Site Progress Meetings attended by the Site Manager and Environment Manager. Environmental performance will also be discussed at regular HSEQ meetings. This will include dissemination and discussion of the findings of audits, environmental reports and other inspections where appropriate.

Table 4.1: Basic list of statutory bodies with an environmental remit within Scotland

Organisation	Web Link
Scottish Environment Protection Agency (SEPA)	https://www.sepa.org.uk/
Inland Waterways Association Scotland	https://waterways.org.uk/waterways/branches/iwa-scotland
Marine and Fisheries	https://www.gov.scot/marine-and-fisheries/
Scottish Water	https://www.scottishwater.co.uk/
North Ayrshire Council	https://www.north-ayrshire.gov.uk

5 GENERAL POLLUTION CONTROL AND CONTINGENCY PLAN

5.1 Exclusion Zone & Materials

1. **Dedicate specific areas for oil storage and refuelling, separated a minimum of 10m (exclusion zone) from any adjacent waterbodies and comply with legislation, including providing bunds sized to contain 110% of fuel storage capacity.**
2. **The contractor will use fill point drip trays, bunded pallets and secondary containment units.**
3. **The construction compound will be enclosed and secured and fuel storage areas will be secondarily secured.**
4. **All fuel, oil and chemical deliveries will be supervised by a responsible person who will be trained to deal with any spillage to prevent a pollution problem occurring.**
5. **Storage of COSHH items is not permitted and only brought to site as required, fuel is provided by client from an existing bunded static supply, where small portable machines are to be fuelled up a drip tray is used.**

5.2 Emergency Procedures

A Site Environmental Emergency Plan will be prepared prior to construction and communicated to all members of the project team including sub-contractors and emergency services. A Pollution Incident Emergency Response Plan would be developed in accordance with the guidance set out in the Guidance for Pollution Prevention GPP 21: Pollution Incident Response Plans (NIEA, July 2017). **Appendix G** of this OCEMP contains an example Emergency Response & Environmental Plan. The Environmental Emergency Plan would set out the procedures to be followed and measures to be implemented in the event of a pollution incident. These incidents may be the result of:

1. **delivery and use of materials;**
2. **spillages of oils or chemicals;**
3. **discharge of silty water or other pollutants to watercourses;**
4. **flooding event; and,**
5. **fire (emissions to air) and failure to contain firewater runoff.**

Emergency procedures are developed to support the response plan. The procedures define the circumstances when the plan should be activated and include:

1. **the names and contact details of staff trained in incident response,**
2. **clearly defined roles and responsibilities,**
3. **the types and location of emergency response equipment available,**
4. **the location of the emergency assembly point, and,**
5. **Procedures for recovering spilled product.**

Responsible staff will be trained in emergency procedures to form an Emergency Team, so that these procedures can be implemented swiftly and effectively. Periodic testing of emergency procedures will be undertaken by the Site Manager.

The Environmental Manager will observe the test and to report on results. Any corrective actions are taken forward for review and approval.

Should an emergency incident occur, the Environmental Manager will be notified immediately. The emergency response will be co-ordinated by the Site Manager.

Protective measures, mitigation, clean up and remediation actions will be identified from the evaluation and shall be put into place, having regard for the sensitivities of the environment.

A record of the emergency incident will be kept to show the nature of the corrective action undertaken. (See **Appendix C** for an example template).

Appendix G of this OCEMP contains an example Emergency Response & Environmental Plan. All relevant staff would be trained in how and when to contact the emergency services, SEPA and other organisations identified in the Environmental Emergency Plan.

5.3 Concrete Pouring

Concrete, cement and grouts are very alkaline and corrosive and can cause serious pollution to water. The following measures shall be followed on-site during construction and pouring of concrete:

1. Ensure that concrete pour are contained within the working area and do not enter any watercourses or surface water drains.
2. When mixing grout on site, construct a suitable barrier around mixing areas, supply lines and around working areas to prevent its escape.
3. Trucks, hoppers, mixers and concrete pumps that have contained concrete must be washed out in a contained area, see 'management of concrete wash out areas' below.
4. All concrete pours will be carried out under supervision,
5. Pours will be properly prepared to avoid run off (shuttering, mud matts, membranes used) and waste.
6. **Pouring of concrete should not take place when heavy rain is imminent.**

Wash down water arising from the washing of equipment that has come into contact with concrete will be collected in an impervious container.

5.4 Stockpiles

Management of stockpiles in accordance with best practice should include where possible 10 meter buffer zone between the stockpile and the watercourse. If required additional mitigation such as silt fencing at the toe or geotextile wrapping of the stockpiles should be considered to manage contaminated run off. The following measures are proposed in relation to stockpiling of materials:

1. Locate stockpiles out of the wind or provide wind breaks to minimise dust generation
2. Keep stockpiles to minimum practicable height and use gentle slopes
3. Minimise the storage time of materials on site
4. Store materials away from the site boundary
5. Minimise the height of fall of all materials
6. Avoid spillage, and clean any spill up as soon as possible
7. Good soil handling and storage methods including protection of stockpiles with geotextiles.

Stockpiled material is located more than 10m away from the exclusion zone around the water body.

5.5 Silt Management

Good soil use and management is crucial to preventing silt pollution which is a major cause of environmental incidents. It can harm water quality, damage and kill aquatic life by smothering and suffocation and can cause flooding by blocking culverts and channels. The following will be implemented on-site:

1. Do not allow water containing silt or mud to discharge directly to any waterway.
2. Minimising the amount of time stripped ground and soil stockpiles are exposed.
3. Only removing vegetation from the area that needs to be exposed in the near future.
4. Using geotextile silt fencing at the toe of the slope, to reduce the movement of silt; this should be installed before soil stripping has begun and vehicles start tracking over the site.
5. Plant washing is carried out in a designated area of hard standing at least 10 metres from any watercourse or surface water drain.
6. Where run off water is contaminated with silt or other pollutants such as oil this water must not be pumped or allowed to flow (directly or indirectly) into the water environment without treatment.
7. Silt controls in place to prevent silt entering watercourses or drains.

Silt treatment options can be complex or relatively simple depending on the volume of water, the amount and type of silt and the type and size of site. Whichever method is used, an area where water can be undisturbed for a period of time. These facilities must be correctly installed, routinely maintained and inspected to ensure they're working efficiently.

6 ENVIRONMENTAL PERFORMANCE MANAGEMENT

6.1 Environmental Risk Register

The Environmental Manager/Officer should prepare and maintain an Environmental Risk Register having regard for legal requirements, project environmental commitments the potential for aspects of works to cause significant environmental impact.

The Environmental Manager should record responsibilities assigned for actions required for mitigation and control of the environmental risks in the Environmental Risk Register.

The Environmental Risk Register will be subject to regular review by the Environmental Manager together with the Site Manager.

6.2 Consents

Copies of legal consents, permits and licences obtained will be held in the site environmental file by the Environmental Manager.

6.3 Method Statements and Risk Assessments

Specific environmental risks will be assessed during preparation of method statements. Actions and environmental constraints associated with specific construction operations will be included in method statements, field control sheets and activity plans where appropriate. Generic environmental requirements will be included in all method statements. Details of what should be included in method statements are set out in **Appendix E**.

6.4 Inspections

Routine inspections to check that pollution control measures are in place will be undertaken by the Environmental Manager, who will produce weekly inspection reports. Daily inspections will be made by the supervisors during each shift and any environmental problems or risks that are identified will be actioned as soon as is reasonably practicable. Any issues arising from the daily inspections will be notified to the Environmental Manager. **Appendix B** of this OCEMP details an example environmental inspection schedule.

6.5 CEMP Review Programme

The CEMP is a **'live'** document that will be updated by the Contractor and reviewed by the Environmental Manager on a monthly basis as a minimum. The CEMP will also be reviewed following any environmental incidents which require the works methods to be updated or changed.

6.6 Notices of Non-Conformance

In instances where the requirements of the CEMP are not upheld a non-conformance and corrective action notice/procedure will be produced. The notice/procedure will be generated during the inspections conducted by the Supervisors, the Site Manager, Environmental Manager or any external third-party audits.

The Site Manager will be responsible for ensuring a corrective action plan is established and implemented to address the identified shortcoming. An incident report form is set out in **Appendix C**.

6.7 Complaints Handling

The response to any complaints will be managed by the Site Manager, who will inform the Environmental Manager of any environmental complaints. A Complaints Register will be maintained to detail the name

and contact details of the complainant, date and time of the complaint, nature of complaint, action taken to resolve issues, and date of complaint handover.

The Environmental Manager will ensure that all environmental complaints and concerns will be responded to in 24 hours. An example complaints form is contained with **Appendix B1** of this OCEMP.

6.8 Key Performance Indicators and Objectives

The Contractor should set environmental objectives in order to continuously improve environmental performance on the site. The Contractor will set objectives based on each significant environmental impact and they will be reviewed, and revised if necessary, on a monthly basis. Procedures, monitoring requirements and key performance indicators will be measured against achievable targets.

7 WORK PROGRAMME

7.1 Proposed Programme of Works

The proposed works are anticipated to be completed over a period of 30 weeks.

Preparation, mobilisation and site clearance will take approximately 4 weeks. Protection works for the existing sea wall units, 3 weeks. Excavation of the footings, 7 weeks. Sea wall installation works, 21 weeks, with time for finalising (snagging), demobilisation and contingency, 5 weeks.

7.2 Construction Hours

It is assumed that the construction hours will be:

- **07:00 to 18:00 Monday to Friday;**
- **From 08:00 to 13:00 on Saturdays,**
- **No construction works on Sundays and Bank Holidays.**

The timing of each phase of works will be subject to tidal restrictions on working.

It should be noted though, that typically the construction hours employed are dependent upon which season the work takes place in with hours in the summer months anticipated to be from 0700 to 1900 hours on weekdays, 0700 to 1300 on Saturdays with no work on Sundays, while in winter the hours would be expected to be 0800 to 1630 hours on weekdays, 0800 to 1300 on Saturdays and no work on Sundays.

Working hours outside of this regime will only occur in exceptional circumstances – of these are known in advance (i.e. not under emergency conditions), discussions will be held with representative of North Ayrshire Council environment and planning team to ensure that the works can be completed with minimal impact on sensitive receptors.

7.3 General Site Set Up

It is anticipated that the beach and the promenade will be closed for the duration of the construction work to ensure public safety, however there may be opportunities to open sections of the beach and promenade early if site security and safety measures allow. RNLI access including parking will be maintained at all times. Storage of materials on the promenade may be considered where off site storage is not feasible.

It is planned to retain a walkway along the edge of the site, creating a temporary walkway on the grassed area between Greenock Road and the promenade. Construction access to the beach is expected to be via a temporary access ramp constructed to the side of the RNLI slipway

The following will be considered during site mobilisation:

7.3.1 Site Construction Compound

There will be a temporary site compound in the immediate vicinity of the site to support the proposed development during the construction period. The location of this has not yet been determined, however one option may be at the northern end of the seawall close to Aubrey Crescent.

7.3.2 Site Clearance

The area of works along the promenade and beach will be fenced off, and initial works will see the partial removal of the existing concrete steps with a rock breaker mounted on small excavator working from the beach. The existing handrail along the promenade will be removed and stored for reuse. This phase is likely to take approx. 3 weeks.

7.3.3 Protection Works for the Existing Seawall structure

Sheet piles will be installed to the front edge of the toe along the length of the existing wall to provide temporary protection against undermining whilst excavations are being carried out. These will be installed using a vibratory hammer where possible. It is expected that due to the nature of the ground conditions to the south of the site an impact hammer may be required to install the piles. It is conservatively estimated that 150 m of the 300 m anticipated length of piling may be driven by means of impact piling. This phase is likely to take approx. 6 weeks and would run concurrent to removal of the steps..

7.3.4 Excavation

Beach material will be excavated to facilitate the installation of the concrete caisson units using a small excavator working from the beach to prevent settlement into the sand. The material is likely to be taken offsite for disposal to a licenced facility or beneficially re-used (subject to testing to confirm suitability of material, and identification of a suitable receptor). This phase is likely to take c.9 weeks.

7.3.5 Seawall Installation

The toe of the proposed replacement wall will be excavated to low water level with a small excavator working from the beach, and bedding material added (lean mix concrete). The caisson units will be installed on top of the material by a crane or telehandler on the promenade or beach and filled with granular material. The precast concrete seawall unit will be placed on top and grouted into place. The space between the replacement seawall unit and the face of the existing seawall will be backfilled and compacted by an excavator working from the promenade, then surfaced with asphalt to tie into the existing promenade. The existing handrail will be removed. The precast installation is likely to take c.9 weeks, with the backfilling and surfacing works taking c.8 weeks. Scour protection will be installed with suitably sized/graded rock placed in layers on the beach surface to the front of the precast concrete seawall, by an excavator working on the beach area.

7.3.6 Surfacing

Asphalt surfacing will be placed on the newly constructed section of promenade and resurfacing works to the existing promenade will also be carried out at this time. All areas of surfacing will include a rolled asphalt surface course containing 14mm red coated chippings. All benches, bollards, movable planters and litter bins will be removed prior to the promenade resurfacing and reinstated upon completion.

7.3.7 Street furniture and Beach Access

It is proposed to install a new handrail along the length of the new seawall. Access to the beach will be provided to the north and south ends of the beach, with ramp access at the Aubrey Crescent end of the seawall. Steps will be installed at an intermediate point along the wall. These will be precast concrete steps, and have a gate to the top edge and railings that tie in with the proposed new handrail along the crest of the new seawall.

7.3.8 Materials

The types of construction material that will be used as part of the proposed permanent works below mean high water springs (MHWS) includes precast concrete caissons, precast concrete sea wall units, granular infill, mortar layer, sealant, granular backfill, bedding material and rock armour scour protection. Temporary works include the installation of the sheet piles, however, the requirement for these to remain as part of the permanent works will be determined during the detailed design stage.

Table 7.1 provides details of the type, volume and descriptions/assumptions. Note, all materials are expected to be sourced locally, regionally or within the UK and brought to site via road.

Table 7.1: Details on Construction Materials

Type	Volume below MHWS (m3)	Units	Description/assumptions
Precast Concrete Caissons	585	150	Concrete caissons are 2m long; smaller caisson (top of caisson level with MHWS); larger caisson (top of caisson below MHWS); volume assumed for concrete units alone.
Precast Concrete Sea Wall Units	305	108	Concrete wall sections are 2m long; smaller type all above MHWS; larger type extend to below MHWS.
Granular Infill	1000	N/A	Coarse gravel infill material to caissons.
Mortar layer	3.0	N/A	Layer assumed to be 50 mm thick.
Grout	3.0	N/A	Assume 20 mm grout between each unit.
Sealant	0.23	N/A	Typically measured in linear m of 20mm x 20mm.
Granular Backfill	325	N/A	Class 6A/6N material to be used.
Handrail	N/A	5m	Assumes reuse of existing handrails.
Rock Armour Scour Protection	900	N/A	Rock armour/scour protection expected to be relatively small – approximately 100kg from UK quarries.
Bedding material	45	N/A	Blinding concrete material.
Sheet Piles	m^2	483m2	Measured as the face area of the sheet pile (assumed piles required over a 160m length of existing seawall).

7.3.9 Embedded Mitigation Measures

In order to manage the risk on the environment a number of embedded mitigation measures relevant to Marine Biodiversity are proposed to be incorporated during the construction phase, these are as follows;

1. Disturbance of intertidal zone outside existing sea wall footprint to be minimised where possible.
2. Rock will be washed down off site prior to installation.
3. Adoption by the Contractor of Largs Yacht Haven's existing Oil Spill Contingency Plan.
4. Sheet piling will be carried out in accordance with best practice guidance, and the use of vibratory pile installation will be maximised where possible.
5. Adoption of measures to minimise risks of spread and/or introduction of invasive non-native species (INNS; see section 4.2.3 for further detail).
6. Potential appointment of an appropriately qualified Environmental Clerk of Works with intertidal environmental experience, if deemed necessary by MS-LOT.

7.4 Deliveries

Delivery of equipment and materials will be carefully controlled and managed at the site. Access and egress to the proposed area will be managed by the General Contractor. Delivery times will be planned in advance.

7.5 Construction Traffic

Construction access to the beach is expected to be via a temporary access ramp constructed to the side of the RNLI slipway. It is assumed typical construction traffic will comprise of ready mix lorries, articulated low loaders, plant delivery and rigid vehicles. It is not anticipated that any specialist vehicles will be required to serve the Site. However, if an abnormal load is required prior notice would be agreed with the police, highway and other relevant authorities. Following this, appropriate routing requirements would be agreed.

7.6 Services

Note that in relation to working near services such as electricity, gas, water etc., liaison will take place with the service provider.

All utility services discovered adjacent to the site will be treated as "live" until proven otherwise and the co-ordination of switchovers and temporary disruptions for new constructions will be undertaken in accordance with the standard procedures of the relevant statutory authorities.

7.7 Construction Site Security

Throughout the construction phase, adherence to high standards of Health and Safety for all construction workers, site visitors and members of the public will be of paramount importance. All construction activities will take place in the context of the relevant Scottish Health and Safety legislation.

As such, it is important that the construction site is secured adequately to ensure that uncontrolled access e.g. by children or vandals, is restricted as much as possible. As well as the potential health and safety risk from uncontrolled access, it is recognised that one of the biggest causes of pollution events from construction sites is due to the activities of vandals.

8 ENVIRONMENTAL MITIGATION MEASURES

Supporting environmental assessments (submitted in support of the planning application) have been undertaken which have assessed the likely impacts that the Proposed Development may have on the environment. Those supporting environmental assessments also propose mitigation measures to reduce the magnitude of effect of those likely impacts. Sections 8.1 - 8.4 details mitigation measures proposed for the Development.

An environmental inspection schedule is set out in **Appendix B**. An incident report form is set out in **Appendix C**. An example site waste management plan (SWMP) is set out in **Appendix D**. Details of what should be included in method statements are set out in **Appendix E**. An Emergency Response & Environmental Plan is located in **Appendix G** of this document

8.1 The Water Environment

The Proposal is not located within a Marine Protected Area (MPA) or designated site. The nearest MPA is the South Arran MPA, located approximately 26 km to the south west of the Proposal and is designated for the protection of kelp and seaweed communities on sublittoral sediment and burrowed mud. The nearest designated terrestrial site under the EU Habitats Directive is the Renfrewshire Heights SPA which is 4 km from the project site. The nearest marine European site is the Inner Clyde Estuary SPA located 23 km to the north east of the Proposal.

The proposed works including the existing sea wall, are characterised by a foreshore dominated by sand, shingle and cobbles, with strandline characterised by washed up seaweeds. The material to be removed from the toe trench will likely consist of coarse sediments and rock which do not have affinity to bond with contaminants, unlike clay and silt sediments. Further, all materials placed during construction are inert and will not result in release of contaminants into the water column. Given the volume of material to be removed, low levels of contaminants likely contained within the material and that all works will be undertaken in the dry, there is no pathway for this to affect the water environment.

8.1.1 Suspended Sediment / Sedimentation

Preventing run-off is an effective method of preventing sediment pollution in the water environment. The adoption of appropriate sediment controls during construction is essential to prevent sediment pollution.

The contractor will ensure that mitigation measures are carried out in accordance with the CEMP are adhered to. Sediment control measures will be consistent with the following guideline:

- **GPP 1: Understanding your environmental responsibilities - good environmental practices (October 2020);**
- **GPP 2: Above ground oil storage tanks**
- **GPP5 Works or maintenance in or near water (February 2018) ; and,**
- **PPG 6 Working at construction & demolition sites (Environment Agency, 2012).**

The following measures are suggested to limit any potential water quality issues during construction:

- **The location of any stockpile storage areas will be carefully chosen, clearly identified and planned to ensure the best location to reduce material movements and minimal possibility of erosion and cross contamination;**
- **The exclusion zone shall be marked out with tape and cones to provide a visual reminder of the exclusion zone.**

8.1.2 Concrete and Cement Pollution

The impacts in relation to cement and concrete for the proposed development are, for the most part (but not limited to) the installation of concrete flooring and construction works of buildings. Mitigation measures

to prevent cement contamination of water bodies will be carried out in accordance with the outlined recommendations within the CEMP. The following measures are to be undertaken to mitigate against potential water quality issues:

- **A risk assessment will be carried out to ensure the best location for concrete washout facilities for plant required on site;**
- **If required, washout from mixing works will be undertaken in a contained impermeable area;**
- **Any stockpile storage areas will not be stored within any potential exclusion zones;**
- **The exclusion zone shall be marked out with tape and cones to prevent provide a visual reminder of the exclusion zone.**

In circumstances where the above mitigation measures are employed during construction operations, the potential magnitude of the impact to receiving water environment will be reduced to negligible thus reducing the significance of environmental effect will be reduced to minor on a temporary basis.

8.1.3 General Construction Works

The risk of water quality impacts associated with works machinery, infrastructure and on-land operations (for example leakages/spillages of fuels, oils, other chemicals and waste water) will be controlled through good site management and the adherence to codes and practices which limit the risk to within acceptable levels.

In circumstances where mitigation measures are employed during construction operations, the potential magnitude of the impact on receiving water environment will be reduced to negligible thus reducing the significance of environmental effect will be reduced to minor on a temporary basis.

Appendix F details GPP 1 in full and Table 8.1 gives a summary of mitigation measures.

Table 8.1: The Water Environment Mitigation Measures

Mitigation Measure	When?	By whom?
i. All mitigation measures detailed herein will be subject to periodic inspection and maintenance.	Before Construction Phase	Principal Contractor to deliver
ii. The contractor should adhere to standard requirements for the protection of watercourses ahering to the exclusion zone.	Construction Phase	Principal Contractor to deliver
iii. The Principal Contractor will allocate a dedicated area for material deliveries separated a minimum of **10m** from adjacent waterbodies, manage the same and make sure that over-ordering and stockpiling is kept to a minimum.	Construction Phase	Principal Contractor to deliver
iv. The Principal Contractor will dedicate specific areas for oil storage and refuelling and will use fill point drip trays, bunded pallets and secondary containment units. The site will be enclosed and secured and fuel storage areas will be secondarily secured.	Construction Phase	Principal Contractor to deliver

Mitigation Measure	When?	By whom?
v. Reference and adherence to all the relevant precepts contained in SEPA Pollution Prevention Guidance paying particular attention to where further information can be found regarding oil storage, safe storage - drums and intermediate bulk containers, and the use of oil separators in surface water systems (including the restrictions due to use of detergents).	Construction Phase	Principal Contractor to deliver
vi. A discharge consent, issued under the Water (Scotland) Act 1980, is required for any discharges to the Aquatic Environment and may be required for Site Drainage during the construction stages of the development. Reference to Standing Advice Discharges to the Water Environment.	Construction Phase	Principal Contractor to deliver
vii. Reference and adherence to all the relevant precepts contained in Standing Advice Discharges to the Water Environment.	Construction Phase	Principal Contractor to deliver
viii. Guidance for Pollution Prevention (GPPs) {Replacing Pollution Prevention Guidelines (PPGs)} are a series of documents developed by the Scottish Environment Protection Agency (SEPA) for Scotland. The GPPs/PPGs make reference to environmental legal obligations and are an acknowledged source of best practice guidance for pollution prevention across different sectors used as a source of information and good practice. **Appendix F details GPP 1 October 2020 in full for convenience**. **A full list of PPG/GPPs are set out at the end of this section and will be adhered to as appropriate.**	Construction Phase	Principal Contractor to deliver
ix. The contractor will adopt a site specific Emergency Response & Environmental Plan (**Appendix G** of this **OCEMP** provides a template than can be adopted and used) in accordance with PPG6, appoint a responsible person and train operatives in implementation and testing of the Plan periodically throughout construction of the works. An Emergency Spill Response Plan, the content of which is included in this **OCEMP** (Please refer to **Appendix G**), will detail actions to be taken in the event of an accidental spillage of fuel, chemicals or other hazardous material.	Construction Phase	Principal Contractor to deliver
x. During the construction stage foul discharges will be collected and stored locally for removal off site. As such, no burden will be placed on any existing foul	Construction Phase	Principal Contractor to deliver

Mitigation Measure	When?	By whom?
infrastructure and no further mitigation measures are required.		
xi. Suitable training will be provided to relevant personnel detailed within the Emergency Response & Environmental Plan (Please refer to **Appendix G)** to ensure that appropriate and timely actions will be taken should an incident occur.	Construction Phase	Principal Contractor to deliver

The works will demonstrate adherence to good working practices as detailed in current guidance in the PPGs and GPPs below:

GPP 1: Understanding your environmental responsibilities - good environmental practices.

A basic introduction to pollution prevention, with signposts to other PPGs and publications. (October 2020)

GPP 2: Above ground oil storage tanks

For above ground oil storage, excluding oil refineries and distribution depots. (January 2018)

GPP 3: Use and design of oil separators in surface water drainage systems

For identifying where an oil separator is required and, if so, what size and type of separator is appropriate. (March 2022).

GPP 4: Treatment and disposal of wastewater where there is no connection to the public foul sewer

For selecting the correct sewage disposal, treatment and disposal options, and maintenance and legal requirements. Also, for what to have in mind, in terms of wastewater treatment, when buying a house. (November 2017).

GPP 5: Works and maintenance in or near water

For construction or maintenance works near, in, or over water. (February 2018)

PPG 6: Working at construction and demolition sites

For the construction and demolition industry. (2012)

PPG 7: Safe storage - The safe operation of refuelling facilities

For operators of liquid fuel refuelling facilities; it applies to all types of fixed refuelling facilities. (July 2011)

GPP 8: Safe storage and disposal of used oils

For storing and disposing of used oils. Applies to activities ranging from a single engine oil change to those of large industrial users. (July 2017)

PPG 18: Managing fire water and major spillages

For identifying equipment and techniques available to prevent damage to the water environment caused by fires and major spillages. (June 2000)

GPP 20: Dewatering underground ducts and chambers

For dewatering underground ducts and inspection chambers. (January 2018)

GPP 21: Pollution incident response planning

For producing emergency pollution incident response plans to deal with accidents, spillages and fires. (June 2021)

GPP 22: Dealing with spills

For anyone who is responsible for storing and transporting materials that could cause pollution if they spill. (October 2018)

GPP 26 Safe storage - drums and intermediate bulk containers

For site operators of industrial and commercial premises storing and handling drums and intermediate bulk containers (IBCs) containing oil, chemicals or potentially polluting substances. (February 2019)

PPG 27 Installation, decommissioning and removal of underground storage tanks

For installing, removing and decommissioning all underground storage tanks (USTs), including those containing petroleum, diesel, fuel oil, aviation fuel, waste oil, domestic heating oil and other potentially polluting materials such as organic solvents. (April 2002)

All of the PPGs and GPPS are downloadable in full from this link:

https://www.netregs.org.uk/environmental-topics/guidance-for-pollution-prevention-gpp-documents/guidance-for-pollution-prevention-gpps-full-list/

Due cognisance will also be given to the Water Environment (Controlled Activities) (Scotland) Regulations 2011. Main points are detailed below for convenience:

Water Environment (Controlled Activities) (Scotland) Regulations 2011;

Schedule 3;

General binding rules– Part 1;

Operating any vehicle, plant or equipment for the purposes of undertaking activities listed above;

- any vehicles, plant or other equipment must only operate in water where it is impracticable for them to operate on dry land;
- the refuelling of vehicles, plant or other equipment must be undertaken at least 10 metres from any surface water;
- any static plant or equipment used within 10 metres of surface water must be positioned on a suitably sized and maintained impervious drip tray with a capacity equal to 110 % of the capacity of the fuel tank which is supplying the tank or equipment;
- any vehicle, plant or other equipment used in or near surface water must not leak any oil;
- the washing of vehicles, plant or other equipment must be undertaken at least 10 metres away from any surface water and water from such washing must not enter any surface water;
- vehicles, plant or other equipment must not be operated in a river, burn or ditch during periods in which fish are likely to be spawning in the river, burn or ditch nor during the period between any such spawning and the subsequent emergence of the juvenile fish;
- vehicles, plant or equipment must not be operated in any part of a river, burn or ditch if there is a reasonable likelihood that, within 50 metres of such an operation, there are freshwater pearl mussels; and
- during forestry operations the operator must not operate machinery in watercourses

Discharge of water run-off from a surface water drainage system to the water environment from buildings, roads, yards or any other built developments, or construction sites for such developments, and, if desired, the construction and maintenance of any water outfall in or near to inland surface water which forms, or will form, part of that system;

- All reasonable steps must be taken to ensure that the discharge must not result in pollution of the water environment
- the discharge must not contain any trade effluent or sewage, and must not result in visible discolouration, iridescence, foaming or growth of sewage fungus in the water environment
- the discharge must not result in the destabilisation of the banks or bed of the receiving surface water
- the discharge must not contain any water run-off from any built developments, the construction of which is completed after 1st April 2007, or from construction sites operated after 1st April 2007, unless:

  - during construction those developments are drained by a SUD system or equivalent systems equipped to avoid pollution of the water environment;
  - following construction those developments are drained by a SUD system equipped to avoid pollution of the water environment;
  - the run-off is from a development that is a single dwelling and its curtilage; or
  - the discharge is to coastal water;
- the discharge must not contain any water run-off from:
  - fuel delivery areas and areas where vehicles, plant and equipment are refuelled;
  - vehicle loading or unloading bays where potentially polluting matter is handled; or
  - oil and chemical storage, handling and delivery areas;
- constructed after 1st April 2007:
  - all facilities with which the surface water drainage system is equipped to avoid pollution, including oil interceptors, silt traps and SUD system attenuation, settlement and treatment facilities, must be maintained in a good state of repair;
  - all reasonable steps must be taken to ensure that any matter liable to block, obstruct, or otherwise impair the ability of the surface water drainage system to avoid pollution of the water environment is prevented from entering the drainage system; and
  - the construction or maintenance of the outfall must not result in pollution of the water environment.

SEPA's Pollution Hotline Number

0800 80 70 60

It is recommended that in the event of a water pollution incident the SEPA pollution hotline is contacted within 30 minutes unless it is not safe to do so.

8.2 Unexpected Contamination

During construction works, should unexpected contamination be encountered in soils or groundwater with visual or olfactory signs of contamination, samples of the potentially contaminated material should be obtained and sent for chemical analysis. An updated risk assessment should be completed to assess risks to human health and environmental receptors. Should unacceptable risks be identified then appropriate remedial works will be conducted and agreement sought from the relevant regulatory bodies.

8.3 Marine Ecology

To be concluded upon the issue of the Marine Ecology report.

8.4 Noise and Vibration

8.4.1 Control of Noise at Source

There are many general measures that will be used to reduce noise levels at source. Such as:

- The avoidance of unnecessary revving of engines and switching off equipment when not required;
- Keeping internal haul routes well maintained and avoiding steep gradients;
- The use of rubber linings in, for example, chutes and dumpers reduce impact noise;
- The minimisation of drop heights; and
- Starting up plant and vehicles sequentially rather than all together.

The use of conventional audible reversing alarms can be a noise nuisance issue on some sites, the reversing alarms used on the proposed site will be of a type which, whilst ensuring that they give proper warning, has a minimum noise impact on persons outside the proposed site. Where practicable, alternative reversing alarm systems will be employed to reduce the impact of noise outside of construction sites.

Prior to the construction phase, the contractor shall review the specification for all plant and equipment to be employed on-site to ensure that the quietest plant/equipment available is to be used. Modifications to plant and equipment to improve sound reduction will be implemented if required, but any alterations shall be conducted in consultation with the plant manufacturer.

For steady state continuous noise, it may be possible to reduce noise by fitting a more effective silencer system or by an acoustic canopy to replace the normal engine cover, if the item of plant is in a stationary position. On-site generators supplying electricity for electric motors will be suitably enclosed and appropriately located.

Noise caused by resonance of body panels and cover plates will be reduced by stiffening with additional ribs or by increasing the damping effect with a surface coating of special resonance damping material. Rattling noises will be controlled by tightening loose parts and fixing resilient materials between surfaces in contact.

As far as reasonably practicable, sources of significant noise will be enclosed. The effectiveness of partial noise enclosures and of screens can be reduced if they are used incorrectly.

Care shall be taken to site equipment away from noise sensitive areas. Where possible, loading and unloading will also be carried out away from such areas. Machines shall not be left running unnecessarily. Plant from which the noise generated is known to be particularly directional should, wherever practicable, be orientated so that the noise is directed away from noise sensitive areas.

Materials shall be lowered whenever practicable and shall not be dropped. The surfaces on to which the materials are being moved will be covered by resilient material.

In order to minimise the likelihood of complaints, North Ayrshire Council and affected residents will be kept informed of the works to be carried out and of any proposals for work outside normal hours.

8.4.2 General Construction Noise Mitigations

In order to ensure that there is no unacceptable noise impact at the nearest noise sensitive receptors during the construction phase, construction phase noise levels should not exceed the appropriate daytime noise threshold limit specified in BS5228:2009+A1:2014 (i.e. 65dB daytime). It is assumed that there will be no evening or night-time construction phase activities.

A detailed construction plan should include a range of measures aimed at reducing the potential construction noise impacts on the nearest receptors to the proposed development site. This plan should address the mode and timing of construction activity in close proximity to the site boundary with the nearest receptors, aiming to reduce the noisiest activities in the vicinity of the boundary of the proposed

development. This should also include measures to communicate and coordinate construction phase activities at the nearest boundary to the most affected receptors so as to reduce these noise impacts to the lowest possible levels. The detailed construction plan will include the noise threshold limits included in British Standard BS5228:2009+A1:2014, which must be adhered to throughout the construction phase.

A range of measures should be taken to ensure that the quietest machinery is used or that the use of machinery is such as to be sensitive to the residents at the nearest properties. This should be detailed in the construction plan mentioned above.

British Standard BS5228:2009+A1:2014 – Noise and vibration control on construction and open sites outlines a range of measures that can be used to reduce the impact of construction phase noise on the nearest noise sensitive receptors. These measures will be applied by the contractor where appropriate during the construction phase of the proposed development.

Examples of some of the best practice measures included in BS5228 are listed below:

- ensuring that mechanical plant and equipment used for the purpose of the works are fitted with effective exhaust silencers and are maintained in good working order;
- careful selection of quiet plant and machinery to undertake the required work where available;
- all major compressors will be 'sound reduced' models fitted with properly lined and sealed acoustic covers which will be kept closed whenever the machines are in use;
- any ancillary pneumatic percussive tools will be fitted with mufflers or silencers of the type recommended by the manufacturers;
- machines in intermittent use will be shut down in the intervening periods between work;
- ancillary plant such as generators, compressors and pumps will be placed behind existing physical barriers, and the direction of noise emissions from plant including exhausts or engines will be placed away from sensitive locations, in order to cause minimum noise disturbance. Where possible, in potentially sensitive areas, acoustic barriers of enclosures will be utilised around noisy plant and equipment.
- Handling of all materials will take place in a manner which minimises noise emissions;
- Audible warning systems will be switched to the minimum setting required by the Health & Safety Executive;

In order to minimise the likelihood of complaints, North Ayrshire Council and affected residents must be kept informed of the works to be carried out and of any proposals for work outside normal hours. A complaints procedure must be operated by the Contractor throughout the construction phase. Best practice will therefore be implemented in order to minimise noise and vibration and comply with the contents and recommendations of the BS 5228 "Code of Practice for Noise Control on Construction and Open sites".

8.5 Air Quality

Construction impacts associated to the proposed development may result in the generation of dust and exhaust emission to the atmosphere. As a precaution the following mitigation measures may be adopted during the construction phase of the proposed development in order to control fugitive dust and emissions to air.

8.5.1 Communications

With respect to communications, the following will be implemented:

- Display the name and contact details of person(s) accountable for environmental issues on the site boundary. This may be the Project Manager or the Site Manager.
- Appropriate training will be provided to all staff to ensure that they are aware of and understand the dust control and other environmental control measures; and,

- Display the head or regional office contact information.

To be implemented before works commence on site and training given as appropriate by the principal contractor.

8.5.2 Site Management

With respect to site management, the following will be implemented:

- Weekly visual inspections of the site and site boundary for evidence of dust depositions will be made. A weekly dust inspection of the site will be undertaken by a suitable person, trained and nominated by the site manager. Increase frequency of site inspections will be undertaken when activities with a high potential to produce dust are being carried out, such as breaking up of concrete, earthworks activities, power tool use and during prolonged windy or dry condition;
- Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken;
- Make the complaints record available to the relevant regulatory authorities when asked;
- Avoid site runoff of water or mud;
- Use covered skips; and
- No bonfires and burning of waste materials on site.

To be implemented during works as required by the principal contractor.

8.5.3 Earthworks

Earthworks are planned as part of the scheme including foundations (and associated excavation of soils and materials), creation of trenches and stockpiling. With respect to earthworks, the following will be implemented:

- Disturbance of the ground will be kept to a minimum wherever possible;
- Soil handling will be restricted during adverse weather conditions such as high winds or exceptionally dry spells;
- Minimise drop heights from loading or handling equipment/materials and use fine water sprays on such equipment wherever appropriate;
- Dampening methods will be used where necessary; and,
- Methods and equipment will be in place for immediate clean-up of spillages of dusty or potentially dusty materials.

To be implemented during construction period by the appointed contractor

8.5.4 Construction

Construction works planned as part of the scheme includes; complex will be a steel portal frame structure with a double pitched roof and will be cladded with coated metal cladding system. With respect to construction, the following will be implemented:

- Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place;
- Ensure bulk cement and other fine powder materials are delivered in enclosed;
- For smaller supplies of fine power materials ensure bags are sealed after use and stored appropriately to prevent dust;

- Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems; and,
- Cleaning of hard stand areas by personnel only or if required mechanical road sweepers (with water suppressant fitted) to clean any site hard stand area.

To be implemented during construction period by the appointed contractor

8.5.5 Vehicle Movement and Vehicle Emissions

As with any construction site, there are associated vehicle movement, emissions and plant use. With respect to vehicle movement and vehicle emissions, the following will be implemented:

- Transportation of aggregates and fine materials will be conducted in enclosed or sheeted vehicles;
- Ensure all vehicles switch off engines when stationary and not in immediate use - no idling vehicles (emissions to air controlled);
- All plant utilised should be regularly inspected (emissions to air controlled);
- Visual monitoring of plant will include: Ensuring no black smoke is emitted other than during ignition (emissions to air controlled);
- Ensuring exhaust emissions are maintained to comply with the appropriate manufacturers limits (emissions to air controlled); and,
- Vehicle exhausts will be directed away from the ground and other surfaces and preferably upwards to avoid road dust being re-suspended to the air.

To be implemented throughout by the principal contractor.

9 ENVIRONMENTAL RISK ASSESSMENTS

An example environmental inspection schedule is set out in **Appendix B**. An example incident report form is set out in **Appendix C**.

10 EMERGENCY RESPONSE & ENVIRONMENTAL PLAN

An emergency response & environmental plan is located in **Appendix G** of this document.

11 SITE WASTE MANAGEMENT PLAN

An example site waste management plan (SWMP) is located in **Appendix D** of this document.

12 FINAL COMMENT

The Contractor is required to develop and implement this Outline Construction Environmental Management Plan (OCEMP) to help ensure that construction activities are planned and managed in accordance with the environmental requirements identified within and the relevant guidance and legislation.

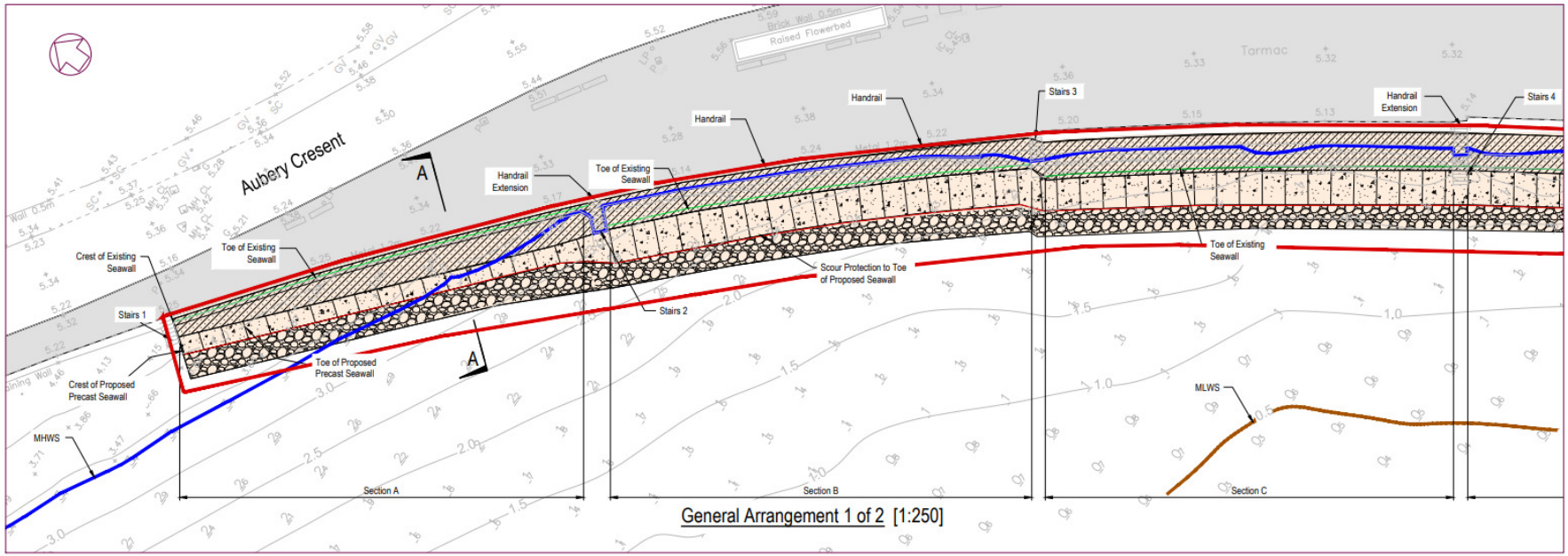
This is VERSION 01 of the OCEMP.

Future updates to the CEMP will be sequential and be saved as such (i.e. VERSION 02, 03 etc.) and shall be adopted on site in full.

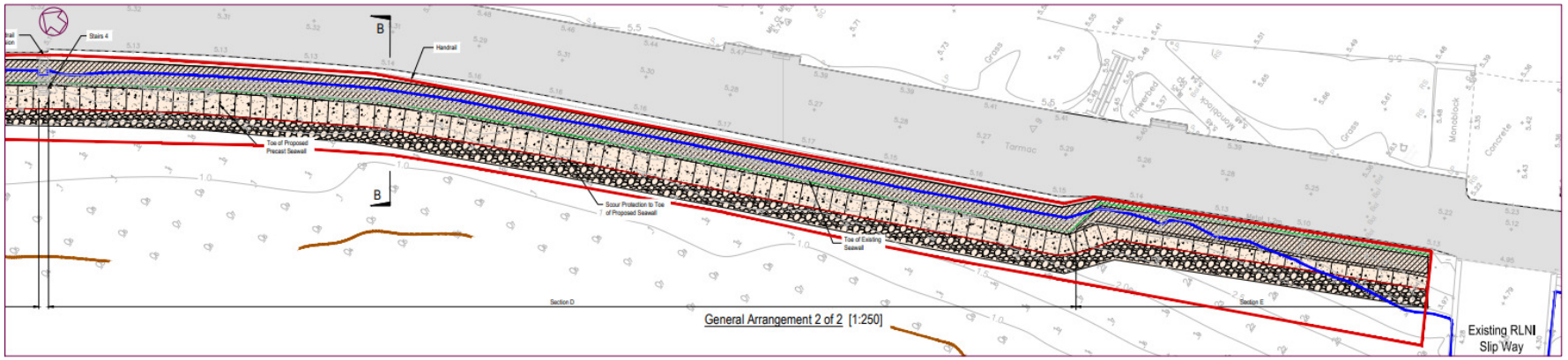
Appendix A

General Arrangement

General Arrangement North



General Arrangement South



Appendix B

Environmental Inspection Schedule

Environmental Inspection Schedule		**Site:**	
Inspected by:		**Date:**	
	Assessment Ratings *0 – Not in place = Non Compliance* *1 – In place but not full Compliance = Non Compliance* *2 – Full Compliance* ***Actions raised from this audit must be closed out within the agreed time scale with North Ayrshire Council.***	*0/1/2*	
1.0	***Emergency preparedness and incidents response***	*0/1/2*	*Comment*
1.1	*Is environmental response equipment held on-site?*		
1.2	*Where is it located?*		
1.3	*Is it all in working order?*		
1.4	*Can site staff operate the equipment?*		
2.0	***Environmental Incidents***	*0/1/2*	*Comment*
2.1	*Have any incidents been reported?*		
2.2	*Have all such incidents been investigated?*		
2.3	*Have they all been documented?*		
2.4	*Have all relevant parties been made aware of any incident?*		
2.5	*Has the Incident Report Form* **(Appendix *C)*** *been completed ?*		
3.0	***Hazardous Materials Storage***	*0/1/2*	*Comment*
3.1	*Are hazardous materials kept in secure areas?*		
3.2	*Are stores of fuels or oils bunded?*		

3.3	*Has any damage occurred to Mobile Bowsers or tanks?*		
3.4	*Are containers/drums labelled with content and capacity?*		
3.5	*Are drip trays empty of water ?*		
3.6	*Are hoses inside bunds/cabinets ?*		
3.7	*Are spill kits fully stocked and have all staff been trained to use equipment ?*		
3.8	*Has an individual been appointed for the safe handling of fuels ?*		
4.0	***Waste minimisation***	*0/1/2*	*Comment*
4.1	*Are all waste containers covered and labelled?*		
4.2	*Is waste segregated correctly ?* *Do skips need to be emptied ?*		
4.3	*Have waste skips been located on-site?*		
4.4	*Are different waste types segregated for recycling?*		
4.5	*Are staff and contractors encouraged to recycle? Is relevant signage in place*		
4.6	*Has litter been removed from site and the external boundary*		
4.7	*Is all appropriate duty of care documentation in place i.e. waste licence, Carrier's licence all kept on file ?*		
4.8	*Does the external appearance of the site present a positive image of the industry?*		
4.9	*Does the site appear well organised, clean and tidy?*		

4.10	*Does the appearance of all facilities, stored materials, vehicles and plant make a positive impression?*		
5.0	***Water Discharges & Pollution Control***	*0/1/2*	*Comment*
5.1	*Are there any de-watering activities conducted on-site?*		
5.2	*Any visible signs of spillage on site (fuel, oil, lubricants etc)? Including from machinery and plant.*		

5.3	*PPG/GPP guidance being followed as stipulated in CEMP/CEMP ?* ***1.Annotated Sketch if appropriate of any spillage and clean up detailed***		
6.0	***Site Boundary & Access***	*0/1/2*	*Comment*

6.1	*Site boundary fencing in place ?* *No visible signs of breaches*		
6.2	*Site signage and information boards in place ?*		
6.3	*Appropriate sign in followed and appropriate health and safety followed ? Hi-vis, boots, hard hat worn for site visit. Appropriate PPE and H&S recommendations for this site in particular.*		
7.0	***Land contamination***		
7.1	*Has any unforeseen historical land contamination been discovered on-site?* *IF yes, please detail.* ***Annotated Sketch if Appropriate***		
7.2	*Has this been managed?* ***Please detail***		

8.0	Site Photographs – labelled, detailed and saved on file
8.1	**SITE PHOTOS TO BE TAKEN DURING CONSTRUCTION PHASE (From first commencement of works). These will include; boundary photographs, internal roadways, fuel storage areas, pollution control in place (inc. spill kits), spills, waste storage areas, recycling signs, machinery.**
8.2	*Have site photos been taken of any specific environmental incidents ? If yes please details:*
8.3	*Have site photos been stored on file, labelled and dated ? Please ensure this is completed*

Corrective Action Plan relating to this environmental inspection schedule:						
		Site :	**Actionee**	**Target date (if not immediate)**	**Close out by Actionee**	**Issue dealt with ? Y/N**
	Count	Proposed Corrective Action				
	1					
	2					
	3					
	4					
	5					
	6					
	7					
	8					
	9					
	10					
Managers use only		**Follow up Action from Incidents?**		**Closed out by Manger**		
Acknowledged		Signed:		Signed:		

PLEASE KEEP ON FILE with other completed environmental inspections

Appendix B1

Complaints Form

	Complaints Form
	Make the complaints log available to the local authority when asked
1.	**Have any complaints been received? If so please detail**
2.	**The name and contact details of the complainant:**
3.	**Date and time of the complaint:**
4.	**Nature of complaint:**
5.	**Action taken to resolve issues:**
6.	**Date of complaint handover:**
7.	**Name of person addressing the complaint:** **Company:** **Signature:**

Appendix C

Incident Report Form

INCIDENT DATE	INCIDENT TIME	REPORT DATE	REPORT TIME

INCIDENT OWNERSHIP		
DIVISION	SUB-DIVISION	UNIT OR DEPT

DESCRIPTION OF WHAT HAPPENED

EXACT INCIDENT LOCATION			
On or Off Site		**Location**	**Sub-Area**

PERSON INVOLVED

CATEGORY OF PERSON [✓]											
Employee	[ ]	Contractor	[ ]	Visitor	[ ]	Environmental	[ ]	Mem of. Public	[ ]		

NATURE OF INVOLVEMENT [✓]					
Witness	[ ]	First Person on Scene	[ ]	Other	[ ]

PERSON'S NAME					
Name:	Mr/Mrs/Miss/Ms	First Name:		Last Name:	

OTHER INFORMATION

Site Manager in attendance (if applicable)						
Reported in Duty Log/Site Book?	Yes	[ ]	No	[ ]	N/A	[ ]

TYPE OF INCIDENT [✓]					
Breach of Limits/Licence Cond.	[ ]	Oil & Chemical Storage	[ ]	Spillage/Spillage Response	[ ]
Waste Storage & Disposal	[ ]	Serious Public/Other Complaint	[ ]	Water Abstraction/Disposal	[ ]
Third Parties and Supply Chain	[ ]	Smoke, Fumes & Odours	[ ]	Natural Envnment & Wildlife	[ ]
Light Pollution	[ ]	Noise Nuisance	[ ]	Other	[ ]
If "Other" please describe:					

Is this a reportable incident?	Yes [ ]	No [ ]	Unknown [ ]
If "Yes" which agency			

What are the actual or foreseeable potential consequences known at this time? [✓]					
Prosecution	[ ]	Enforcement Notice (Imp/Proht)	[ ]	Civil Claim	[ ]
Clean-up/Restoration	[ ]	Breach of Licence Requirements	[ ]	Adverse Publicity/Reaction	[ ]
Adverse Customer Reaction	[ ]	Contamination of Water	[ ]	Habitat or Species	[ ]
Health Effects	[ ]				

Please provide any other relevant information

What immediate actions have been taken?

INCIDENT REPORTED BY		
Name	Telephone No.	Date

Appendix D

Example Site Waste Management Plan (SWMP)

In the course of the Project, it is estimated that the following quantities of C & D Wastes/material surpluses will arise:

C & D Waste Material	**Quantity** (tonnes)
Clay and Stones	To be completed for Final CEMP
Concrete	To be completed for Final CEMP
Masonry	To be completed for Final CEMP
Wood	To be completed for Final CEMP
Packaging	To be completed for Final CEMP
Hazardous Materials	To be completed for Final CEMP
Other Waste Materials	To be completed for Final CEMP
TOTAL Arisings	To be completed for Final CEMP

Proposals for Minimisation, Reuse and Recycling of C & D Waste

a. **C & D Waste will arise on the Project mainly from excavation and unavoidable construction waste/material surpluses/damaged materials.**

b. **The Contractors Purchasing Manager etc. shall ensure that materials are ordered so that the quantity delivered, the timing of the delivery and the storage is not conducive to the creation of unnecessary waste.**

c. **Excavated soils will be carefully stored in segregated piles on the site for subsequent re-use/removed from site for direct beneficial use elsewhere.**

d. **Concrete waste will be recycled where possible or source segregated/collected in receptacles with mixed C & D Waste materials, for subsequent separation and recovery at a remote facility.**

e. **Masonry and wood will be source segregated/collected in receptacles with mixed C & D Waste materials, for subsequent separation and recovery at a remote facility.**

f. **Packaging will be source segregated for recycling or return to suppliers.**

g. **Hazardous wastes will be identified, removed and kept separate from other C & D Waste materials in order to avoid further contamination.**

h. **Other C & D Waste materials will be collected in receptacles with mixed C & D Waste materials, for subsequent separation and disposal at a remote facility.**

Excavation soils and C & D Waste-derived aggregates are considered suitable for certain on-site construction applications. It is proposed that the following quantities, corresponding to all C & D Waste arisings from the project, will be used within the works and beyond the site confines:

Standard form that will be completed by the contractor on-site: Proposals for Beneficial Use/Management of C & D Material Surpluses/Deficits and Waste Arisings on and off the Project

C & D Waste Type	**Clay and Stones** (t)	**Concrete** (t)	**Masonry** (t)	**TOTALS**
Proposed Use				
Earthworks	To be completed for Final CEMP			
General Fill/Hardcore				
Pipe Bedding				
Selected Trench Backfill				
Fill to Structures				
Beneath Paths Structure				
Beneath Road Structure				
Other Site Use A				
Other Site Use B				
Off-Site Use				
TOTAL				

It is anticipated that waste materials will have to be moved off site. It is the intention to engage specialist waste service Contractors (as required), who will possess the requisite authorisations, for the collection and movement of waste off-site, and to bring the material to a facility which currently holds a Waste Licence/Waste Permit. Accordingly, it will be necessary to arrange the following waste authorisations specifically for the Project:

Specific Waste Authorisations Necessary for the Scheme

Authorisation Type	Specific Need for Project (Yes/No?)	
Waste Licence	Yes	No
Waste Permit	Yes	No
Waste Collection Permit	Yes	No
Transfrontier Shipment Notification	Yes	No
Movement of Hazardous Waste Form	Yes	No

Assignment of Responsibilities

a. **The appointed contractor shall be designated as the Responsible Person and have overall responsibility for the implementation of the on-site Waste Management Plan.**

b. **The Responsible Person will be assigned the authority to instruct all site personnel to comply with the specific provisions of the Plan.**

c. **At the operational level, a site manager/foreman from the main contractor and appropriate personnel from each sub-contractor on the site shall be assigned the direct responsibility to ensure that the discrete operations stated in the Waste Management Plan are performed on an on-going basis.**

Training

a. **Copies of the Waste Management Plan will be made available to all personnel on site (as required).**

b. **All site personnel and sub-contractors will be instructed about the objectives of the Waste Management Plan and informed of the responsibilities which fall upon them as a consequence of its provisions.**

Site Waste Management Plan **Checklist**

Planning and preparation

- ☐ Have you set aside time to prepare your SWMP?
- ☐ Have you considered the construction methods and materials that you can use to reduce the amount of waste your project produces?
- ☐ Have you thought about ordering materials that have less or reusable/returnable packaging?
- ☐ Have you recorded all of your waste reduction decisions in your plan?

Allocation responsibility

- ☐ Has someone with authority been assigned overall responsibility for the SWMP?
- ☐ Have you included a declaration from the client and principal contractor in your SWMP?

Identifying your waste

- ☐ Have you assessed the waste produced at each stage of the project- the types, how much and when, including the processes involved?
- ☐ Have you identified which workers will produce waste?

Managing your waste

- ☐ Has an area of the site been set aside for storing new materials and waste, including separate containers for different types of waste? You must store new materials separately from waste, and make sure storage areas are secure against vandalism.
- ☐ Have you set targets for the different types of waste likely to be produced by the project? Include targets for the amounts of each waste type to be reused, recycled and disposed of.
- ☐ Have measures been put in place to deal with expected and unexpected hazardous waste?
- ☐ Have you considered whether you can reuse materials either on-site or off-site?
- ☐ Have you considered on-site and off-site processing and reuse of materials?

Disposing of your waste

- ☐ Have you considered how you will dispose of liquid wastes such as wash-down water and lubricants?
- ☐ Have you got agreement from your water and sewerage operator for trade effluent discharge?
- ☐ Are you complying with your duty of care, including waste transfer notes or consignment notes for all movements of waste from your site and checking the details of those removing the waste?
- ☐ Has someone been made responsible for checking that loads of waste leaving your site are accurately described, and waste transfer notes and consignment notes completed correctly?
- ☐ Have you checked that every waste carrier you use is registered with your environmental regulator?
- ☐ Have you checked that all sites receiving your waste have the appropriate permits, licences or registered exemptions?
- ☐ Have you identified your nearest waste sites? Use our Waste Directory (http://ww.netregs.org.uk/library_of_topics/waste/waste/_site_directories.aspx).
- ☐ Have you considered how to reduce disposal costs by reusing or recycling waste materials with a commercial value?

Organising materials and waste

- ☐ Have you assessed the quantities of materials you need to order to reduce over-ordering and site waste?
- ☐ Can you return unused materials to the supplier, sell them or use them on another job?
- ☐ Have you considered using recycled materials?
- ☐ Can you return unwanted packaging to the supplier for reuse or recycling?
- ☐ Will you separate different types of waste to enable you to get best value from good waste management practices?
- ☐ Have you labelled containers and skips clearly to avoid confusion? Colour coding you containers could help.
- ☐ Are your storage areas secure and weatherproof to prevent wind and rain damaging your materials?

- ☐ Have you covered or nettled any loose materials to prevent them being spread and possibly causing pollution?
- ☐ Is everyone who will handle waste aware of the SWMP requirements?

Communicating and training

- ☐ Have you planned site inductions and toolbox talks for all site staff?
- ☐ Are contractors and subcontractors trained and aware of their responsibilities?
- ☐ Have contractors and subcontractors understood and agreed the SWMP?
- ☐ Are SWMP requirements built into contracts?
- ☐ Are you carrying out spot checks and monitoring your staff regularly to make sure they are following procedures?

Measuring and monitoring your waste

- ☐ Are you updating your plan every time waste is removed from your site?
- ☐ Are you checking the SWMP regularly and making sure targets are being reached?
- ☐ Are the agreed waste management procedures being checked and monitored regularly?
- ☐ Are you producing regular reports on waste quantities, treatment/disposal routes and costs?
- ☐ When construction is underway, are you making notes of problem and recording them for your next plan?

Appendix E

Construction Method Statement

The Appointed Contractor is aware of Scottish Environmental Legislation and will ensure the following measures are taken:

1. The handling, use and storage of hazardous materials will be undertaken in line with the Pollution Prevention Guidelines (e.g. PPG2 above Ground Oil Storage Tanks).
2. All site operatives will receive a Site Induction which includes Health & Safety, Waste & Environmental details (Pollution Prevention Requirements) and Quality Management Procedures.
3. Regular Environmental Toolbox talks will be delivered on site - at least one per week.
4. ***A named person*** has been nominated as the responsible person for pollution prevention on site.
5. ***The Appointed Contractor*** will have spill kits on site and all concerned will be briefed during site inductions on the contents and their use.
6. A spill kit will be on hand during fuel deliveries
7. ***The Appointed Contractor*** will manage any waste arising on site and ensure it is kept to a minimum
8. ***The Appointed Contractor*** will keep in touch with weather forecasts throughout the project and take appropriate action.
9. Daily site inspections will be carried out to check for pollution incidents and/or potential problems.
10. Times for deliveries will be controlled to avoid major disruption to neighbouring traffic.
11. The site manager/site foreman will be on hand to supervise deliveries.
12. Any drums, containers and/or tanks whether used for deliveries to site or on site will be inspected and verified as fit for purpose before accepted to site or used on site.
13. Any plant wheel and/or boot washing will be sited at least 10 metres from the waterbody on the site periphery.
14. There will be no oil or fuel stored on site.
15. Appropriate fuel transfer techniques will be employed such as fuel transfer pumps, drip trays and spill kits.
16. ***The Appointed Contractor*** will Inspect and maintain on a regular basis all temporary and permanent drainage systems and water courses.

Protection of Surface Waters

During construction, protection measures to control the risk of pollution to surface waters will be adopted, these will include:

a. Any containers of contaminating substances on site will be leak proof and kept in a safe and secure building or compound from which they cannot leak, spill or be open to vandalism. No fuel will be stored on site and areas for transfer of contaminating substances will be sited at least 10m away from any surface watercourse and will be located away from any drains leading to a watercourse.

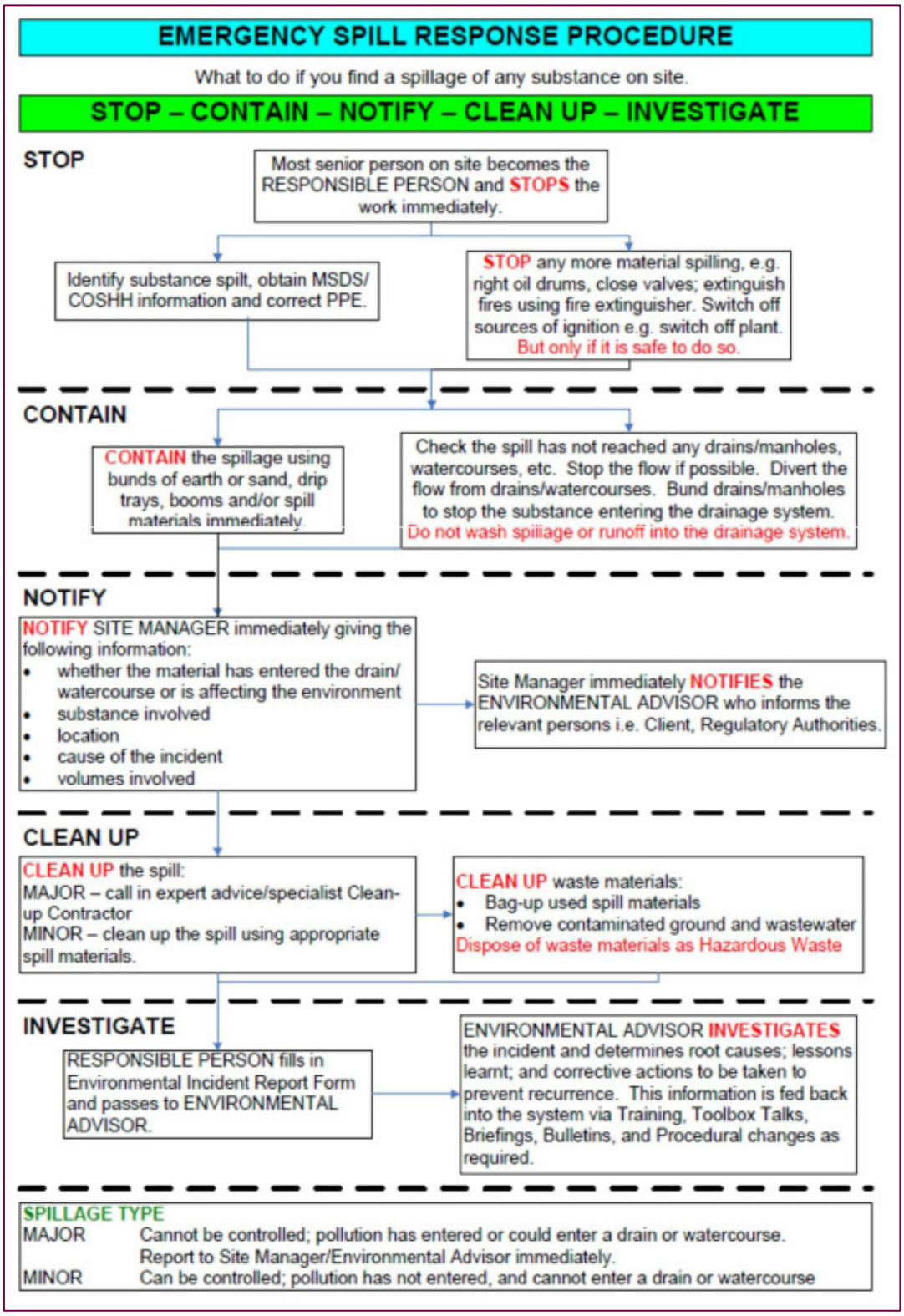
b. All refuelling, oiling and greasing will take place at least 10 metres away from the watercourse, above drip trays or on an impermeable surface (when available) which provides protection to underground strata and watercourses and away from drains. Vehicles will not be left unattended during refuelling.

c. Only construction equipment and vehicles free of oil/fuel leaks which could cause contamination will be permitted on site.

d. There will be regular inspections of machinery on site.

Appendix F

Pollution Prevention Plan


EMERGENCY SPILL RESPONSE PROCEDURE
What to do if you find a spillage of any substance on site.
STOP – CONTAIN – NOTIFY – CLEAN UP – INVESTIGATE
STOP
Most senior person on site becomes the RESPONSIBLE PERSON and STOPS the work immediately.
Identify substance spilt, obtain MSDS/ COSHH information and correct PPE.
STOP any more material spilling, e.g. right oil drums, close valves; extinguish fires using fire extinguisher. Switch off sources of ignition e.g. switch off plant. But only if it is safe to do so.
CONTAIN
CONTAIN the spillage using bunds of earth or sand, drip trays, booms and/or spill materials immediately.
Check the spill has not reached any drains/manholes, watercourses, etc. Stop the flow if possible. Divert the flow from drains/watercourses. Bund drains/manholes to stop the substance entering the drainage system. Do not wash spillage or runoff into the drainage system.
NOTIFY
NOTIFY SITE MANAGER immediately giving the following information:
whether the material has entered the drain/ watercourse or is affecting the environment
substance involved
location
cause of the incident
volumes involved
Site Manager immediately NOTIFIES the ENVIRONMENTAL ADVISOR who informs the relevant persons i.e. Client, Regulatory Authorities.
CLEAN UP
CLEAN UP the spill:
MAJOR – call in expert advice/specialist Clean-up Contractor
MINOR – clean up the spill using appropriate spill materials.
CLEAN UP waste materials:
Bag-up used spill materials
Remove contaminated ground and wastewater
Dispose of waste materials as Hazardous Waste
INVESTIGATE
RESPONSIBLE PERSON fills in Environmental Incident Report Form and passes to ENVIRONMENTAL ADVISOR.
ENVIRONMENTAL ADVISOR INVESTIGATES the incident and determines root causes; lessons learnt; and corrective actions to be taken to prevent recurrence. This information is fed back into the system via Training, Toolbox Talks, Briefings, Bulletins, and Procedural changes as required.
SPILLAGE TYPE
MAJOR Cannot be controlled; pollution has entered or could enter a drain or watercourse. Report to Site Manager/Environmental Advisor immediately.
MINOR Can be controlled; pollution has not entered, and cannot enter a drain or watercourse

GPP 1: A general guide to preventing pollution

Guidance for Pollution Prevention

Name: GPP 1

Date 30/10/2020

These guidelines are produced by the environmental regulators Natural Resources Wales (NRW), the Northern Ireland Environment Agency (NIEA) and the Scottish Environment Protection Agency (SEPA).

For Northern Ireland, Scotland and Wales, this document provides guidance on environmental legislation.These guidelines are not endorsed by the Environment Agency for use in England however you may find them useful. For guidance on environmental regulations in England go to www.gov.uk

To find the relevant regulations visit www.legislation.gov.uk

Guidance for Pollution Prevention documents are based on relevant legislation and reflect current good practice. Following these notes will help you manage your environmental responsibilities to prevent pollution and comply with the law.

If you cause pollution or allow it to occur, you may be committing a criminal offence. Following these guidelines will help you reduce the likelihood of an incident. If one does occur contact your environmental regulator immediately on the hotline number 0800 80 70 60

SECTION 1

1.1 Legal compliance

The basis of any good environmental performance is compliance with environmental regulations. You must be aware of your environmental responsibilities and make sure that you operate in a completely legal way.

Non-compliance brings the risk of enforcement action, possible fines and real damage to your reputation as a business.

1.2 Save money

Good environmental performance includes reducing waste, minimising energy and water use and taking steps to reduce other environmental impacts that your business might have. This creates a leaner and more efficient business with lower costs.

1.3 Manage risk

Businesses which manage the risks to their success are often better prepared to deal efficiently with problems when they happen. Managing risks gives you peace of mind and maximises your chances of running a successful business.

1.4 Enhance your reputation

Legal compliance and implementing good practice will improve your reputation with customers and your neighbours. Your environmental credentials can help you win contracts; an increasingly relevant part of the tendering process for many sectors.

1.5 Why we need to protect our environment

Pollution occurs when substances released to water, land or to air have a harmful effect on our environment. It can affect our drinking water supplies, people's health, business activities, wildlife and habitats, and our enjoyment and use of the environment. You might not see it, but you can pollute it.

Pollution can happen accidentally or deliberately, and can come from a single place (point source) or from lots of different, possibly unknown and unconnected sources (diffuse sources).

Many different substances can cause pollution – common examples include:

- fuels and oils
- chemicals
- sewage
- farm manure
- slurry
- detergents
- milk
- fire-fighting run-off.

You should understand your premises and how your activities could affect the environment and cause pollution. Think about what pollution linkages you have.

Figure F2 Source, Pathway, Receptor

Your site and activities will only cause harm to the environment or people if you have all of these present: a source, a pathway and a receptor.

You should put in place measures to break the links or weaken the links between potential sources, the pathways and the final receptor.

By doing this, you can identify how to prevent or reduce the likelihood of pollution and reduce the impact of any problems which may occur.

SECTION 2

2.1 Where does “dirty water” come from?

Where does “dirty water” come from?

Almost all premises produce dirty water which could cause pollution if it enters rivers, streams, ditches or groundwater.

Dirty water comes from:

- Kitchens
- Bathrooms
- Toilet and laundry facilities
- Vehicle washing
- Rainwater run-off from dirty areas of your premises Rainwater run-off: spills from storage and delivery areas
- Liquid wastes or trade effluents from your business activities.

Many premises also store liquid materials such as chemicals, fuels and oils, milk or fertilisers which can spill, leak or release their contents if there is a fire or flood.

To protect your environment from spills, leaks and other accidents it is very important that you make sure that you know where your drains are, and where they go.

2.2 Drains - why are they important?

Drains are common pathways for dirty water to enter the environment and cause pollution. This can happen through wrong connections, spills and leaks, fires and poor or inadequate maintenance.

Your site can have two types of drain: surface water drains, and drains that connect to the sewer.

You must not allow dirty water to enter surface water drains

To reduce the risk of pollution, you should know where your drains are, where they go and correct any problems you may find, such as wrongly-connected pipes.

If you make changes to your premises, such as building an extension or changing activities, you should understand your drainage systems so you can manage these changes safely, cost-effectively and without causing pollution.

If you want to discharge anything other than clean rainwater runoff from your site onto land, or into a watercourse you must contact your environmental regulator (SEPA) and get permission. You will probably have to treat any dirty runoff before you can discharge it. Contact details are at the end of this document. If you want to put dirty water into a sewer, you must contact your water and sewerage provider.

2.3 Where do your drains go?

All premises should have a drainage plan.

This will show where **surface water drains** are located and where they discharge to any nearby ditches, streams, rivers or other watercourses. This includes storm drains.

It will also show where **drains that connect to the sewer** are located. These can be sewers that remove dirty water only, or combined sewers, which take dirty water and runoff from some surface water drains to the sewage treatment plant.

This information should be available when you need it:

- when you plan activities on your site,
- when you to carry out inspection and maintenance of your drains
- when contractors or visitors need this information.

You can get help to work out where your drains are, and where they go, from:

- your sewerage provider
- your landlord
- a drainage consultant.

Produce a clear plan of your site, with all the drains identified, and include the direction of the drain, where it leaves your premises and where it goes. Include any nearby watercourses in your plan.

Colour code manhole covers and drains, **red for drains that lead to the sewer** and **blue for drains that lead to surface water.** This can prevent accidental contamination of the surface water drain.

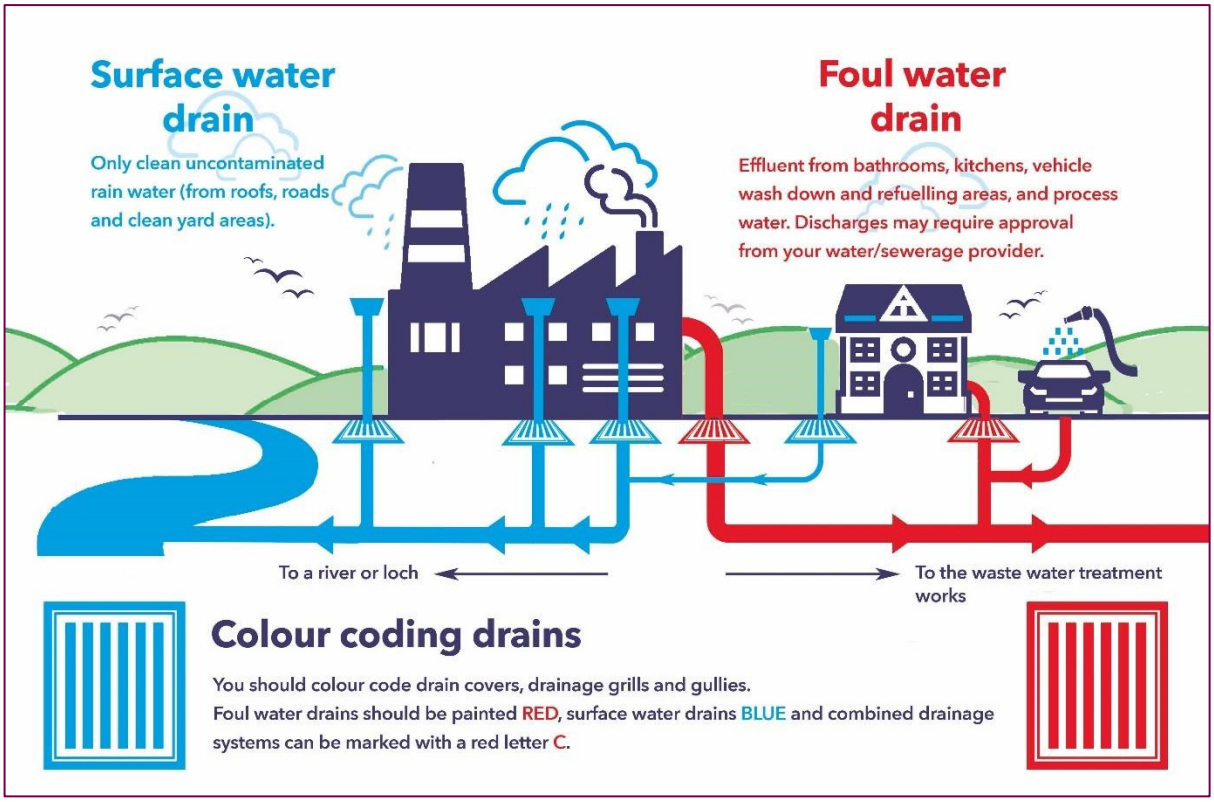


Figure F3: Surface Water and Foul Water Drainage

2.4 On site treatment facilities

You might have treatment facilities on your site, such as septic tanks, package treatment plants or oil separators. Make sure that these are maintained properly as they can be a source of pollution if they are not working correctly.

Manufacturers will provide information on how to maintain these facilities, you should make sure you have this information available so you can correct any problems, or if you need to change your site layout.

2.5 SuDS

You might also use Sustainable Drainage Systems (SuDS) to treat lightly contaminated water that runs off your site. Speak to your environmental regulator before installing SuDS. It is important to make sure the system is properly maintained. SuDS can treat runoff where there is a possibility that runoff will collect light contamination, for example from car parks, and will trap and help break down these pollutants. SuDS will also reduce the risk of downstream flooding, and can add green space to built-up areas.

SuDS require a certain amount of land, and are not possible on every site. If you are designing new premises then consider SuDS from the outset. In Scotland all new developments (but not single dwellings) must include SuDS for the treatment and attenuation of surface water runoff.

If you wash or clean vehicles on site then make sure runoff from this activity does not go into surface water drains. Make sure that you have permission from your sewerage provider if you want to discharge this runoff to the foul sewer.

2.6 More information on drainage

All GPPs can be found at: https://www.netregs.org.uk/environmental-topics/pollutionprevention-guidelines-ppgs-and-replacement-series/guidance-for-pollutionprevention-gpps-full-list/

- GPP 13 Vehicle washing and cleaning.
- GPP 3 Use and design of oil separators in surface water systems
- GPP 4 Treatment and disposal of wastewater where there is no connection to the public foul sewer
- GPP 5: Works and maintenance in or near water.
- NetRegs SuDS https://www.netregs.org.uk/environmentaltopics/water/sustainable-drainage-systems-suds/

SECTION 3

You might store a number of different materials at your premises. Even materials that you think of as safe can cause serious damage to the environment.

Think of all the materials that arrive on your premises, including those delivered, collected, stored and handled by staff, and also by visitors or contractors.

Oils and chemicals are obvious sources of potential environmental harm, but other materials such as food and drink products and detergents can cause significant pollution. For example a spill of milk can cause more harm to a watercourse than the same volume of sewage.

Remember, you have already paid for these materials, and if you lose a quantity of them you are losing money. You will then also have clean-up costs. You also want to avoid any health and safety problems which could affect people on your premises or people nearby.

3.1 Plan your storage areas

Make sure that you understand the risks associated with any materials you store on site. Suppliers will provide product information and highlight materials with particular risks associated with their storage or handling.

You must pay the same attention to the storage of waste, waste management companies can advise you about containers and storage areas.

Use your drainage plan to identify the safest places to store materials. Consider when and how you use these materials, and use this to plan your storage areas.

You should avoid storing materials:

- Near to open drains
- On bare ground; always use impermeable surfaces
- Anywhere near to watercourses, soakaways or other sensitive areas
- Anywhere there is a risk of flooding

Choose areas that are:

- Under cover – to prevent rainwater carrying pollutants away
- Bunded to prevent spills spreading
- In a safe place away from vehicles, to prevent collisions.

Leaks and spills can soak into unmade ground where there is a risk of pollution to groundwater. This can affect drinking water, and the clean-up can be a lengthy and expensive task.

Figure F4: Safe Storage, Bunded and Under Cover

3.2 Use suitable containers

Use containers that are suitable for the materials stored. Label them clearly and store them in a dedicated area.

Make sure your containers are in good condition by doing regular inspections. Any cracks or leaks can be dealt with before causing an incident.

Some materials must have specific storage, for example all kinds of oils and fuels.

Certain materials must be kept away from other materials to prevent reactions or fire.

Keep your storage areas secure, to prevent accidental damage, theft or vandalism.

You are responsible for clean-up costs even if the damage is caused by vandalism.

3.3 Contain leaks and spills

You can't completely avoid spills and leaks, so put in place measures to reduce their likelihood and severity. You should be able to catch minor spills, leaks or overflows from your containers or stores, and be able to clean them up easily and safely.

Consider installing and maintaining secondary containment, such as a bund wall, or using bunded pallets. It's good practice for your secondary containment to be able to hold more than your tank or container is able to hold, commonly called 110% containment. In some cases this is a legal requirement, such as when storing oils. Secondary containment gives you time to either correct or minimise the problem and to get help.

Figure F5: Bunded Storage Drums and Containers

You should inspect and maintain your secondary containment so it's still effective, such as sealing any cracks or holes, making sure any walls or floors are rendered impermeable, and safely removing any rainwater from the secondary containment. If you store fuels or other liquids in underground storage tanks (USTs) you must take care when installing these tanks, or when decommissioning or removing them. If not carried out properly, these activities can result in serious pollution of soil, groundwater and nearby water courses.

You and others on your premises should know where to find your spill kits, understand how to use them properly and understand how to store and use materials safely. Label your spill kits and check their contents regularly.

If you have a spill or any pollution incident, report immediately on **0800 807060** **(24 hours, 7 days a week)** – your environmental regulator can advise you on what to do, and can help to inform any other agencies that might be required.

3.4 Deliveries

Delivery and handling of materials can be risky, and delivery areas should be managed to prevent incidents.

Have procedures in place for safe deliveries, and make sure all your suppliers understand them. Supervise deliveries to make sure that procedures are followed.

Keep spill kits or appropriate clean-up equipment close to where deliveries are made, and make sure staff and suppliers understand how to use them.

Minimise the handling and movement of materials around your site by planning where deliveries take place. This reduces the risk of spills, and also saves time and money.

3.5 More information on storage of materials

All GPPs can be found at: https://www.netregs.org.uk/environmental-topics/guidance-for-pollution-prevention-gpp-documents/guidance-for-pollution-prevention-gpps-full-list/

GPP 2 Above ground oil storage tanks.

GPP 8 Safe storage and disposal of used oils

GPP 13 Vehicle washing and cleaning

GPP 21 Pollution Incident Response Planning

GPP 22 Dealing with spills

GPP 26 Safe Storage - drums and intermediate bulk containers

Section 4

4.1 Minimising your waste (Appendix D details an example SWMP)

Everything you buy and use on your premises might end up as waste, from food to packaging to off-cuts. Do you know what wastes are you generating at each stage of your activities?

Poorly managed wastes can pollute the environment, for example through illegal dumping or leaking into the ground or watercourses.

You have a responsibility – called **the duty of care** - to ensure you produce, store, transport and dispose of waste without harming the environment. This includes waste you produce directly and indirectly, such as waste produced by a contractor doing work on your behalf.

Wastes which are most hazardous to the environment or human health, such as solvents, asbestos and oils must be managed differently from other wastes. You have a legal duty to understand what types of waste you produce and how you need to manage them.

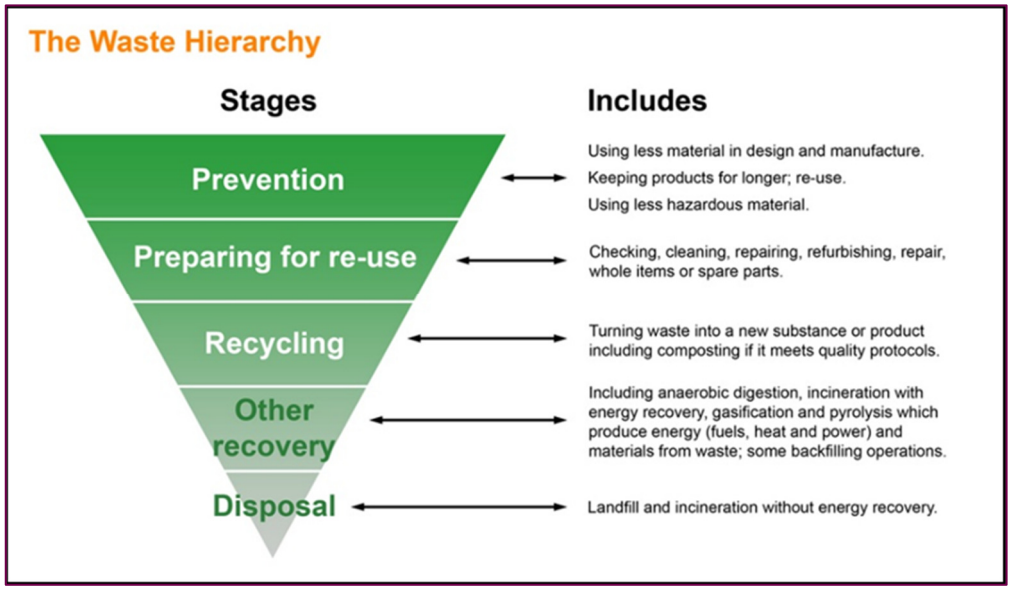


Figure F6: The Waste Hierarchy

Reduce

There are a number of ways to reduce the amount of waste you produce. This ranges from simple measures such as purchasing goods with less packaging or buying in bulk, not in individual packs, to entirely redesigning your products and processes to eliminate waste.

Reuse

Identify goods or materials that can be reused, perhaps with minimal cleaning and preparation. Design for re-use, e.g. your packaging.

Recycle

Items that can't be re-used can often have the materials they are composed of recycled. Items made of a single material are easier, however you may be able to find a cheap way of removing recyclable parts from more complex items.

Recover

Rather than dispose of materials to landfill, it is sometimes possible to recover some value from them, even if this is just heat from burning them. Energy from waste plants convert the waste into heat and power.

Dispose of.

The least desirable destination for waste. A last resort if all other options have been tried and have not been feasible.

4.2 Storage and handling

Store waste in secure containers. If they contain liquids, make sure they don't leak. Where appropriate keep waste in containers with lids. This will prevent the wind blowing waste around your site, and will keep the waste dry. Rain water could pick up pollutants from the waste and this contaminated water would need to be managed as a waste too. Also, for example, wet cardboard weighs more than dry, and if soaked you could end up paying extra to have this material removed from your site.

4.3 Segregate your wastes

In Scotland all businesses must segregate dry recyclable materials. Paper, cardboard, glass, metals and plastic must be segregated to allow for high quality recycling. Clearly label the containers for different materials, and make your staff aware so the right materials go into the right containers. Identify all the waste materials you produce, then identify those that can be reused or recycled.

4.4 Hazardous/special waste

Some types of waste, called 'hazardous wastes', or, in Scotland, 'special wastes', are very harmful to human health or to the environment. You must store, handle and dispose of these differently to non-hazardous wastes.

You must not mix different types of hazardous/special wastes together. Also, if you mix hazardous wastes with non-hazardous wastes then you must consider it all as hazardous/special waste. Consider the security of your premises too - any waste dumped on your property becomes your responsibility to remove, and it will cost you money.

4.5 Waste Disposal

You must only use a registered waste carrier to take your waste away. Check your environmental regulators website to find a list of all registered waste carriers. Ask where they will take your waste, and check that waste site is authorised to accept your type of waste. Not all waste management sites can accept all types of waste.

You can transport your own business waste to a site for recovery or disposal, but you will need to register with your environmental regulator. If waste is removed from your site you must complete a Waste Transfer Note, and keep your copy for 2 years. If the waste removed from your site is hazardous/special waste then you must complete a Consignment Note and keep your copy for at least 3 years.

4.6 More information on waste management

Check if a waste carrier is licensed:

Scotland: Registered waste carriers/transporters
https://www.sepa.org.uk/regulations/waste/waste-carriers-and-brokers/

Transfer Notes:

NetRegs: How to complete a waste Transfer Note

https://www.netregs.org.uk/environmental-topics/waste/duty-of-care-your-wasteresponsibilities/waste-transfer-notes-and-how-to-complete-them/

NRW: Completing waste transfer notes

https://naturalresources.wales/guidance-andadvice/environmental-topics/waste-management/completing-waste-transfernotes/?lang=en

NetRegs e-learning – How to complete a Waste Transfer Note, Consigning Hazardous/special waste, How to get the right EWC code

https://www.enetlearn.com/netregs?gl=475c726f-2dfb-4358-8d884b744169f509&r=1

Waste Minimisation:

WRAP: Waste reduction:

https://www.wrap.org.uk/category/subject/waste-reduction

SECTION 5

5.1 Preparation

Take time to consider all areas of your premises or site. Think about where things could go wrong and why. Consider fire, flooding, accidents, vandalism, leaks and spills and how materials and waste are moved around your premises.

Dealing with incidents mean significant disruption to your activities. The better prepared you are the less downtime you will experience. Preparing and incident response plan can save time and effort and will reduce the cost of dealing with an incident. Remember, you are responsible for any contractors working on your behalf, so you must make sure you give them clear work instructions and supervise them appropriately

5.2 Planning and training

The best way for you to cope when problems and emergencies arise is to plan. Well managed premises are less likely to have problems in the first place. You should create and implement an **incident response plan**. You may even have a legal responsibility to make a plan. It should include procedures to deal with problems and emergencies and importantly include a copy of your drainage plan.

5.3 Implement plans

Make sure everyone on your premises understands what to do in case of an emergency. Include advice to visitors and contractors. Keep a copy of your plan offsite, so you can always access it. Regularly train staff, and review your plans on a regular basis to make sure they are fit for purpose. Make sure the plan is updated if there are changes to you premises, or you change the materials or processes you carry out.

5.4 Flooding

You can check whether you are at risk from flooding on the flood maps available from your environmental regulator. You will also be able to sign up for free flood warnings direct to your phone.

5.5 Fire

Contact your local Fire and Rescue Service and ask them to visit and give you advice of fire safety and fire prevention. They can help you draw up a fire response plan for your premises.

5.6 Spill kits and pollution control equipment

Keep spill kits close to areas where there is a risk of spills, for example near to oil storage areas. Make sure these are maintained and restocked after any incident. Train staff in when and how to use them.

Have pollution control equipment that is appropriate to your site, your activities, and the risks they pose.

5.7 If you have an incident

Use the pollution hotline

0800 807060

(24 hours a day, 7 days a week)

Your environmental regulator can offer advice on what to do and can inform any other agencies that may be required.

5.8 More information on dealing with pollution incidents

All GPPs can be found at: https://www.netregs.org.uk/environmental-topics/pollutionprevention-guidelines-ppgs-and-replacement-series/guidance-for-pollutionprevention-gpps-full-list/

GPP 21 Pollution Incident Response Plans GPP 22 Dealing with spills

Flood maps and guidance

Scotland Flood Maps

https://www.sepa.org.uk/environment/water/flooding/flood-maps/

Scottish Fire and Rescue Service: Business safety advice

Fire and Rescue contact information

https://www.firescotland.gov.uk/

Appendix G

Emergency Response & Environmental Plan

The contractor will be responsible for the preparation and implementation of the spillage response procedure. The key issues to consider for the spillage response procedure include:

1. **If the main contractor already has a standard spill response procedure in operation then this should be amended to reflect the local conditions on site;**

2. **It will be important to ensure that the Environmental Manager is notified of all incidents where there has been a breach in agreed environmental management procedures;**

3. **As a general rule the following principles should apply In the event of an environmental emergency:**

    a. **If SAFE, stop the source of the spill and raise the alarm to alert people working in the vicinity of any potential dangers. Inform Engineer immediately**

    b. **IF SAFE (USE PPE), contain the spill using the absorbent spill material provided. Do not spread or flush away the spill. Cover or bund off any vulnerable areas where appropriate.**

    c. **If possible, clean up as much as possible using the absorbent spills materials. Do not hose the spillage down or use any detergents.**

    d. **Contain any used absorbent material so that future contamination is limited.**

    e. **Notify the Construction Project Manager and environmental officer so that used absorbent material can be disposed of using a specialist contractor.**

2. The Construction Manager, in conjunction with the contractor's environmental manager, will develop and test, through exercises, the Emergency Spillage Procedure to ensure that appropriate measures to prevent and mitigate damage due to accidents and spillages are in place.

3. Testing of the Emergency Spillage Procedure shall be recorded on the relevant environmental control form.

4. Inform all personnel about the spill response procedure through toolbox talks and/or induction training. Consider the need for refresher training on long-term construction projects.

5. Use reminder posters, identifying the key essential elements of the spill response procedure, located in appropriate areas such as fuel storage areas, mess cabins, security points or on the back of toilet doors.

6. Example control containment measures for different pollutants are given below:

Control/Containment Measure	Pollutants				
Spill on ground	**Concrete / cement**	**Paints**	**Oils**	**Silt**	**Detergents**
Sand	✓	✓	✓	×	✓
Straw bales	×	×	✓	✓	×
Absorbent granules	×	×	✓	×	×
Geotextile fence	✓	×	×	✓	×
Drip trays	×	✓	✓	×	×
Pads/rolls	×	×	✓	×	×
Drain seal	✓	✓	✓	✓	✓
Earth bunds	✓	✓	✓	✓	✓
Spill in water					
Straw bales	×	×	✓	✓	×
Pads/rolls	×	×	✓	×	×
Booms	×	×	✓	×	×
Stop further spill contain and inform appropriate personnel immediately	✓	✓	✓	✓	✓

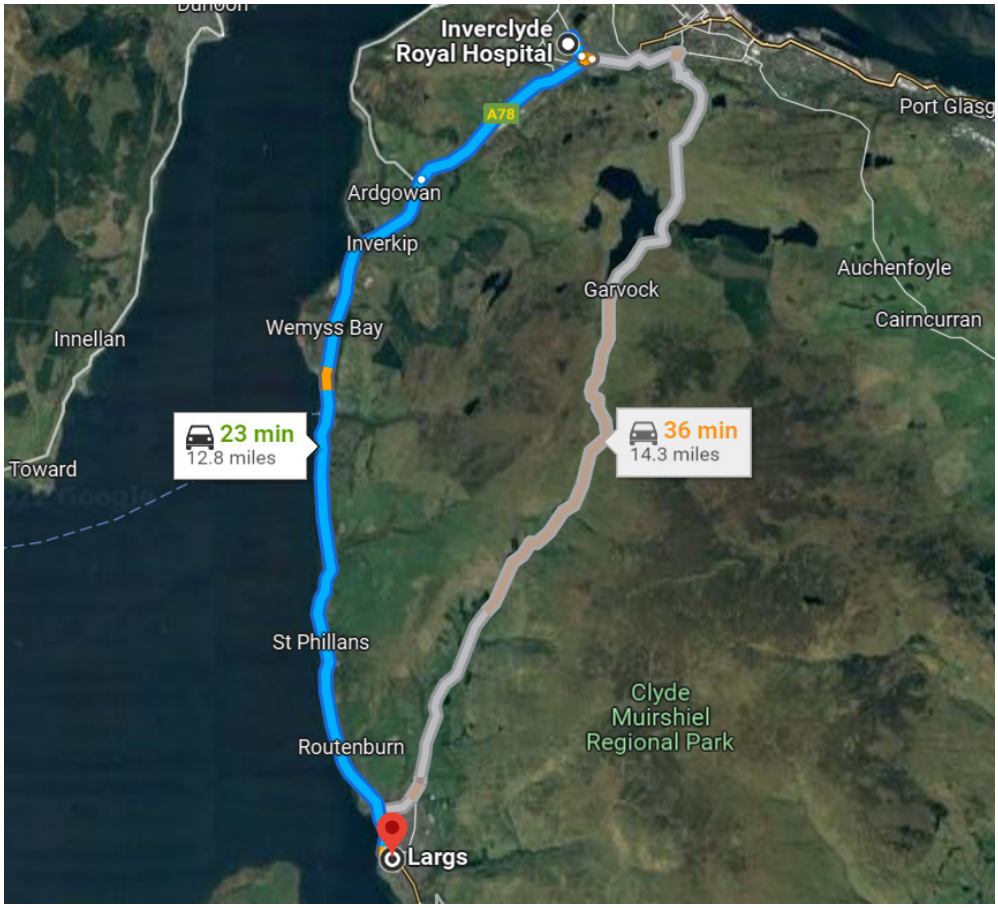
In the event of a significant spill contact the **SEPA Hotline (0800 80 70 60)**

It will be important to incorporate the names and telephone numbers of others you need to inform (includes alerting people out of hours) and who should contact them within the spillage response plan.

Further issues to be considered when the main contractor is preparing an emergency spill response plan include:

- Details of a professional 24 hour call-out clean-up service e.g.: Alpha Environmental Systems Ltd. Tel +44 (1506) 637340
- Ensure sufficient types and quantities of spill response equipment are available on site. Keep spill kits where spills may occur, e.g. at refuelling points or on plant working near a watercourse.
- Material safety data sheets and COSHH assessments will assist in identifying appropriate spill measures for dealing with hazardous materials.
- Dispose of used spill response material appropriately, e.g. oily granules or pads should be bagged up and placed in the designated waste skip.

IMPORTANT TELEPHONE NUMBERS

Emergency Contact Details	
Emergency Services	**999**
Nearest hospital – Inverclyde Royal Hospital, Larkfield Rd, Greenock PA16 0XN	
SEPA Environmental Incident Hotline	**0800 80 70 60** (Free 24 hr Emergency Hotline)

Contractor Contacts: (Out of Hours)	
Construction Director	TBC
Construction Manager/Site Manager	TBC
Environmental Manager	TBC

Incident response plan KEY POINTS (From: GPP 21: Pollution Incident Response Plans)

Procedure	Included?
Clearly define **when you will activate the plan**. This will depend on the nature of your site and the type of the incident.	
Ensure all relevant staff know how and when to **contact other emergency responders**: emergency services, environmental regulator, local authority, sewage undertaker and others identified in your plan.	
Agree **contact procedures**, if possible, with nearby properties, downstream abstractors, agricultural land or environmentally sensitive sites that could be affected by an incident on your site.	
Put in place **staff evacuation procedures** – your local authority emergency planning department will help you with these.	
Identify any special methods you need to deal with **substances** posing particular health or environmental risk.	
Train your staff in **the use of spill kits**, drain blockers and other pollution control equipment and the operation of pollution control devices.	
Identify procedures for recovering spilled product and the safe handling and **legal disposal of any waste** associated with the incident.	
Have staff available who are trained to deal with **media enquiries**.	

From: Guidance for Pollution Prevention Dealing with spills: GPP 22 October 2018 (Version 1)

PRINT OUT AND DISPLAY SIGN (To be located throughout site)

STOP

- Stop work immediately
- Stop the leak or elimimate the source of the spill
- Eliminate ignition sources and provide natural ventilation

CONTAIN

- Use pollution control equipment (e.g. spill kits, drip trays, bunds of earth and sand) to contain the spill
- Check the spill has not reched any drains, water courses or other sensitive areas
- Cover all drains / manholes to prevent the spill from entering the drainage system

NOTIFY

- Once the spill has been contained notify your emergency contact. Details at the bottom of the page:.

CLEAN-UP

- Attempt to soak up the spill using absorbent material
- Always follow your Duty of Care for waste when disposing of contaminated materials including spill kit/equipment.

EMERGENCY CONTACT DETAILS (Complete with your business details)

NAME	TELEPHONE	NEAREST SPILL KIT

SEPA's Pollution Hotline Number

0800 80 70 60