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Morlais Project

Document MOR/RHDHV/DOC/0077: Outline Pollution Prevention and Management Plan

Applicant: Menter Môn Morlais Limited

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GLOSSARY OF ABBREVIATIONS

CEMP	Construction and Environment Management Plan
ES	Environmental Statement
ML	Marine Licence
NRW	Natural Resources Wales
PPMP	Pollution Prevention and Management Plan
SGN	Sector Guidance Note
TGN	Technical Guidance Note
TWAO	Transport and Works Act Order
WMP	Waste Management Plan

1. INTRODUCTION

1.1. BACKGROUND

1. Menter Môn Morlais Limited ('the Applicant', hereafter referred to as Menter Môn) is seeking a Transport and Works Act Order (TWAO) and Marine Licence (ML) for the Morlais Project (hereafter 'the Project').
2. The Project has extensive onshore elements including:
 - Cable landfall;
 - Landfall substation;
 - Onshore cable route;
 - Grid substation(s).
3. Menter Môn recognises that the provision of an outline Pollution Prevention and Management Plan (PPMP), to sit alongside the outline Construction and Environment Management Plan (CEMP), as part of the Environmental Statement (ES) submission, adds value to the ES and demonstrates consideration of the links between the findings of the ES, works anticipated to construct and operate the Project and potential consent conditions.
4. This document should be read alongside the outline CEMP (**Document MOR/RHDHV/DOC/0073**).

1.2. OBJECTIVE

5. This outline PPMP sets the framework for the final PPMP, which will ensure compliance with the requirements of legislation, commitments within the ES, consent conditions and environmental policies of the Applicant.
6. The Applicant will ensure that the Project is executed in a way that reflects the Applicant's environment policies and its desire to care for the environment.
7. This outline PPMP will be adopted by contractors and project tenants undertaking works as part of the Project. All parties undertaking works for the Project shall do so in accordance with the requirements of the PPMP.
8. The PPMP will be a live document, continuously reviewed to take into account additional environmental information encountered during the detailed design and construction phases, with any change approved by the Environment Manager within the Project Team.

1.3. RESPONSIBILITIES

9. Key project staff will be identified within the CEMP (**Document MOR/RHDHV/DOC/0073**).

1.4. LEGISLATION RELEVANT TO POLLUTION PREVENTION AND MANAGEMENT

10. The Environmental Protection Act 1990 covers subjects relating to the protection of the environment and the Project, including:

- Maintenance of premises and facilities;
 - Disposal of wastes;
 - Accumulation and depositing of materials
 - Fumes or gases emitted;
 - Dust;
 - Noise from facilities or operations; and
 - Noise from vehicles or equipment on a road or street.
11. The Water Resources Act (1991) and amendment regulations (2009) places a responsibility on the Project not to contaminate surface water.
 12. The Water Industry Act (1991) regulates effluent discharged to public sewers.
 13. The Control of Substances Hazardous to Health Regulation (2002) ensures that an employer does not undertake work liable to expose the workforce to a substance hazardous to health, unless an assessment of the risks has been undertaken and appropriate mitigation and management is in place.
 14. The Environmental Permitting Regulations (2010) provide a system of environmental permits and exemptions for the control of industrial activities, mobile plant, waste operations, water discharge activities etc.
 15. The Anti-pollution Works Regulations (1999) prescribe the content of anti-pollution work notices.
 16. The Waste (England and Wales) Regulations (2011) place emphasis on waste hierarchy to ensure that waste is dealt with in the priority order. The regulations cover the Waste Duty of Care requirements and implement a carrier and broker regime with a two-tier registration system.
 17. The Hazardous Waste Regulations (2005) and amendment regulations (2009) detail the control of hazardous waste, its storage and disposal.
 18. The Environment Act (1995) enables Natural Resources Wales (NRW) to carry out investigations to establish the source of polluting matter, the person responsible and to recover its costs.
 19. The Control of Pollution (Oil Storage) (Wales) Regulations 2016 require anyone in Wales who stores more than 200 litres of oil to provide more secure containment facilities for tanks, drums, Intermediate Bulk Containers (IBCs) and mobile bowsters.
 20. The Control of Pollution Act (1974) Sections 60 and 61 control noise nuisances from construction works.
 21. The Clean Neighbourhoods and Environment Act (2005) introduces noise, litter and waste controls including site waste management plans, and classifies artificial lighting as a statutory nuisance.

22. The Road Vehicles (Construction and Use) Regulations (1986) regulates the use of road vehicles.
23. NRW publishes a series of Sector Guidance Notes (SGN) and Technical Guidance Notes (TGN) to advise operators on standards for operational and environmental performance. These are regularly updated, and a list will be compiled prior to commencement of construction to ensure currency of advice. Area covered by the notes will include:
- Guidance for storage and handling of materials;
 - Guidance for site drainage, and effluent management; and
 - Guidance on environmental best practice.

2. PREVENTION OF POLLUTION TO LAND

2.1. STORAGE AND HANDLING OF FUELS

24. The final PPMP will carefully consider the location and management of any fuel storage during construction. All storage will be in accord with the requirements of the Control of Pollution (Oil Storage) (Wales) Regulations 2016 and relevant SNG and TNG published by NRW.
25. Key requirements will include:
- Fuel tanks and storage areas on hardstanding areas prevent ground contamination;
 - All fuel tanks and bowzers should have an integral bund built to contain 110% of capacity;
 - Mobile fuel bowzers should be double skinned;
 - Fuel bowzers and storage tanks should be labelled clearly with contents and maximum capacity.
 - Spill kit equipment should be located next to any fuel tank and / or fuel bowzers;
 - Dispensing nozzles and hose valves should be locked within the bunded bowser when not in use;
 - Only competent members of the construction / works / project team should be able to carry out refuelling of plant and machinery and only using the correct equipment (nozzles and funnels of an appropriate size etc.);
 - Fuel bunds and drip trays should be kept be free from rainwater and clean. A competent member of the project team must be designated with executing this task, especially during periods of inclement weather, with bunds and drip trays inspected daily.
 - Static items of plant such as pumps and generators should only be used if they have an integral double skin or have a drip tray or other capture method below.
 - Storage and delivery of fuel should be as far as possible from watercourses, and at least 30 m if possible.
 - Transport of fuel on site in drums or other plastic containers should be avoided.

2.2. CEMENT AND WET CONCRETE

- 26. Concrete and cement are alkaline and corrosive. They are potentially polluting of land and water, as well as harmful to personnel.
- 27. Only designated areas should be used for concrete wash out, with care taken to ensure these are away from sensitive receptors such as watercourses and land drains. The washing out of any concrete mixer and associated chutes, tools or equipment should also be carried out in a designated area away from drains and watercourses.
- 28. Wash down activities will take place in designated areas consisting of impermeable wash out lagoons.

2.1. MUD

- 29. Mud on the public highways is a statutory nuisance and a health and safety hazard and a named member of the project team will carry out regular checks on the roads conditions and ensure road cleaning is carried out using a method appropriate to the nature and quantity of mud.

2.2. HAZARDOUS SUBSTANCES

- 30. Chemicals must be clearly labelled, segregated, and stored on spill trays in lockable containers. Storage must be in accordance with the COSHH regulations.
- 31. Containers should have raised lips designed to contain any spills that may occur within.
- 32. No mixing of different chemical containers should be allowed, and such containers should be stored separately.
- 33. Appropriate firefighting equipment should be stored adjacent to any flammable chemicals.
- 34. A named member of the Project / construction / works team should control access to hazardous substances and keep records of quantities held and contents.
- 35. When not in use, gas cylinders shall be stored upright in lockable cages. Gases must be kept a suitable distance from other reactive gases and substances.
- 36. Spill kit material should be kept within containers for use in an emergency, along with the Emergency Response Procedure for the site.
- 37. Hazardous substances should not be stored next to (minimum 30 m separation) any watercourses or drains.

2.3. GENERAL WASTE

- 38. Waste management will be in accordance with the procedures detailed in a site Waste Management Plan (WMP).
- 39. A named member of the Project / construction / work team be responsible for housekeeping in the work area and site base.

40. Waste collected from the site should be classified, segregated and disposed of appropriately.

2.4. PLANT MAINTENANCE

41. Prior to entry onto site all plant will inspected for leaks of fuel, hydraulic fluid and engine oil. An item of plant considered a possible pollution threat must not be granted access to the site.
42. Mobile plant will be maintained so that leaks and spills are avoided.
43. Plant maintenance will only be carried out with a drip tray under the work area and spill kit to hand.
44. Any plant maintenance must be undertaken in a designated area as far as possible from any watercourses (30 m where possible).

3. PREVENTING POLLUTION TO AIR

3.1. EXHAUST FUMES FROM PLANT AND MACHINERY

45. Plant and machinery will be switched off when not in use.
46. Machinery will be checked, to ensure that it is in good operative condition before commencing work and that exhaust emission levels are acceptable. Any item of plant deemed to be a pollution threat will not be granted access onto site.
47. Contractors will ensure regular servicing is carried out and recorded.

3.2. FUMES FROM CHEMICALS, SOLVENTS ETC.

48. Containers of chemicals etc. will not be left unattended or stored in a manner likely to cause spillage or mixing with other chemicals. They will be kept safe from interference.
49. Lids will be replaced on containers when they are not in use, to prevent evaporation to the atmosphere, particularly of highly volatile and combustible substances.

3.3. DUST

50. Methods for minimising dust include the following:
- Damping down during prolonged periods of dry weather;
 - Appropriate site speed limits;
 - Covering or damping of haul lorries and stockpiles of fine materials;
 - Maintenance of roads clear of mud and other debris tracked from the site.

4. PREVENTING POLLUTION TO WATER

4.1. USE OF FUEL AND OILS

51. Fuel storage tanks and containers storing hazardous substances shall not be located near a drain, ditch, watercourse or peaty soil and shall be placed on hardstanding areas. Storage areas will be as far away from watercourses as possible (minimum distance of 30 m).
52. No refuelling will be carried out within 30m of the watercourses or drains with the exception of refuelling static items of plant when absolutely necessary under controlled circumstances.
53. Where operations are adjacent to watercourses, absorbent booms will be stored adjacent to the works, prior to the commencement of any work. Clean up material and equipment will also be available at these locations.
54. Working areas, where possible will not be within 10 m of watercourses. Where this is not possible, approaches will follow the most recent guidance from NRW.
55. Spilt oil and fuels absorbed using a spill kit will be disposed of as Hazardous Waste.
56. Drip trays will be regularly inspected and emptied, either via tanker and disposed of immediately off site, at an appropriately licensed facility (for large quantities), or to an on-site, bunded, storage facility for later off-site disposal (small quantities). The inspection frequency will increase during times of frequent rainfall.

4.2. DISPOSAL OF GROUNDWATER AND SURFACE WATER FROM TRENCHES AND EXCAVATIONS

57. Discharge to a watercourse from construction activities is prohibited without prior consent from NRW.
58. Surface or groundwater from excavations shall not be pumped or allowed to drain into watercourses, field drains etc. without adequate filtration or settlement, agreed by NRW.
59. Pumps shall be located as far away from any given watercourse as practicable and placed on drip trays on level ground.

4.3. ESCAPE OF SILT WATER

60. Permission is required from the Project Team's Environmental Manager before any discharge is made off site.
61. Prior to any discharge, suitable filtration media such as settlement lagoons/tanks, straw bales or grass plots on site shall be in place. Thought will be given to potential water discharge points to ensure sufficient land is available to deal with the needs of dewatering including the availability of grassy areas to be used as soakaway.
62. Any discharges from site will be checked regularly.
63. Clean water will be diverted away from bare ground.

64. Silty water will be diverted away from drains using sandbags for example.
65. Lagoons or tanks for the settlement of water will be positioned in an appropriate location and maintained so as to prevent any leakages or breaches.
66. Roads and hard surfaces will be kept clean, to prevent a build-up of mud and sediment that could contaminate surface water.

4.4. RISK OF POLLUTION ASSOCIATED WITH THE HDD AND TRENCHING

67. Soils excavated from the drilling and receiving pits, cable trenches and HDD will be stored in appropriate secure locations in sheeted stockpiles;
68. During HDD, drilling fluid that helps lubricate and cool the drilling process collects in a mud pit to the side of the entry point, before passing through a mud recycling plant which separates mud and cuttings, thus allowing the drill fluid to be re-used. This mud pit represents a potential source of pollution and will be securely bunded while maintaining an efficient drilling operation.
69. Upon completion of works any excavated soils will be returned in reverse order to reinstate the pits and trenches. Material that cannot be accommodated on site will be removed from site and treated in accordance with the site WMP.
70. Any excess drilling fluid will be taken away by suction tanker to an approved landfill site.

5. CONTAMINATED LAND

71. If unforeseen contamination is encountered during construction of the Project work will stop. NRW will be contacted and the local planning authority informed as soon as is practicable. A risk assessment will be undertaken to identify additional actions which may be required such as:
 - Review existing desk study and site data;
 - Design and undertake appropriate site-specific intrusive ground investigation;
 - Undertake laboratory chemical and geotechnical/ civil engineering soil and groundwater analysis;
 - Undertake human health and controlled water risk assessment;
 - Undertake remedial action, options appraisal and/or design only where identified through site specific ground investigation and risk assessment;
 - Implement the detailed mitigation measures or remedial works; and
 - Verify mitigation measures or remedial works.
72. Professional advice would be sought only from those with a demonstrable specialist competency in risk-based management of land contamination.
73. There is a low risk of environmental pollution occurring should any unknown underground services be encountered and damaged during intrusive works.

6. INCIDENT MANAGEMENT

6.1. POLLUTION CONTROL EQUIPMENT

74. Pollution control equipment must be available in all high-risk areas. A nominated member of the Project Team will carry out checks to ensure that the equipment is available and re-stocked if used. The following is an example of the types of equipment required for dealing with small-scale incidents (5 litres or less) and medium scale incidents (6–20 litres) on a typical construction project.
75. For larger incidents onsite the Environmental Incident Response Team must be called to assist.
76. The site compounds will maintain a supply of not less than:
- Absorbent booms;
 - Absorbent pads;
 - Absorbent granules;
 - Heavy duty plastic bags;
 - Sandbags; and
 - Spades.
77. Each fuel bowser or fuel tank location will have:
- Absorbent granules; and
 - Absorbent pads;
 - Heavy duty plastic bags and ties; and
 - Spade

6.2. INCIDENT RESPONSE PROCEDURES

78. The stages of response in the event of a pollution incident are:
- Stop all work in the immediate area immediately.
 - Contain by using granules and spill kits, or inert material such as sand or earth.
 - Notify the Site Manager immediately who in turn shall without delay inform the Environmental Manager.
 - Recover by using absorbent pads, booms or skimmers.
 - Bag all contaminated materials.
 - Dispose by taking contaminated material to the appropriate container and disposing in accordance with the Waste Management Plan.

6.3. SPILLS TO WATERCOURSES

79. If a watercourse is affected, the following procedure will be followed:
- Stop the source of the leak/spill;

- The pollutant shall be removed using floating absorbents and if necessary, skimmers.
- Contaminated material and absorbents 'double-bagged' and disposed of in accordance with the WMP.

80. All spillages into a watercourse, and spills/incidents presenting a pollution risk shall be reported to NRW as soon as possible – the responsibility of the Environmental Manager.

6.4. SPILLS TO LAND

81. Small spills (5 litres or less):

- Stop the spill;
- Use absorbent material or dry subsoil to contain and to clean up spill;
- Dispose of contaminated soil in heavy duty sacks and 'double-bag';
- Dispose of sacks following the WMP; and
- Report incident to Environmental Manager.

82. Medium Spills (between 6 and 20 litres):

- Stop the spill;
- Contain the spread of the spill using inert material (spoil, soil, sand or sandbags) as appropriate;
- Dispose of contaminated material in heavy duty plastic sacks following the WMP; and
- Report incident to Environmental Manager.

83. Large Spills (over 20 litres):

- If a spill cannot be contained by on site equipment, then call the assistance of 24-hour Emergency Team and the Environmental Manager will inform NRW.

6.5. DRILLING MUDDS

84. Drilling mud will be pumped from mixing tanks to the drill rig.

85. Bunding of the entire drill site will provide additional safeguard against spills.

86. During HDD, in the event of inadvertent drilling fluid returns to the surface the incident will be reported immediately to the Environmental Manager.

87. Inadvertent returns will be contained by a bund, depending on the location and ground conditions of the spill, and a method of removal from the area back to the drill site will be agreed.

88. Pumps, hoses and storage, will be sourced prior to the start of the work to enable quick availability once the method of removal is agreed.

6.6. PROTECTED SPECIES

89. If protected species are encountered during construction, work in the affected area will halt immediately until further notice.
90. The Environmental Manager will inform and seek advice from NRW and the Local Planning Authority Ecologist immediately.

6.7. INCIDENT REPORTING

91. It is the responsibility of the person who discovers/causes the incident to report it. All staff shall report all spills immediately to the Environmental Manager.
92. The Environmental Manager will notify the Project Manager immediately and inform NRW on their hotline. In the final PPMP the number will be provided here.
93. All incidents will be reported, recorded and closed out in accordance with the CEMP.

6.8. EMERGENCY NUMBERS

94. In the final PPMP, a table of numbers will be provided here.

Role	Name	Contact Number
Project Manager		
Environment Manager		
Site Manager		
Environmental Health IoACC: Pollution Control		
NRW Incident hotline		