



Project Environmental Plan

SPACEPORT 1
CNES

Audit Programme

Where audits identify areas of improvement, appropriate steps will be taken to implement these. Improvements requiring immediate action will be immediately raised with the MAL SHEQ Manager, to allow for actions to be arranged. If immediate action is not required, then the audit report will be submitted within 24 hours of the audit, to the site manager, and actions agreed at the next site management meeting.

In addition to identifying areas for improvement, areas of good practice will be highlighted and fed back to allow appropriate recognition to be given.

Audit forms including checklists will be utilised for each audit type to ensure that all items are appropriately checked and that audits are recorded in a systematic manner.

General Requirements

In addition to topic specific requirements and task specific requirements detailed below, all equipment and machinery will be appropriately maintained to minimise pollution risks in terms of noise, greenhouse gas emissions and loss of containment (fuels and hydraulic fluids). Good housekeeping practices and considerate construction techniques will be employed throughout, with particular regard to users of the existing facilities, local residents and businesses.

Works will be conducted primarily between 7am to 8pm Monday to Friday, with Saturday work generally finish earlier.

Site Emergency Response

Introduction

Pollution prevention measures have been developed to minimise the risk of an environmental incident occurring during works. These measures combine both the current UK best practice and guidance. However, in the unlikely event of an environmental incident occurring, it is important to have a comprehensive emergency response plan in place in order to minimise the potential impacts.

Spill Equipment

During the project, MAL will be trialling HVO fuel (where possible) in its machinery and vehicles on site. While HVO is bio-degradable and safer for the environment in the case of any spillages, spill kits will be made available close to the working areas with equipment suitable for the types of materials being utilised, this will vary depending on the work being undertaken at the time but will include as a minimum:

- A universal spill kit adjacent to the COSHH store capable of containing material from the largest container stored.
- A mobile oil spill kit capable of containing 100L of oil stored adjacent to the refuelling bowser.
- A universal spill kit adjacent to existing pier.
- Oil absorbent booms at the pier.

Outline of Procedures

All personnel will be briefed on **MAL-HSE-023 Spill Response Plan**. This emergency response plan follows the 'Source – Pathway – Receptor' model as described in PPG1 (NIEA *et al.*, 2013) and the

pollution prevention hierarchy. In the event of an environmental incident the following will be prioritised:

- Stop the source of the pollution.
- Interrupt any pathways to the environment.
- Report the incident in as much detail as possible to site management.
- Clean the contaminated area and recover pollutants.
- Analyse the event to prevent further incidents.

The site manager will ensure all site personnel are trained in the ERP through regular toolbox talks, drills, and safety briefs.

References

NIEA, SEPA, & Environment Agency. (2013). Pollution Prevention Guidelines: PPG1 – Understanding your Environmental Responsibilities - Good Environmental Practices. In (pp. 1-10): NIEA, SEPA and Environment Agency.

Site Waste Management Plan

Introduction

MacAulay Askernish Ltd, (*MAL*), Depot is a Scottish Environmental Protection Agency, (*SEPA*), registered Waste Management Licence No: WML/N/220030 holder & Waste Carrier No: SNO/038011, therefore, our Business & Commercial Policies & Procedures encompasses the legislation (as amended).

All waste/refuse transported from the Site will be recorded in the appropriate Duty of Care – Waste Transfer Register, SNO/333932 to the designated, Licenced Waste Facility for the purposes of re-cycling or further disposal/onward disposal.

MacAulay Askernish Ltd strive to minimise our construction activities with a positive view to reducing the work-related impact on the environment & waste accumulation/disposal, thus protecting natural resources & ensuring that they are passed onto the next generations, in good order, for their enjoyment.

Wastes arising during construction will include but not be limited to, soil, and packaging materials associated with both construction works and the welfare facilities.

The waste hierarchy will be employed throughout the construction works.

Waste Hierarchy Implementation

Reducing Waste

Where practicable, steps will be taken to avoid the production of waste. For example, the use of reusable water bottles, crockery and cutlery in the welfare facilities will prevent the need for single use plastics.

The bulk of material will be delivered in HGVs without packaging and, where practical, requests should be made to suppliers to minimise packaging.

Similarly, ordering the correct quantity and types of materials will prevent unused excess materials being disposed of as waste.

MAL also utilise a paperless system for all site documentation. All relevant documentation will be accessible through mobile devices within a project specific SharePoint, access will be controlled by senior management with only selected project personnel granted access. All personnel will complete daily documentation relevant to their tasks e.g., Daily plant check sheets, Permits, daily briefings, site diary, cleaning register etc. The information will then be instantly accessible by management and stored as per MAL procedures. Using this process, MAL's site paper usage is eliminated.

Reuse

Where possible, materials can be reutilised. For example, excavated materials can be reused in re-instatement.

Recycle

Recycling will be facilitated by the segregation of wastes. Clearly marked and labelled waste receptacles will be provided in designated areas. Wastes suitable for recycling are likely to include wood, metals, glass, paper, plastics and oils. Where possible materials will be recycled.

Dispose

Solid waste not suitable for recycling will be sent to landfill as waste, or special waste, depending on its constitution.

Litter

Prior to construction works on site commencing, a litter sweep will be conducted to prevent the escape of existing litter on site into the marine environment.

All personnel working on the project will undertake site induction. This will include a section on waste management and the use of the waste receptacles provided. It will be made clear that littering will not be tolerated. Construction staff will be encouraged to collect any litter they see in the construction areas and, if deemed necessary, litter sweeps will be carried out.

Waste Management

Waste receptacles (bins and skips) will incorporate lids or covers to protect against vermin gaining access and wind blowing wastes out of skips, giving rise to litter.

MAL will put in place procedures for ensuring that appropriate records are kept for all waste arisings including volumes, categories and waste carriers used, and that waste transfer notes are retained.

Monitoring

MAL site management and SHEQ team will carry out regular site inspections which will cover and review details of waste arisings to identify areas for opportunity to reduce or recycle more wastes.

Material Management Plan

Introduction

The works will utilise a variety of materials such as rockfill, concrete and fuel. Some of the material pose an environmental risk if a loss of containment occurs, hence, it is essential that they are appropriately managed as detailed in this section.

General Management

To minimise overordering of materials, potentially leading to increased waste and construction cost, material requirements should be identified accurately.

Delivery of material to site should be 'just in time' for it to be utilised for its use as soon as possible, reducing the requirement of storage for extended periods.

The selection of material sourcing should take account of the intrinsic and transport carbon cost without jeopardising the materials quality to meet the require engineering standard.

Excavated Spoil/Peat & Mineral Working Materials is to be kept in separate stockpiles in temporary Lay Down Areas for use at a later stage. Any area with the potential of spoil slippage will be stabilised using appropriately sized Mineral Working Materials to prevent seepage/slipping occurring.

All surrounding watercourses will have silt netting placed at regular intervals to catch any sediment/waste washed out from site during construction and will be checked/emptied regularly. NO fuel storage or fuel driven equipment eg pumps, generators must be kept a minimum of 50m away from any watercourses/bodies.

Fuel Storage

Where fuel is stored, and plant is refuelled the following will apply:

- A suitable double skinned bowser or tank (or bunded tank) will be utilised for fuel storage.
- The bowser or tank will be stored at least 50m from the loch or nearest drain and protected from collision risks.
- The distribution hose will be fitted with a shut off type filling nozzle.
- The filling nozzle will be fitted with a security lock to prevent unauthorised use.
- A drip tray will be provided below the distribution hose and nozzle when not in use.
- A fuel accountancy system will be employed.
- All refuelling will be carried out in accordance with site procedures by trained personnel in a designated area.

Hazardous Material Storage

All oils and chemicals will be subject to Control of Substances Hazardous to Health (COSHH) assessments including a section on the environment to highlight any precaution or mitigation requirements. Appropriately bunded oil and chemical storage cabinets will be provided on site. These will be kept locked, with the key under management control to ensure appropriate use and accountability.

Appropriate spill plans aligned to the pollution control hierarchy and spill kits will be in place with construction operatives being trained in the plans and in the use of spill kits. The protocol to deal with spills is detailed in the **Site Emergency Response**.

Where practicable bio-degradable hydraulic fluids will be utilised in machinery.

Dusty Material Storage

Material won on site should be processed and utilised at the earliest opportunity, to minimise the need for storage.

All dusty material on site will be appropriately stored, managed and monitored to prevent the generation of dust as discussed in the Dust Management Plan below.

In-Air Acoustics

Introduction

It is anticipated that temporary adverse construction noise effects are anticipated during construction works in the immediate vicinity of the site. These mitigations are based on typical equipment utilised for the planned construction activities.

Noise Effects

There are multiple construction activities that could give rise to noise, some of which will be carried out concurrently. The location of the works also determines the level or effect on receptors.

Mitigation

Works will be carried out primarily during daytime hours as defined by BS5228-1:2009+A1:2014 Code of Practice for Noise and Vibration Control on Construction and Open Sites. In line with the aforementioned guidance, the noise levels during daytime will be $\leq 70\text{dB } L_{Aeq,t}$ at noise sensitive properties. Any works out with daytime hours will only be completed with authorisation from the client and if the appropriate noise limits are not exceeded at any noise sensitive locations.

For each stage of the works, a review of plant requirements will be made against those assumed from pre-construction information. If the actual plant requirements are significantly different and could give rise to greater noise emissions to those predicted, the noise assessment will be reviewed and updated to identify any particular issues and associated requirements for mitigation.

General Mitigation

The following mitigation will be employed throughout the construction works as applicable in line with good practice to minimise noise effects:

- Haulage vehicles will not arrive at or leave the site between 18.00 and 08.00 hours.
- All vehicles and mechanical plant will be fitted with effective exhaust silencers and 'smart' reversing alarms and will be subject to programmed maintenance.
- Inherently quiet plant will be selected where available - all major compressors, pumps and generators will be 'sound reduced' models fitted with properly lined and sealed acoustic covers, which will be kept closed whenever the machines are in use.
- All ancillary pneumatic percussive tools will be fitted with mufflers or silencers of the type recommended by the manufacturers.
- Machine operator will be instructed to shut down machines between work periods or throttled down to a minimum.
- Equipment used on site will be regularly maintained, including maintenance related to noise emissions.
- Vehicles will be loaded carefully to ensure minimal drop heights so as to minimise noise generation; and
- The positioning of ancillary plant such as generators and pumps will take into account of receptor location so as to minimum noise disturbance and if necessary, temporary acoustic screens or enclosures will be provided.

Dust Management Plan

Introduction

The works associated with the project have the potential to give rise to dust, which can become a nuisance and potentially a health hazard, especially in dry and windy conditions. Steps to be taken to minimise and monitor dust effects are detailed within this Dust Management Plan.

Dust Prevention

Infill material stored on site will be minimised where practicable by utilising a 'just in time' delivery system. The movement of dusty material, such as infill, will be appropriately planned to minimise the number of times dust emitting material is moved. Any infill materials with the potential to give rise to dust will be kept moist, to avoid dust arisings until they have been covered by surfacing.

Waste arising from construction works with potential to give rise to dust will be covered when stored on site and removed from site promptly.

Good housekeeping will be employed across the site to prevent dust emissions.

Minimising Spread and Track-Out

All delivery vehicles entering and leaving the site will be covered to prevent escape of materials and giving rise to dust on the public roads. Delivery vehicles will also follow the designated route, avoiding unsurfaced roads. All HGV Vehicles leaving site will have their wheels checked for stuck debris prior to leaving site.

Excavator mounted brushes will be utilised periodically to sweep the road and bell mouth during the construction phase to ensure any trackout from the site will be mitigated.

Dust Monitoring

Qualitative monitoring surveys of visible dust emissions and surface soiling will be conducted once each working day within the vicinity of the site boundary (internal and external) with the result of the inspection being recorded.

Site audits will be undertaken with the audit including material storage status; inspection of the access road and local roads; and looking for signs of surface soiling on surfaces around the site. Frequency of audits in periods of dry weather will increase.