Bonneagar Iompair Éireann
Transport Infrastructure Ireland

NTA
Údarás Náisiúnta Iompair
National Transport Authority

Luas Finglas

Environmental Impact Assessment Report 2024

Appendix A6.6: Environmental Incident Response Plan

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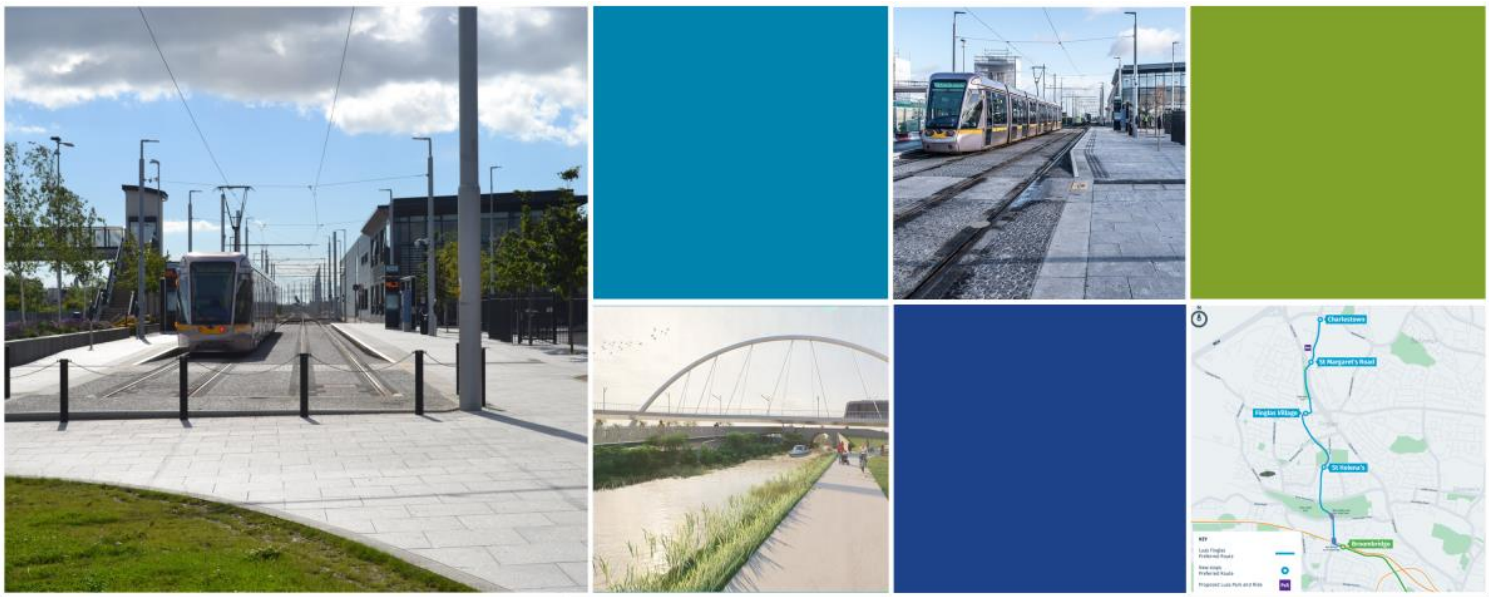
Preliminary Design & Statutory Process



EIAR
Appendix 6.6. Environmental Incident Response Plan

BARRY TRANSPORTATION

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GLOSSARY OF FREQUENTLY USED TERMS

Acronym	Term
CEMP	Construction Environmental Management Plan
CCTV	Closed-Circuit Television
C&D WMP	Construction and Demolition Waste Management Plan
DCC	Dublin City Council
DECC	Department of the Environment, Climate and Communications
DHLGH	Department of Housing, Local Government and Heritage
DMP	Dust Management Plan
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EIF	Environmental Incident Form
EIRP	Environmental Incident Response Plan
EM	Environmental Manager
EPA	Environmental Protection Agency
FCC	Fingal County Council
FRA	Flood Risk Assessment
ICW	Integrated Construction Wetland
NPWS	National Parks and Wildlife Service
SCI	Special conservation interest
SUDs	Sustainable Drainage Systems
SWMP	Surface Water Management Plan
TII	Transport Infrastructure Ireland
UÉ	Uisce Éireann (Irish Water)

SECTION 1: ENVIRONMENTAL INCIDENT RESPONSE PLAN

1.1 Introduction

This Environmental Incident Response Plan (EIRP) has been prepared to ensure that in the unlikely event of an incident, response efforts are prompt, efficient, and suitable for the particular circumstances. The EIRP details the procedures to be undertaken in the event of a significant release of sediment into a watercourse, or a significant spillage of chemical, fuel or other hazardous substances (e.g., concrete), non-compliance incident with any permit or licence, or other such risks that could lead to a pollution incident, including flood risks. The EIRP will identify the onsite risks and appropriate responses. The focus of including the measures in this EIRP is on prevention of the incident arising in the first place.

1.1.1 Objectives

The objectives of this EIRP are to:

- Ensure the health and safety of personnel and visitors along the proposed Scheme;
- Minimise any impacts to the environment and ensure protection of the water quality and the aquatic species dependent on it;
- Minimise any impacts on properties, services etc.; and
- Establish procedures that enable personnel to respond to incidents with an effort and in a manner that minimises the possibility of loss and reduces the potential for affecting health, property, and the environment.

1.1.2 Guidance

This EIRP has been prepared with regard to the following guidance documents, where relevant:

- Control of Water Pollution from Linear Construction Projects. Technical Guidance (C648) (CIRIA, 2006a);
- Control of Water Pollution from Linear Construction Projects. Site Guide (C649) (CIRIA, 2006b);
- Control of Water Pollution from Construction Sites. Guidance for Consultants and Contractors (C532) (CIRIA, 2001);
- A Framework for Emergency Management (Department of Housing, Local Government and Heritage, 2021); and
- Dublin City Council Major Emergency Plan 2015 (DCC, 2015).

1.2 Roles and Responsibilities

The EIRP will be reviewed and updated regularly so that it continues to apply to construction activities and is amended when applicable regulations are revised or when amendments are required by a regulatory authority. It will be the responsibility of the Environmental Manager (EM), or equivalent, as stipulated by the appointed contractor to maintain and change the EIRP as required. The EIRP may also require amendments from the various stakeholders or suppliers as the proposed Scheme progresses.

The appointed contractor shall provide a full list, including the exact locations, of all pollution control plant and equipment. All such plant and equipment shall be maintained in place and in working order for the duration of the works.

As part of the development and management of the EIRP, the appointed contractor will:

- Assess the pollution risks and develop emergency and spill response procedures for specific construction activities;
- Obtain details of key people that may need to be contacted for help in the event of an incident;
- Provide equipment for dealing with pollution incidents;
- Identify emergency access routes along the proposed Scheme;

- Train personnel to follow procedures and use equipment correctly;
- Audit the EIRP; and
- Take action following an incident to ensure that it does not occur again.

1.2.1 Contacts

The EIRP will detail the initial contact that should be made in case of an emergency incident as well as those responsible for following up once an emergency event is declared. To cover the full length of the proposed Scheme, more than one contact may be needed. The EIRP will indicate which contacts apply to which sections of the proposed Scheme.

Contact details will include the organisation, position title, name, mobile phone number and email address of relevant personnel. Numbers will be obtained for contacts, including the following:

- Radio / mobile contacts for management staff and trained personnel;
- Out-of-hours contacts;
- Environmental regulators (hotline or local contact);
- Local authorities;
- Fire Services;
- Uisce Éireann (UÉ) - Irish Water;
- National Parks and Wildlife Service (NPWS);
- Environmental Protection Agency (EPA);
- Department of the Environment, Climate and Communications (DECC);
- Department of Housing, Local Government and Heritage (DHLGH); and
- Spill response and clean-up contractors.

1.2.1.1 Training and Testing

Personnel will be trained on the implementation of the EIRP and how to use the necessary equipment such as spill kits. Emergency arrangements will need to be reviewed and tested periodically (and always after an incident) to ensure that measures are effective, and that the workforce is aware of what to do in the event of an incident. Emergency drills will be recorded, and improvements noted and actioned accordingly.

1.3 Environmental Emergency Response Procedures

1.3.1 General Pollution Control

Spill kits containing absorbent pads, granules and booms will be stored in the site compound with easy access for delivery to site in the case of an emergency. A minimum stock of spill kits will be maintained at all times and site forepersons' vehicles will carry large spill kits at all times. Absorbent material will be used with pumps and generators at all times, and used material disposed of in accordance with the Waste Management Plan. All used spill materials e.g. absorbent pads will be placed in a bunded container in the contractor's compound. The material will be disposed of by a licenced waste contractor at a licenced facility. Records will be maintained by the environmental manager.

Regular inspections and maintenance of plant and machinery checking for leaks, damage or vandalism will be made on all plant and equipment.

In the event of a spill, the principal contractor will ensure that the following procedure are in place:

- Emergency response awareness training for all project personnel on-site works;
- Appropriate and sufficient spill control materials will be installed at strategic locations within the site. Spills kits for immediate use will be kept in the cab of mobile equipment;
- Spill kits must include suitable spill control materials to deal with the type of spillage that may occur and where it may occur. Typical contents of an on-site spill kit will include the following as a minimum:
  - Absorbent granules;

- Absorbent mats/cushions;
- Absorbent booms; and
- Track-mats, geotextile material and drain covers.

- All potentially polluting substances such as oils and chemicals used during construction will be stored in containers clearly labelled and stored with suitable precautionary measures such as bunding within the site compound;
- All tank and drum storage areas on the site will, as a minimum, be bunded to a volume not less than the following:

  - 110% of the capacity of the largest tank or drum within the bunded area, or
  - 25% of the total volume of substances which could be stored within the bunded area.

- All hydrocarbons to be used during construction are to be appropriately handled, stored and disposed of in accordance with the TII document *'Guidelines for the crossing of watercourses during the construction of National Road Schemes'* (NRA, 2008);
- The site compound fuel storage areas and cleaning areas will be rendered impervious and will be constructed to ensure no discharges will cause pollution to surface or ground waters;
- Designated locations for refuelling are within site compound;
- Potentially contaminated run off from plant and machinery maintenance areas will be managed within the site compound surface water collection system; and
- Damaged or leaking containers will be removed from use and replaced immediately.

1.3.2 Fuel and Chemical Spillages

For pollution prevention measures, including area specific measures, refer to the SWMP in Appendix 6.4 (Surface Water Management Plan) of the EIAR. Emergency procedures will be further developed by the contractor with either scheme-specific works, area-specific or activity-specific measures, and all personnel will be required to know these procedures.

An effective pollution EIRP relies on the following elements, with regards to fuel, and chemical spillages:

- of lessons learnt from previous incidents;
- In terms of Identification of receptors / pathways (e.g. water body/surface water paths);
- Identification and clear marking of surface water drain locations within the construction compound and other work areas;
- Having designated re-fuelling areas;
- All hydrocarbons used during the Construction Phase will be appropriately handled, stored, and disposed of in accordance with recognised standards as laid out by the EPA;
- Identification of all possible emergency scenarios;
- Effective planning, e.g. oil booms and oil soakage pads should be maintained at appropriate locations on site to enable a rapid and effective response to any accidental spillage or discharge. These shall be disposed of correctly and records will be maintained by the environmental manager of the used booms and pads taken off site for disposal;
- Identification and dissemination of contact numbers;
- Definition of personnel responsibilities;
- Assurance that all appropriate personnel are aware of the emergency procedure(s) (e.g. spillage, leakage, fire, explosion, and flooding), that drain covers and spill kits are available, and personnel know how to use them;
- Knowledge of incident scenarios, such as spill drills; and

Implementation pollution spill response procedures, these will vary depending on the sensitive receptor and nature of construction activities. However, the following information will be included as a minimum and displayed at appropriate locations along the proposed Scheme, at river crossings, near outfalls, re-fuelling locations, fuel storage areas etc.:

- Instructions on how to stop work and switch off sources of ignition;
- Instructions on how to contain the spill;
- Location of spill clean-up material;
- Name and contact details of responsible personnel (these personnel should assess the scale of the incident to determine whether the environmental regulator needs to be called); and
- Measures particular to that location or activity (for example, close to a settlement pond).

More detailed plans may be location-specific, or specific to a particular activity depending on the nature of the work. They will identify the potential sources of pollution and pathways to receptors so that containment measures can be put in place at these locations. Suitable equipment, such as spill kits, oil booms and absorbent material, will be held at appropriate locations along the proposed Scheme and personnel will be trained in the use of the equipment.

Emergency equipment will be obtained from a reputable supplier, and personnel will be trained in its correct use. Material Safety Data Sheets (MSDS) and best practice assessments will be used for advice on appropriate spill measures. The type of equipment required will depend on the activity taking place. The Construction Industry Research and Information Association, '*Control of Water Pollution from Linear Construction Projects'* (C648), Technical Guidance document (CIRIA 2006a), hereafter referred to as the CIRIA Technical Guidance Document, provides details on the types and applications of emergency equipment. Refer to Table 15.2 of the CIRIA Technical Guidance Document for further information.

Every effort will be made to prevent an environmental incident during the Construction Phase of the proposed Scheme. The objective of the measures in the EIRP and the SWMP is to prevent an incident arising in the first place. Oil / fuel spillages are one of the main environmental risks that will exist during the Construction Phase of the proposed Scheme which will require an emergency response procedure. An example of the steps that could be followed in the event of a spillage to ensure that the environmental risk is reduced to as low as reasonably practical is provided in this section. This procedure can be tailored to be location / activity specific as required:

- Stop the source of the spill and raise the alarm to alert people working in the vicinity of any potential dangers;
- Notify the EM immediately giving information on the location, type, and extent of the spill so that they can take appropriate action;
- If necessary, the EM will inform the appropriate regulatory authority, including the Fire Services, depending on the size and nature of the spill - the appropriate regulatory authority will vary depending on the nature of the incident;
- If applicable, eliminate any sources of ignition in the immediate vicinity of the incident;
- Contain the spill using the spill control materials, track mats or other material as required. Do not use detergent or hoses to disperse spilled fuel;
- If possible, cover or bund off any vulnerable areas where appropriate such as drains, watercourses or sensitive habitats;
- Clean up as much as possible using the spill control materials;
- Contain any used spill control material and dispose of used materials appropriately using a fully licensed waste contractor with the appropriate permits so that further contamination is limited;
- The details of the incident will be recorded on an Environmental Incident Form (such as that provided in Section 1.3.6, or equivalent, identified by the appointed contractor), which will provide information such as the cause, extent, actions, and remedial measures used following the incident. The form will also include any recommendations made to avoid the reoccurrence of the incident. This form will be appended to the EIRP;
- A record of all environmental incidents will be kept on file by the EM and the appointed contractor;
- These records will be made available to the relevant authorities if required; and
- The EM will be responsible for any corrective actions required as a result of the incident e.g. an investigative report, formulation of alternative construction methods or environmental sampling, and will advise the appointed contractor as appropriate.

By carrying out the above steps, a proper system will be in place to investigate, record and report any potential fuel or chemical spillages.

1.3.3 Surface Water Monitoring

The appointed contractor shall conduct visual monitoring of surface water control measures (settlement tanks, silt fences, fuel storage areas etc.) on a daily basis. In addition, weekly visual inspections of the Royal Canal and the River Tolka will be conducted.

Furthermore, surface water quality sampling will be undertaken at four locations: at stream outlets of the Finglaswood Stream, St Margaret's Stream, and at the River Tolka, and Royal Canal. Four rounds of sampling will be undertaken – the first round on commencement of the Geotechnical Ground Investigation works, and at intervals of 2 / 3 months thereafter. Indicators that water pollution may have occurred include the following:

- Change in water colour;
- Change in water transparency;
- Increases in the level of silt in the water;
- Oily sheen to water surface; and
- Floating detritus, or scums and foams.

If hydrocarbons are observed or other water quality parameters are suspected to have been exceeded, an investigation will be conducted to determine whether any element of the construction of the proposed Scheme could be causing the contamination. If any potential sources of contamination are observed, appropriate actions will be taken (depending on the source and nature) to prevent further contamination and the incident shall be recorded and investigated in more detail to prevent a recurrence. If required, the relevant regulatory authorities will be informed.

1.3.4 Dust Management

The following measures will be implemented to prevent excavation- and cement-based dusts entering the local surface water network and SCI supporting in-situ habitats:

- Limit the breaking of the topsoil or earth stripping from occurring during dry and windy weather;
- Wheel washing of vehicles leaving the site, covering of fine dry loads, or spraying of loads prior to exiting the site, and if necessary regular cleaning of public roads in the vicinity of the entrance;
- The utilisation of pre-cast concrete features will minimise the generation of the concrete-based dusts throughout the development site; and
- Stockpiling of spoil and spoil-like materials will be appropriately located and covered and/or sprayed where possible to minimise exposure to prevailing winds, which will in turn minimise the generation of dust within the site.

1.3.5 Other Environmental Incidents

Environmental incidents are not limited to just fuel spillages. For example, other environmental incidents could include:

- Accidental stripping of a protected habitat;
- Accidental excavation of protected archaeological structure (without archaeologist present);
- Accidental release from settlement pond / tank etc.; and
- Unplanned utility strikes, resulting in foul water releases, temporary loss of services etc.

Therefore, any environmental incident will be investigated in accordance with the following steps.

- Immediately notify the EM, giving information on the location, type, and extent of the incident so that they can take appropriate action;

- In the very unlikely event of an incident occurring which may impact on a sensitive receptor, the EM will inform the appropriate persons / regulatory authority. The appropriate persons / regulatory authority will vary depending on the nature of the incident;
- The details of the incident will be recorded on an Environmental Incident Form (such as that provided in Section 1.3.6, or equivalent, identified by the appointed contractor) which will provide information such as the cause, extent, actions, and remedial measures used following the incident. The form will also include any recommendations made to avoid the reoccurrence of the incident. This form will be appended to the EIRP;
- A record of all environmental incidents will be kept on file by the EM and the appointed contractor. These records will be made available to the relevant authorities if required; and
- The EM will be responsible for any corrective actions required as a result of the incident e.g. an investigative report, formulation of alternative construction methods or environmental sampling, and will advise the appointed contractor as appropriate.

By carrying out the above steps, a proper system will be in place to investigate, record and report any potential accidents or incidents.

1.3.6 Environmental Incident Form

An example of an Environmental Incident Form (EIF) is provided in Table 1. An EIF will record details of any environmental incidents. This form will be appended to the EIRP.

Table A6 6.1: Environmental Incident Form Example

Incident Details				
Date:				
Time:				
Location:				
Extent:				
Direct Activity being Undertaken:				
Cause:				
Dangerous Substances (s) Involved (identity and quantity):				
Remedial Measures Undertaken:				
Parties Involved in the Incident				
Name	**Role**	**Phone Number**	**Email**	**Address**
Description of the Incident				
Recommendations following the Incident				

1.3.7 Fire Control

Every effort will be made to prevent the outbreak of a fire during the Construction Phase of the proposed Scheme. Fire extinguishers and first aid supplies will be available in the work area. In the event of such an

incident, the health and safety of all personnel will be a priority. All relevant legislation and guidance on health and safety of people and in particular fire safety will be complied with.

1.3.8 Flood Risk Control

Where temporary stockpiles of invasive species infected material cannot for practical limitations, be situated away from a potential flood risk area, the appointed contractor will be required to include a flood response plan within the EIRP, to ensure that any inundation of the construction compound does not result in a pollution event to nearby water bodies.

1.4 Corrective Action

When an incident happens, it is important to learn from it and ensure that such an incident does not occur again. This may involve changing the method of work for a particular activity, providing containment or treatment materials, or simply training personnel so they are aware of the correct method of work. Similarly, if an audit of planned arrangements indicates that measures are not in place, or those in place need to be improved, action will be taken immediately.

A record of corrective actions and lessons learned will be kept and communicated to all relevant persons, teams, sub-contractors etc. across the proposed Scheme.

1.5 References

Control of Water Pollution from Linear Construction Projects. Technical Guidance (C648) (CIRIA 2006a)

Control of Water Pollution from Linear Construction Projects. Site Guide (C649) (CIRIA 2006b)

Control of Water Pollution from Construction Sites. Guidance for Consultants and Contractors (C532) (CIRIA 2001)

A Framework for Emergency Management (Department of Housing, Local Government and Heritage 2021)

Dublin City Council Major Emergency Plan 2015 (DCC 2015)

TII document ‘Guidelines for the crossing of watercourses during the construction of National Road Schemes’ (NRA, 2008)

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