Intended for
Viking Energy Wind Farm LLP

Date
February 2022

Project Number
1620009158

VIKING ENERGY WIND FARM
PLANNING MONITORING OFFICER AUDIT REPORT 016: 22ND JANUARY 2022 TO 16TH FEBRUARY 2022

RAMBOLL

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015: 22ND JANUARY 2022 TO 16TH FEBRUARY 2022

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1. AUDIT DETAILS

1.1 Audit Details

Audit Number	PMO 016
Location	Kergord Sandwater Road Mid Kame Ridge North Compound and North Nesting Main Construction Compound Nesting
Weather Conditions	Dry, calm, cold (-1 - 1°C).
Audit Date	16th February 2022
Audit Period	22nd January 2022 – 16th February 2022
Audit Owner	Ramboll UK Ltd

1.2 Distribution

Position	**Action**
Ramboll Project Director Planning Monitoring Officer	For information
SSE Renewables Development Manager	For information
SSE Renewables Consents Manager	For information
SSE Renewables Environmental Advisor	For information
RJ McLeod Design Management Engineer	For Information
Shetland Islands Council Planning Enforcement Officer	For information
Shetland Islands Council Natural Heritage Officer	For information

1.3 Terms of Reference

This audit has been completed with reference to the following key documents:

- Application under Section 36C of the Electricity Act 1989 to vary the consent granted under Section 36 of that Act on 4 April 2012 to construct and operate the Viking Wind Farm located in Shetland Islands Council Planning Authority Area and for a direction under Section 57 of the Town and Country Planning (Scotland) Act 1997 for planning permission to be deemed to be granted in respect of the proposed development (i.e. the 'Variation Application').

The Viking Wind Farm project will comprise the construction of 103 wind turbines with a turbine tip height of 155 m; development of a temporary construction compound; construction of associated access tracks; development of a substation; development of a convertor station; erection of permanent Met Masts; and the excavation of borrow pits.

The project was consented as detailed above, receiving Section 36C Consent and deemed planning permission on 24th May 2019.

Separate planning consents are in place for the following specific aspects of the development:

- Construction of the Kergord Access Track[1] (consented on 29th April 2019).
- Re-alignment of Sandwater Road[2] between the Burn of Weisdale and the junction with the A970 to facilitate construction access for the Viking Wind Farm (consented on 26th May 2020).
- Formation of temporary construction compounds at two locations; Sandwater (Main)[3], consented on 22nd June 2020; and North (South of Voe)[4] consented on 9th September 2020.

1.4 Role of the Planning Monitoring Officer

Condition No. 3 of the Variation Application states that:

"No development shall commence unless and until the Planning Authority has approved in writing the terms of appointment by the Company of an independent and suitably qualified environmental consultant to assist the Planning Authority in monitoring compliance with the terms of the deemed planning permission and conditions attached to this consent (a Planning Monitoring Officer ("PMO"). The terms of the appointment shall:

- Impose a duty to monitor compliance with the terms of the deemed planning permission and conditions attached to this consent;
- Require the PMO to submit a monthly report to the Planning Authority summarising works undertaken on site; and
- Require the PMO to report to the Planning Authority any incidences of non-compliance with the terms of the deemed planning permission and conditions attached to this consent at the earliest practical opportunity.

The PMO shall be appointed on the approved terms throughout the period from Commencement of Development to completion of post construction restoration works.

In order to discharge the above requirements, the PMO undertakes site-based audits at monthly intervals to monitor the compliance with the conditions of the consent. The primary documents used for compliance monitoring are the Construction Environmental Management Plan (CEMP); and the Pollution Prevention Plan (PPP). Additional documents will be referenced as required for specific detail.

The following traffic light system is used to indicate action status:

	Green – activities appear to be compliant with the CEMP, PPP and other applicable environmental management procedures and plans and there are no other issues.
	Amber – in general activities are compliant with the CEMP, PPP and other applicable environmental management procedures and plans but there are minor actions required.
	Red – activities may not be compliant with the CEMP, PPP and other applicable environmental management procedures and there are critical actions.

[1] Shetland Islands Council Planning Reference No: 2018/096/PFF
[2] Shetland Islands Council Planning Reference No: 2019/079/PPF
[3] Shetland Islands Council Planning Reference No: 2019/188/PPF
[4] Shetland Islands Council Planning Reference No: 2019/210/PPF

1.5 General Limitations and Reliance

This report has been prepared by Ramboll UK Limited ("Ramboll") exclusively for the intended use by Viking Energy Wind Farm LLP (the "client"). No other warranty, expressed or implied, is made as to the professional advice included in this report or in respect of any matters outside the agreed scope of the services or the purpose for which the report and the associated agreed scope were intended or any other services provided by Ramboll.

In preparation of the report and performance of any other services, Ramboll has relied upon site observations, publicly available information, information provided by the client and information provided by third parties. Accordingly, the conclusions in this report are valid only to the extent that the information provided to Ramboll was accurate, complete and available to Ramboll within the reporting schedule.

Ramboll's services are not intended as legal advice, nor an exhaustive review of site conditions and/or compliance. This report and accompanying documents are intended to form a record for the purpose of documenting compliance with Condition No. 3 of the Variation Application. Ramboll neither owes nor accepts any duty to any third party, unless formally agreed by Ramboll through that party entering into, at Ramboll's sole discretion, a written reliance agreement.

2. INTRODUCTION

2.1 Objectives of Audit

The purpose of the PMO Audits is to monitor the provision of appropriate environmental management at active work sites of the project, via desk-based review of relevant documentation and site visits to be undertaken on a monthly basis to ensure compliance with the conditions of the planning consent and associated environmental management plans.

2.2 Scope of Audit

The scope of the audit was as follows:

- Liaison with SIC regarding public concerns or complaints received during the audit period.
- Review of documents provided by the Client and Principal Contractor prior to and following the audit visit. Specific references are included in the relevant sections of the report.
- A site visit attended by the PMO, representatives of SSE Renewables, RJM Lead ECoW and SIC Planning Enforcement Officer undertaken on 16th February 2022 which included the following locations:
  - Kergord;
  - Sandwater Road;
  - Mid Kame Ridge;
  - North Compound/Batching Plant and North Nesting;
  - Main Compound; and
  - Nesting.
- Discussions were held with the Geotechnical Clerk of Works (GCoW), Environmental Clerk of Works (ECoW) and Archaeological Clerk of Works (ACoW).

A selection of photographs taken during the audit are included in Appendix 1.

2.3 Site Personnel

The following site personnel were interviewed as part of this audit:

Company	Position
RJ McLeod	ECoW
Tony Gee and Partners	Geotechnical Clerk of Works
MBEC	Environmental Clerk of Works
Headland Archaeology	Archaeological Clerk of Works

3. SITE SETTING, RECORDS AND OBSERVATIONS

Observations made during the audit are described in this section. Corresponding photographs are included in Appendix 1, alongside a plan of the site indicating the location of each photograph.

3.1 Kergord

3.1.1 Site Setting and Activities

Access to the Kergord Arrays is taken via the Kergord Access Track (KAT), which was accessed from the Sandwater track along the southern boundary of the central area of the development.

Activities in this area during the audit included progression of access tracks and concrete pouring at turbine base K43 (see photo 1).

3.1.2 Observations

The construction of track to K49 was observed to be underway (photo 2). The terrain at K49 is steep therefore a slower and more cautious approach has been undertaken to reduce risks. A cut off drain has been installed uphill of tracks towards K49 to provide preventative mitigation as excavation continues. Ground and vegetation reinstatement on the low side of the track was noted to have been completed as work progresses (see photo 2).

Concrete pouring was ongoing at turbine K43 during the audit (photo 1).

The site tracks in Kergord were noted have a lot of soft/ loose material on the surface – likely to be as a result of the roads requiring completion with a final capping layer of stone and the high volume of dumper truck movements. The weather was dry at the time of the visit, although there had been some rain, sleet and snow in the 24 hours prior to the site visit. No evidence of pollution to the surrounding habitat or water environment was noted during the visit. It was noted that in the event of heavy rainfall the road surface could be a potential source of pollution in its current state. The RJ McLeod representative confirmed pollution prevention is a key area of focus for their environmental team.

It was noted that an excavator was working to complete patch repairs/infilling holes on the track surface on spur 4/ near the junction to the converter station at Kergord.

3.2 Sandwater Track

3.2.1 Site Setting and Activities

A track has been constructed at Sandwater, located at the southern limit of the central site area, which provides access to the Kergord and Mid Kame Ridge wind farm areas for all construction traffic. The new track is located adjacent to the existing Sandwater Road (B7095), which remains operational for public traffic.

The Sandwater Loch is located directly to the south of the site boundary. Sandwater Loch is designated as a Site of Special Scientific Interest (SSSI)[5], notified for 'Open Water Transition Fen' and 'Mesotrophic Loch' habitats.

3.2.2 Observations

During the site inspection, peat was being reinstated on the cutting with reinstatement of turves also ongoing. The permanent Pettawater bridge is now in place and work to decommission/reinstate the temporary bridge is underway.

[5] As notified under the Nature Conservation (Scotland) Act 2004

3.3 Mid Kame Ridge

3.3.1 Site Setting and Activities

The Mid Kame Ridge (MKR) is accessed from the Sandwater track and stretches northwards to Hamarigrind Scord.

3.3.2 Observations

It was noted that the edges of the cut at Hamarigrind Scord have been dressed with soil and peat. The RJ McLeod representative confirmed that these areas would be seeded in spring/summer 2022. The PMO observed the preparations for cable laying activities on the MKR. Cable drums and dust (for cable bedding) were being delivered and stockpiled along the route. The cable route has been excavated in preparation for the cable laying activities, which are anticipated to start in February 2022.

3.4 North Compound and North Nesting

3.4.1 Site Setting and Activities

The North Compound and northern Nesting turbine arrays are located towards the northern limit of the site on the eastern side of the A970. Track construction, reinstatement and crane pad hardstanding formation was also being undertaken during the audit. At the North Compound batching plant 1 and 2 are in place and were operational during the audit, supplying concrete for the pour at K43.

3.4.2 Observations

Ground Investigation crews were noted to be onsite completing geotechnical investigation and testing required before further foundation work can be completed.

The PMO observed the area of good quality wetland habitat between N104 and 105 which was preserved by micrositing the wind farm track to avoid impacts on this area (photo 4)

The active peat restoration was observed at P12 (near N101) on the day of visit (photo 5).

The PMO visited the concrete batching plant at the North Compound during the audit.

It was noted during the inspection of the batching plant that some IBCs of concrete admixture were stored off the concrete bunded area (photo 6). The PMO understands that since the audit the concrete admixture has been used and moving forward IBCs will be stored on the hardstanding unless in use. Rainwater was noted to have accumulated in the bund, which may compromise the storage capacity for the IBCs stored in the bunded area.

The concrete washout was inspected. It is noted to be provided with an automated 'siltbuster' pHD CO2 pH treatment skid. Water levels in the washout were low on inspection (photo 7).

The fuel storage at the compound was noted to be in good order, with spill kit provided (photo 8).

On inspection of the waste skips in the North Compound it was noted that there was no clear labelling of the skips. One of the skips was noted to contain some waste plastic oil containers which would need to be treated as special waste. The RJM representative noted that improved signage to support on-site segregation or a dedicated special waste skip would need to be provided (photo 11).

3.5 Main Compound

3.5.1 Site Setting and Activities

The Main Compound is located at the southern extent of the development site, accessed from the A970. The lower level comprises car parking and site offices and welfare facilities. The upper level is in use for material and equipment laydown.

3.5.2 Observations

New lighting columns in the car parking area were noted have been installed recently. It is anticipated that the Main Compound will move onto mains electricity in the near future.

3.6 Nesting

3.6.1 Site Setting and Activities

The Nesting arrays are accessed from the A970. Activities in this area during the audit included progression of access tracks and rock extraction at borrow pits.

3.6.2 Observations

Tracks within Nesting are now all completed with turbine base and hardstanding excavation still to be completed.

The PMO observed the continuing rock extraction and crushing at NBP05 (photo 12), with various 'products' being stockpiled for use in cable laying, tracks and concrete production.

3.7 Communication with Clerks of Work

3.7.1 GCoW

Condition 39 of the planning consent requires the appointment of a Geotechnical Clerk of Works (GCoW) to minimise the risk of peat failure arising from the development. A discussion was held between the PMO and GCoW before the site visit, on the 10th February 2022.

The GCoW described the ongoing monitoring work across the site. This has included monitoring of the general construction works, monitoring peat restoration areas and providing advice on peat handling. The monitoring did not identify any events resulting in environmental incidents. There is ongoing supervision throughout the site with the GCoW working with the Principal Contractor to implement preventative measures.

3.7.2 ECoW

Condition 19 of the planning consent requires the appointment of an Ecological Clerk of Works to ensure protection of the natural heritage of the area. A discussion was held between the PMO and ECoW after the site visit, on the 17th February 2022.

The ECoW continues to work with the Principal Contractor to identify and implement mitigation measures throughout different stages of construction. The ECoW noted the Principal Contractor is proactively working to manage surface water drainage and pollution control. Silty water runoff is an ongoing challenge during heavy rain events. It is anticipated that the situation will improve as dumper truck movements reduce and roads are re-capped/ The ECoW reported no other incidents with ecological impacts.

3.7.3 ACoW

Condition 29 of the planning consent requires the appointment of an Archaeological Clerk of Works to ensure archaeological features are protected and recorded during the development. The ACoW communicated the ongoing works to the PMO on the 20th February 2022.

The ACoW described the ongoing and completed monitoring works across the site. In North Nesting monitoring is complete at Spur 47, with focus moving on to Spur 46.

In the Nesting Array, monitoring of the overhead line construction has been completed and all archaeological interests protected/avoided. It is noted that these works were part of a separate project, however the Viking team provided support to SSE Power Distribution to allow the work to progress.

3.8 Scope of next audit

The scope of the next PMO audit will be dependent on the specific activities undertaken at the development site in the preceding days and weeks. This is likely to include:

- Update on progress of construction works at Kergord, Mid Kame Ridge, Sandwater Road, North Compound and North Nesting, Main Compound and Nesting.
- Consideration of any comments received by the SIC or the Developer in relation to the works, including visits to view specific areas of concern.
- Update on the formation of peat restoration areas.
- Update on the construction of borrow pits.
- Update on the construction of the VEWF Substation.
- Updates from the ACoW, ECoW and GCoW teams.

4. AUDIT FINDINGS AND REQUIRED ACTIONS

Issue	Auditor Comments	Required Action	Action Owner	Status
Materials Storage and Handling (e.g. oil/fuel storage and peat/mineral soil storage and handling).	Peat restoration areas are managed through the project Habitat Management Plan and by a dedicated HMPO which balances the geotechnical and ecological objectives of the restoration. Potential risks relating to storage of peat are recorded on the PRRs and communicated to the Principal Contractor to allow mitigation/monitoring to be undertaken. The PMO will request evidence in future audits to confirm compliance with requirements for GCOW and ECOW approval of proposed peat restoration areas. The project COSHH stores are typically used for the storage of maintenance oils and greases. The stores were all locked and the assessment for each substance was readily available in each store. The stores were bunded and no leaks or staining was observed around the stores.	No action required	Principal Contractor	Green
Materials Storage and Handling (e.g. oil/fuel storage and peat/mineral soil storage and handling).	PMO observed some chemicals stored outside of the bunded areas in the batching plant (contrary to the CEMP). The PMO received confirmation following the audit that the issue has now been resolved. PMO observed non-compliance with waste management plan. A special waste skip and/or clearer labelling of skips is required.	Move materials to approved storage location	Principal Contractor	
Natural and Built Environment (e.g. ecology, biosecurity, protected sites, archaeology and site restoration).	Ecological constraints identifed by the ECoW team are communicated to the Principal contractor and Developer to allow mitigation measures to be implemented and rescheduling of preparatory and construction work as required.	No action required.	N/A	Green

Issue	Auditor Comments	Required Action	Action Owner	Status
	These are also marked out by poles on the site and included on ecological sensitive plans issued to the Principal contractor. Watching briefs have been undertaken by the AcoW where potential archaeolgical constraints are identifed. Where there are known archaelogical features the track is micro-sited to avoid the feature.			
Pollution Prevention and Response (e.g. use of spill kits, silt control, cement/concrete, water resources).	The project has recieved authorisation to abstract water from eight locations from SEPA. The authorisation allows the water to be used for dust suppression. The PMO has reviewed documents confirming that the appropriate registration is in place with SEPA under The Water Environment (Controlled Activities) (Scotland) Regulations 2011, as amended. During the audit the PMO observed spill kits to be well stocked and readily available in areas where liquids are stored. The project continues to improve the pollution prevention measures with additional measures installed in high risk area. PMO observed effective measures in place including but not limited to cut off drains, settlement ponds, silt controls, track side ditches and water pump reactor.	No action required.	N/A	Green
Noise, Dust, and Air Quality	No dust complaints had been received during the reporting period. Given the wet weather, dust suppression measures have not been required but effective measures are in place if required.	No additional actions required other than continued monitoring of dust conditions and implementation of control measures as needed; and ongoing liaison as required with other construction operators.	N/A	Green

Issue	Auditor Comments	Required Action	Action Owner	Status
Resources, Waste and Transport.	The project manages wastes through a Site Waste Management Plan, the plan identifies the contractors transferring the waste and the disposal sites. Documents are retained in line with regulatory requirements.	No action required.	N/A	Green
Pre-Planning Works (e.g. site set-up and general management, access tracks, community liaison).	Evidence of pre-planning works observed and reported during the audit included pre-construction surveys, nesting bird surveys, and micro-siting of access tracks to account for constraints. Potential constraints are identified and suitable mitigation measures implemented to prevent negative impacts.	No action required.	N/A	Green

APPENDIX 1
SITE LOCATION PLAN AND PHOTOLOG

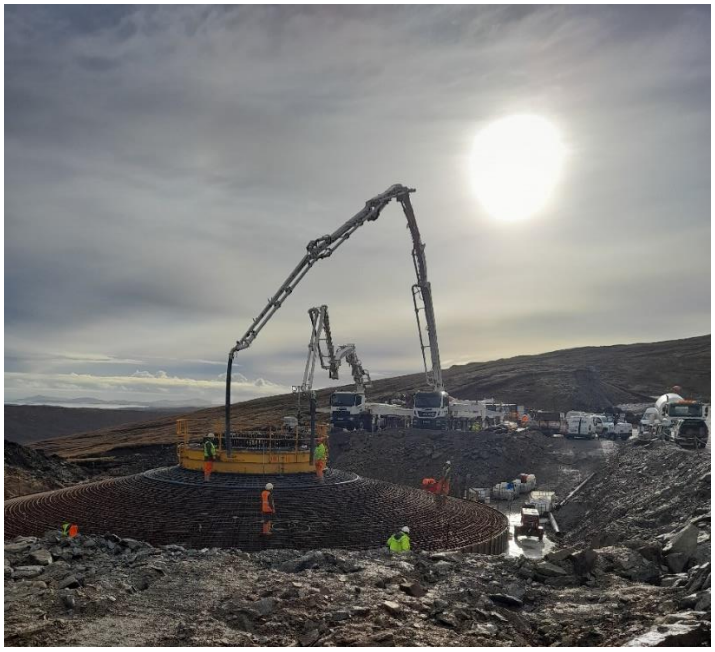

Photo 1. K43 turbine foundation concrete pour in progress

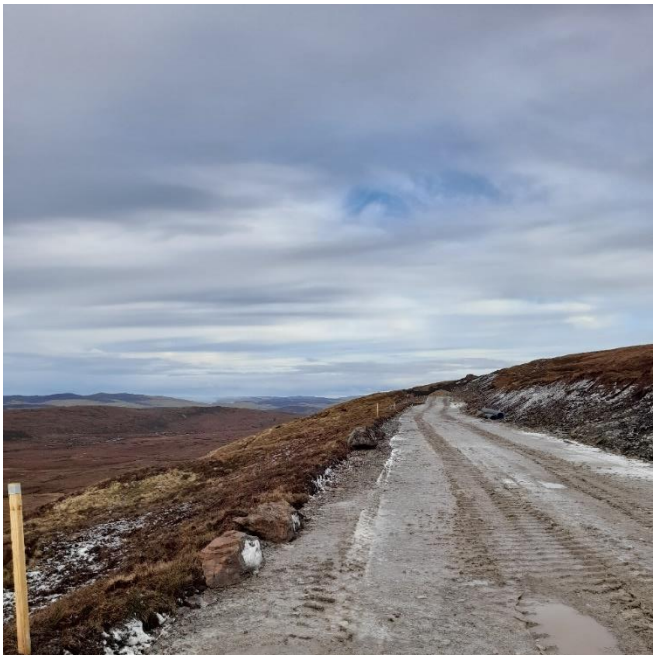

Photo 2. View of track construction to turbine K49

Title: Photographic Log	**Client:** Viking Energy Wind Farm
Site: Viking Energy Wind Farm	**Date:** 16th February 2022

Photo 3. Track construction at N95

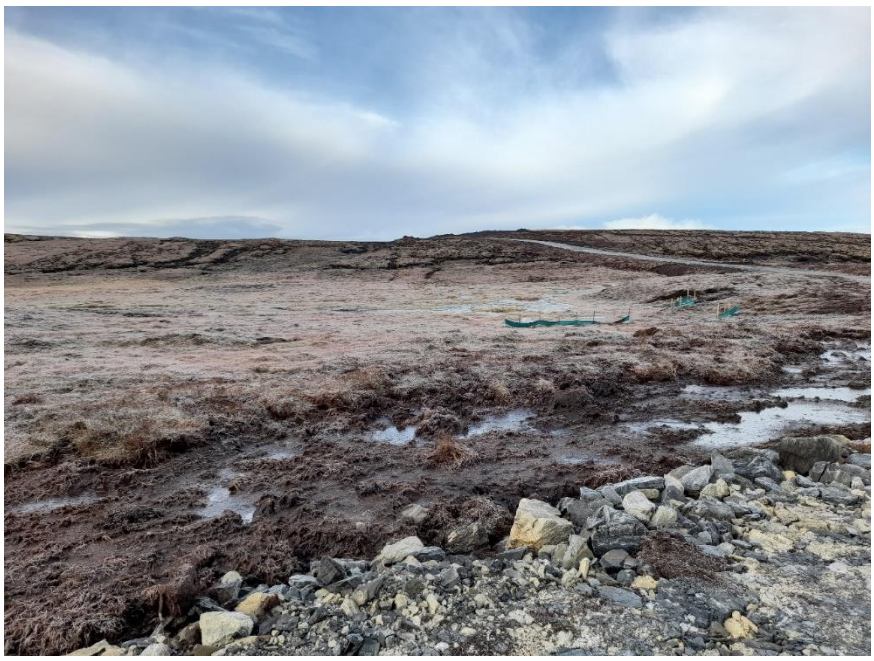

Photo 4. Wetland avoidance using micrositing between N104 and N105

Title: Photographic Log	**Client:** Viking Energy Wind Farm
Site: Viking Energy Wind Farm	**Date:** 16th February 2022

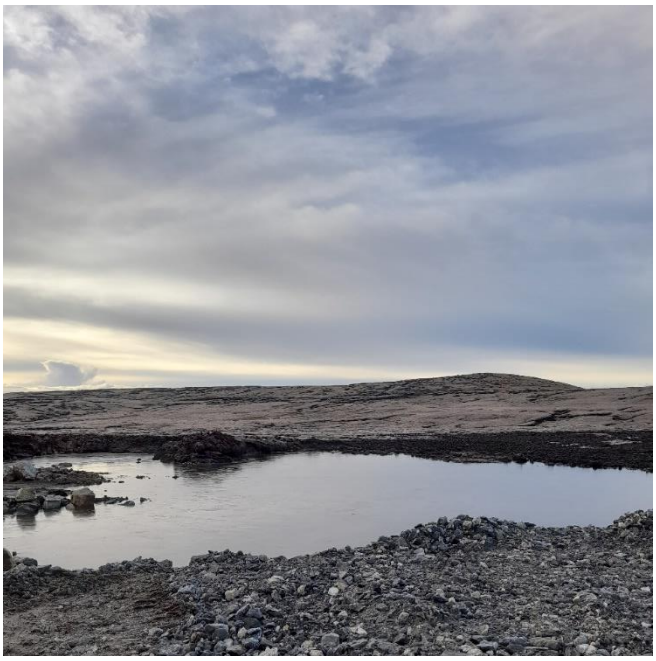

Photo 5. View of peatland restoration at P12 (adjacent to turbine N101)

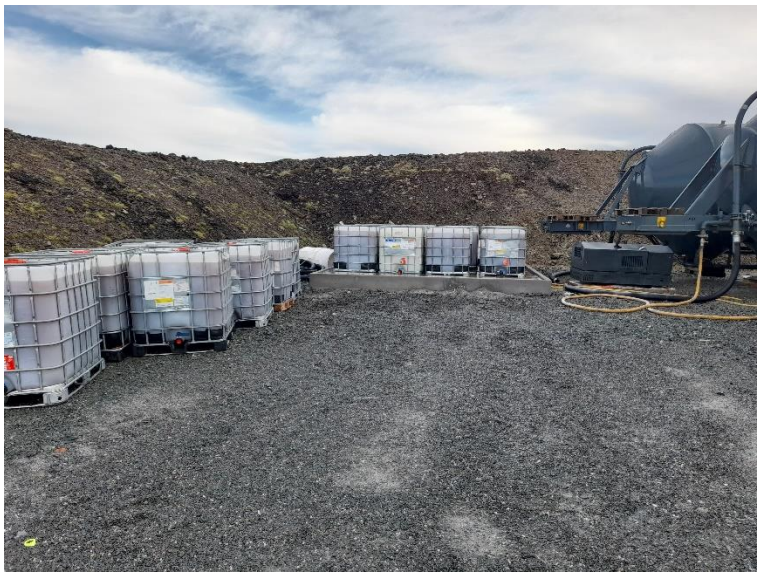

Photo 6. IBCs with concrete admix exceed capacity of storage area

Title: Photographic Log	**Client:** Viking Energy Wind Farm
Site: Viking Energy Wind Farm	**Date:** 16th February 2022

Photo 7. Concrete washout at batching plant

Photo 8. Batching plant fuel storage and spill kit

Title: Photographic Log	**Client:** Viking Energy Wind Farm
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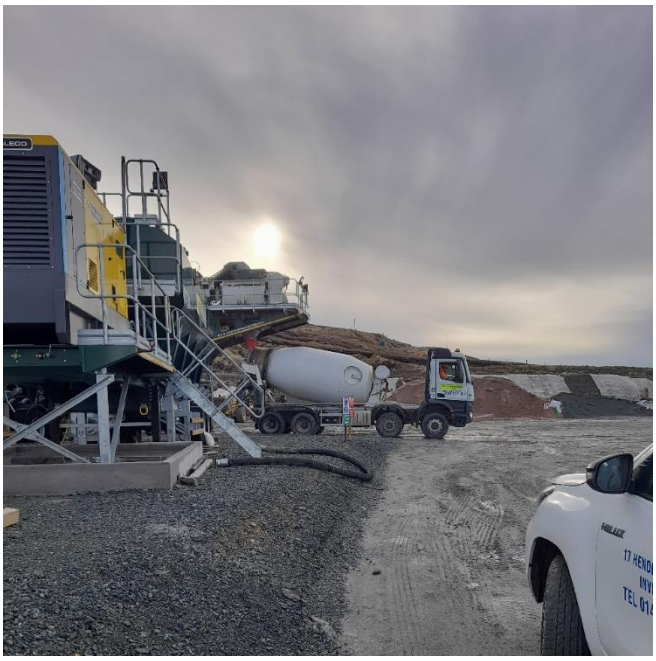


Photo 9. Batching plant in operation

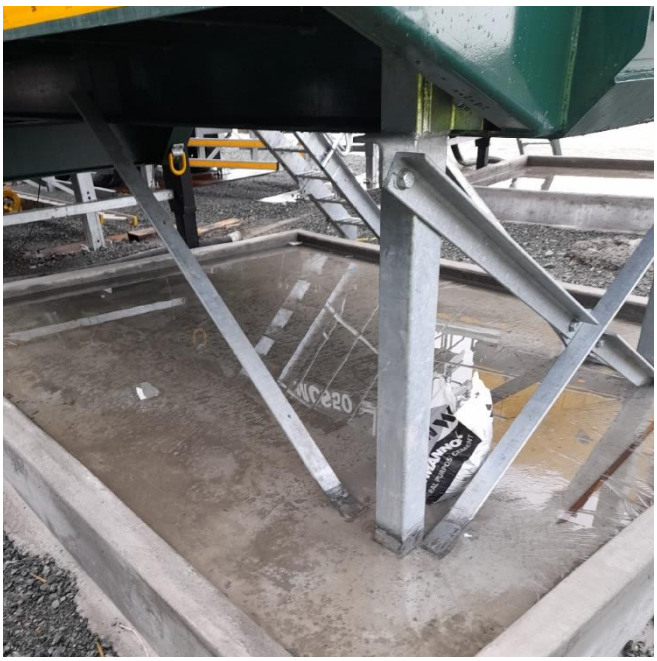


Photo 10. Rainwater accumulation in bund

Title: Photographic Log	**Client:** Viking Energy Wind Farm
Site: Viking Energy Wind Farm	**Date:** 16th February 2022

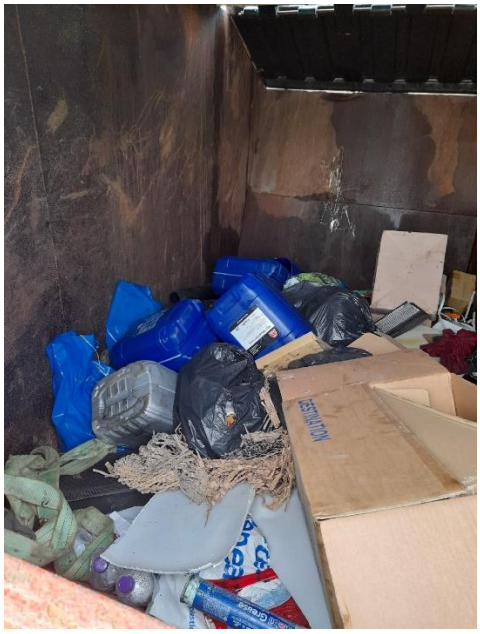
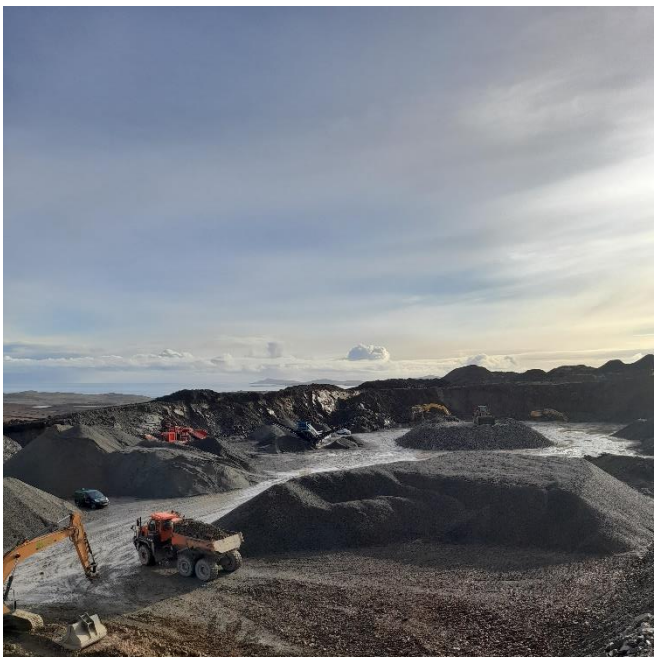


Photo 11. General waste – require separate skip for oily waste



Overview of operations at NBP05

Photo 12.

Title: Photographic Log	**Client:** Viking Energy Wind Farm
Site: Viking Energy Wind Farm	**Date:** 16th February 2022