Irish Water

PROJECT:

Ringsend Wastewater Treatment Plant Upgrade Project

DOCUMENT:

Outline Waste Management Plan

May 2018

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SECTION 1: INTRODUCTION

This Waste Management Plan relates to the management and disposal of wastes generated associated with expansion of Ringsend Wastewater Treatment Plant and ancillary works. This Waste Management Plan outlines the waste management framework and the key wastes that are likely to be generated during construction.

Wastes arising from the operation of the facility will continue to be managed in accordance with proposals agreed as part of the site's Wastewater Discharge Authorisation (WWDA) issued by the EPA.

The Contractor is responsible for preparing the contract-specific Waste Management Plan. The plan must comply with the Department of Environment, Heritage and Local Government 'Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects' and will include the following (but not limited to):

- Specific/achievable waste management objectives;
- Analysis of waste arising; and
- Methods for proposed prevention, reuse and recycling of wastes.

It must also specify points of contact for each type of waste generated through the project and reference written procedures for the management of each type of waste.

Where the contract encroaches the EPA licensed site, the Waste Management Plan must further comply with any specific requirements of the site WWDA. All waste management records shall be prepared for sharing with Irish Water and the site operator to allow updates to any statutory or WWDA reporting requirements.

SECTION 2: WASTE MANAGEMENT PRINCIPLES

Management of all waste throughout the project life-cycle will be in accordance with EU, national and regional waste management policy and the principles of the Waste Hierarchy i.e. prevention, minimisation, reuse, recovery and recycling.

The contractor will be required to address the following issue within the preparation of the site waste management plan.

2.1 Prevention of Waste

The management of material is key to implementing an effective waste prevention and minimization policy on site. Materials will be ordered in a timely manner and as required to avoid over ordering, excess supply and wastage. The Waste Management Plan shall provide for proper storage and handling of construction material to maximise usage and minimise waste. Materials delivered to site shall be inspected to ensure they are defect free and suitable for use.

2.2 Reuse of Waste

Where possible construction material will be reused on site/ off site. Material removed from site will be organised through an appropriately authorised waste collector removing to an authorised facility (licensed, permitted or registered as required).

2.3 Recycling of Waste

Segregation of waste streams shall be implemented on site to maximise recycling and recovery.

2.4 Disposal or further treatment of Waste

Segregation of waste streams shall also apply to waste streams (if found on-site) that may require specialist treatment, packaging or preparation prior to recovery or disposal e.g. Japanese knotweed, contaminated soil, asbestos, etc. The Contractor shall appoint a designated competent person for the preparation of additional paperwork and/or contact with appropriate officials and this shall be set out in the contract-specific Waste Management Plan.

2.5 Waste segregation, Storage and removal

The Contractor will ensure as much as possible that all recyclable material will be separated at source. Individual waste streams will be segregated through the use of separate bins, storage containers or

clearly defined areas for stockpiling. Reusable and recyclable waste streams will be stored separately to residual wastes to avoid contamination and maximize their reuse potential.

Waste will be stored appropriately as follows:

- Clearly marked signs;
- Enclosed to prevent waste escaping;
- Segregated by type where possible;
- Suitable for that waste type, i.e. able to contain waste and prevent escape, including leaking of liquids;

2.6 Hazardous Wastes

Hazardous or contaminated material, including material that requires specialist treatment or disposal, will be stored separately on site to avoid cross-contamination. Hazardous wastes must not be mixed. Any hazardous waste generated (e.g. oil rags or waste oil) will be stored in appropriate receptacles or containers,bunded or other storage areas prior to their removal by an appropriately licensed contractor.

2.7 Waste Carriers/ Treatment Facilities

The materials to be disposed off-site classified as 'wastes' are subject to the provisions of the 'Waste Management Act' 1996 (as amended). Material removed from site will be organised through an appropriately authorised waste collector. Waste shall be brought by them to an authorised facility (licensed, permitted or registered as required). If waste is to be exported from Ireland, the Contractor will liaise with Irish Water or its representative to arrange the necessary Transfrontier Shipment approvals through the Competent Authority.

The Contractor will ensure that:

- any waste carrier holds a valid waste collection permit;
- any disposal or recovery facility (national or international) be used for the management of waste arising from the scheme is suitably permitted, licensed or registered;
- the terms and conditions of these authorisations allow for the acceptance of the waste in question;
- the relevant authorisations remain valid when used within the lifetime of the project; and,
- all records are maintained and made available as set out below.

SECTION 3: MANAGEMENT RESPONSIBILITIES

The Contractors Waste Manager will be responsible for ensuring that the Waste Management Plan is implemented. The Waste Manager may be the Environmental Manager or other suitability experienced person. The Waste Manager shall be assigned the responsibility for waste prevention, minimisation, reuse, recycling and disposal during all stages of this project. The Waste Manager shall liaise with the relevant authorities, environmental specialists and site operations personnel as required to implement the plan.

3.1 Training

The Waste Management Plan will be made available to all personnel on site. The Waste Management Plan and its objectives will be included in site induction for all staff members. Site induction will include instructions on how to support objectives and targets set out in this waste management plan.

Site notices will be positioned throughout the site to assist implementation the Waste Management Plan.

3.2 Records

A record will be maintained of all waste removed from the site (Waste Removal Record). The record will include information on the date removed, LoW Code, description of area where waste, weight and volume, details of whether the waste in question was being removed for either disposal or recovery/recycling, waste transport contractor (including permit number), details of the facility to which waste is removed (including license or permit number).

A monthly summary including quantity, type and composition of all waste removed from site will be prepared by the Waste Manager and performance measured against any agreed targets.

A location will be identified where all records in regard to wastes removed, quantities recycled or disposed will be held for inspection by the Contractor, Employer's representative, site operators and other third parties.

3.3 Inspections

The Waste Manager will carry out weekly inspections of the site which to examine how the waste is segregated and stored The weekly inspections will be documented on the Weekly Environmental Inspection Record Sheet.

3.4 Audits

Waste management will be audited as part of the auditing for the overall CSEMP. Internal audits by the Contractor will be completed at a minimum of twice per year. Upon completions of the audit attention will be given to opportunities for reducing waste and any other areas which could be improved Audit findings will highlight corrective actions that may be taken in relation to management policies or site practices in order to bring about further waste reductions.

All waste records (Waste Record Sheet, records of waste transfers or collections, consignment notes etc.) will be audited externally by the Employer's Representative during the External Audit of the CSEMP.

3.5 Identification and Segregation of Waste

Wastes generated must be identified and segregated according to their category as described by the European List of Waste (LoW). Waste categories may include, but are not limited to, the wastes detailed in the following sections.

Concrete, Bricks, tiles, ceramics

Waste concrete is likely to arise during the construction (and/or demoilition) phase. Where possible, concrete will be returned to the supplier for reuse. In circumstances where this is not possible the concrete may be disposed off-site.

It's unlikely to have waste bricks, tiles or ceramic during the construction phase of this project. Unless they are found in excavated soil. However, careful storage is required to reduce the amount of breakages and waste being created. Offcuts/ trimmings will be re-used where possible. Any waste generated will be stored in containers to removal to a waste facility.

Wood, Glass and plastic

Timber waste will be stored separately and re-used where possible. Unused timber will be disposed of at a recycling facility. Pallets will be returned to the supplier for reuse. A covered container for waste wood will be placed on site in convenient locations (Timber will not be allowed to rot.).

Bituminous mixtures, coal tar and tarred products

Waste bituminous material may arise during the construction of internal site roads.

Metals

Metal waste can have a significant scrap value. Metals will be segregated on site for reuse and recycling.

Soil (including excavated soil from contaminated sites), stones and dredged spoil

Depending on preliminary site investogations, some soils, stones may be identified as suitable for reuse and should be stored in on-site areas prior to re-use. Soils or spoil to be removed from site should be managed as set out in 3.7 below. Such wastes may be transferred to suitable inert landfills, if it is not possible to find a reuse application or if they cannot be accepted as engineering grade material in landfills.

Insulation materials and asbestos-containing construction materials

In the event that asbestos waste is encountered on-site appropriate storage, transportation and disposal of waste must be adhered to.

Packaging and Plastics (Various)

Packaging waste will be segregated at source and removed to a recycling facility. Waste packaging will be stored in separate covered containers.

3.6 Hazardous Material

In the event that hazardous waste is encountered, the Contractor must provide appropriate storage until such voilumes accumulate that will allow safe transportation and disposal or recovery. The Contractor will ensure that a competent person will classify the material in accordance with the List of Waste (LoW). The Waste Management Plan will ensure that non-hazardous waste is not mixed with hazardous waste where possible.

The Contractor will ensure that appropriate measures are taken to safeguard the health of the Contractor's operatives and the general public for the duration of the works. In the event that hazardous materials are discovered on the site, the ER is to be informed immediately. The ER has the right to request that tests be carried out on any suspected hazardous materials to determine their exact nature.

Under certain circumstances, specialist contractors may be required to remove the hazardous materials from site e.g. asbestos. The Contractor will seek the approval of the Employer's Representative where the services of a Specialist Contractor are to be engaged. The Contractor will ensure that the Specialist Subcontractor, if any, will comply with all relative legislation regarding the required permits and licensing for the disposal of hazardous materials.

Hazardous materials arising from site clearance and/or excavations will be disposed of only at suitable licensed facilities.The contractor shall provide details of the health and safety requirements to be implemented during the removal of hazardous materials such as asbestos. This will include any PPE protocol.

3.7 Other wastes requiring specialised management

Wastes other than those listed above may not be easily recovered. Such material should be stored separately or in a designated covered container for removal to a licensed facility for disposal.

In the event that materials such as invasive species (e.g. Japanese Knotweed) are discovered, the Waste Manager shall engage as set out in the Invasive Species Management Plan to gain appropriate authorisations from the NPWS, procurement approval from the Client and will establish arrangements to provide for appropriate segregation, storage, collection and treatment. The Waste Manager will maintain records of all relevant correspondence and authorisations.

In the event that materials such as contaminated soils are discovered, the Waste Manager shall engage with a specialist to gain appropriate authorisations, procurement approval from the Client, TFS approvals (if required) and will establish arrangements to provide for appropriate segregation, storage, collection and treatment. The Waste Manager will maintain records of all relevant correspondence and authorisations.

Rechargable batteries should be used for portable devices where possible and any batteries or electrical equipment which may become redundant during the project should be stored separately prior to transfer to an appropriate WEEE facility.

Food waste management shall account for the need to align with health, safety and welfare at work guidelines to prevent rodent infestation.