

Site Specific Risk Assessment

Risk assessment for proposed land-spreading activity – Hafod Farm, Ferwig, Cardigan, Ceredigion

Risk assessment carried out by: Mr Daniel James & Mrs Carys James Date: May 2026

Data				Judgement				Action	
<i>Receptor</i> What is at risk? What do I wish to protect?	<i>Source</i> The agent or process with potential to cause harm	<i>Harm</i> The harmful consequences if things go wrong	<i>Pathway</i> How the receptor might come into contact with the source	<i>Probability of exposure</i> How likely is this contact?	<i>Consequence</i> Severity of the consequences if this occurs	<i>Magnitude of risk</i> The overall magnitude of the risk	<i>Justification for magnitude</i> Basis of my judgement	<i>Risk management</i> How I can best manage the risk to reduce the magnitude	<i>Residual risk</i> Magnitude of the risk after management
Surface water – ditches, watercourses and ponds	Nutrients, organic matter and solids	Surface water pollution	Direct application to surface water, underdrainage and run off	Low	High	Medium	No spread areas, buffer zones in place and accurate spreading with dribble bar. Liquid waste soil incorporated following spreading where spread prior to planting of grass crops.	Comply with COGAP, Sludge Regs and EPR. Spreading to be only undertaken when conditions are suitable. No spreading areas enforced as per plans attached to application. Wastes soil incorporated within 12 hrs following spreading where spread prior to planting of next crops.	Low
Groundwater /Soils	Nutrients and PTES	Groundwater pollution and excessive nutrient build up	Over-application to land	Low	High	Low	The materials have low PTEs to be applied at proposed rates as detailed in application. Nitrogen applied is significantly less than crop recommendations. Phosphate applied is less than crop recommendations.	Appropriate spreading rates and timing of application. Comply with COGAP, EPR and Sludge Regs. Carry out soil analysis of all fields regularly. Fields spread with dribble bar applicator using flow metres. No spreading within 50m of a spring, borehole or well.	Low
Humans and animals	Spreading activities – physical	Harm to humans or animals	Trespass, accidental contact Public footpaths in fields Hafod 1594 & Hafod 2312	Low	Medium	Low	Agricultural areas with limited public access.	Application during appropriate conditions & awareness of access issues. No spreading in fields near footpath if in use.	Low
Soils	Physical damage to soil structure	Damage to soil structure and poor subsequent crop yields	Delivery and spreading activity	Low	Medium	Low	Delivery and spreading to be undertaken under appropriate ground conditions using low ground pressure equipment.	Comply with COGAP and Cross Compliance Criteria. Apply only in suitable conditions.	Low

Risk Assessment continued

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Soils	PTE addition	Build-up of PTEs.	Spreading activity	Low	Medium	Low	Low levels of PTEs in wastes, lower than average annual addition limits under Sludge Regs	Comply with COGAP, Cross Compliance and Sludge Regs. Apply at specified rates. Soils sampled regularly.	Low
Soils	Nutrient build up	Reduced yield quality and quantity of subsequent crops, nutrient leaching, runoff to sensitive receptors & surface water	Spreading activity, over application	Low	Medium	Low	Wastes applied at specified rates with the use of flow metres. The materials are low in available nitrogen. Nitrogen & phosphate applied are less than crop recommendations.	Apply according to RB209 recommendations, COGAP & The Water Resources (Control of Agricultural Pollution) (Wales) Regulations. Application rates in agricultural benefit statement not to be exceeded. Carry out soil analysis of all fields regularly.	Low
Air	Odour during storage, loading / unloading and spreading activities	Odour issues and complaints	Airborne compounds	Medium	Medium	Medium	Nearby residents often sensitive to odour. Spreading in rural areas with appropriate equipment and measures in place to reduce odour.	Liquid wastes spread with a low trajectory dribble bar & soil incorporated within 12 hrs where spread prior to planting of grass crops. Prevailing wind direction and weather will be monitored. Odour monitoring and mitigation measures in place in line with EMS. Liquid sludge in storage is in covered nurse tank, or slurry tank, lagoon store at farmyard away from most sensitive receptors.	Low
Air	Dust during spreading	Dust complaints	Dust during windy conditions	Low	Low	Low	Liquid sludges - materials have low potential for dust.	Assess wind speed and direction before spreading and proximity to surrounding receptors. Spread when conditions are suitable.	Low
Air/People	Noise	Noise complaints	Noise from delivery, and spreading	Low	Low to Medium	Low	Agricultural machinery in agricultural areas.	Avoid sensitive delivery & spreading periods where possible e.g. bank holidays and weekends. Delivery during daylight hours where possible	Low
Hedgerows and trees	Physical damage from spreading	Ecological + landscape	Physical damage from spreading equipment	Low	Low	Low	Experienced operators employed & instructed to take care around trees	Leave a 2.0m minimum buffer zone adjacent to trees, shrubs and hedges.	Low

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Aberarth-Carreg Wylan SSSI This site is of special interest for its geological, geomorphological and biological features. The cliffs and foreshore vary considerably in structure, exposure and sediment type, supporting a wide range of marine and coastal wildlife. Bottlenose dolphin and Atlantic grey seal are of special interest and are known to feed and breed along the shoreline. Secluded beaches and sea caves provide pupping sites for grey seals.	Deterioration of site through contamination, nutrient enrichment, habitat loss, smothering	Harm to protected site through contamination, nutrient enrichment, disturbance etc.	Spreading activity, airbourne compounds, flooding, nutrient run off or leaching	Low	Medium	Medium	No spreading areas to SSSI enforced and watercourses. Liquid wastes spread with a low trajectory dribble bar applicator. Spreading at appropriate timings. Proximity of temporary storage locations to SSSI.	Assess wind speed and direction before spreading and proximity to surrounding receptors. Spread when conditions are suitable with no or little wind and when the potential of any gusts is not in the direction of the SSSI. Spreading with low trajectory dribble bar applicator. 10m no spread areas enforced to watercourses and minimum 20m no spread area to SSSI. Ensure field conditions are appropriate for spreading. No spreading within 48 hours of forecasted heavy rainfall. Wastes soil incorporated within 12 hrs where spread prior to planting of grass crops.	Low
Local human population and local environment	Flooding of site	If waste is washed off site, it may contaminate buildings / gardens / natural habitats downstream.	Flood waters	Low	Medium	Medium	Spreading undertaken only on fields at appropriate timings. Temporary storage sited in suitable low risk locations.	No spreading in periods where heavy rain is forecast or if land is waterlogged. Spreading operator to employ 10m no spreading areas as per attached plans to watercourses.	Low

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Caeau Crug Bychan, Ty Gwyn a Llwyn Ysgaw SSSI (Caeau Crug Bychan, Ty Gwyn a Llwyn Ysgaw is of special interest for the species-rich wild plant community of these arable fields and for populations of nationally scarce and regionally rare plants)	Deterioration of site through contamination, nutrient enrichment, habitat loss, smothering	Harm to protected site through contamination, nutrient enrichment, disturbance etc.	Spreading activity, airbourne compounds, flooding, nutrient run off or leaching	Low	Medium	Medium	No spreading areas to SSSI enforced and watercourses. Liquid wastes spread with a low trajectory dribble bar applicator. Spreading at appropriate timings. Proximity of temporary storage locations to SSSI.	Assess wind speed and direction before spreading and proximity to surrounding receptors. Spread when conditions are suitable with no or little wind and when the potential of any gusts is not in the direction of the SSSI. Spreading with low trajectory dribble bar applicator. 10m no spread areas enforced to watercourses and minimum 20m no spread area to SSSI. Ensure field conditions are appropriate for spreading. No spreading within 48 hours of forecasted heavy rainfall. Wastes soil incorporated within 12 hrs where spread prior to planting of grass crops.	Low

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Cardigan Bay / Bae Ceredigion SAC (- in particular the bottlenose dolphin)	Deterioration of site through contamination, nutrient enrichment, habitat loss, smothering	Harm to protected site through contamination, nutrient enrichment, disturbance etc. Impact on the habitats of the bottlenose dolphin and other habitats	Spreading activity, airborne compounds, flooding, nutrient run off or leaching	Low	Medium	Medium	No spreading areas to SAC enforced and watercourses. Liquid wastes spread with a low trajectory dribble bar applicator. Spreading at appropriate timings. Proximity of temporary storage locations to SAC.	Assess wind speed and direction before spreading and proximity to surrounding receptors. Spread when conditions are suitable with no or little wind and when the potential of any gusts is not in the direction of the SAC. Spreading with low trajectory dribble bar applicator. 10m no spread areas enforced to watercourses and minimum 20m no spread area to SAC. Ensure field conditions are appropriate for spreading. No spreading within 48 hours of forecasted heavy rainfall. Wastes soil incorporated within 12 hrs where spread prior to planting of grass crops.	Low

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West Wales Marine / Gorllewin Cymru Forol SAC (- in particular the European Protected Species - the harbour porpoise)	Deterioration of site through contamination, nutrient enrichment, habitat loss, smothering	Harm to protected site through contamination, nutrient enrichment, disturbance etc. Impact on the habitats of the harbour porpoise and other habitats	Spreading activity, airborne compounds, flooding, nutrient run off or leaching	Low	Medium	Medium	No spreading areas to SAC enforced and watercourses. Liquid wastes spread with a low trajectory dribble bar applicator. Spreading at appropriate timings. Proximity of temporary storage locations to SAC.	Assess wind speed and direction before spreading and proximity to surrounding receptors. Spread when conditions are suitable with no or little wind and when the potential of any gusts is not in the direction of the SAC. Spreading with low trajectory dribble bar applicator. 10m no spread areas enforced to watercourses and minimum 20m no spread area to SAC. Ensure field conditions are appropriate for spreading. No spreading within 48 hours of forecasted heavy rainfall. Wastes soil incorporated within 12 hrs where spread prior to planting of grass crops.	Low

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Crug-Bychan Round Barrow - Scheduled Monument	Deterioration to scheduled monument via ground disturbance, nutrient enrichment from run off / leaching	Damage to scheduled monument via ground disturbance, run off / leaching causing nutrient enrichment at site	Spreading activity, nutrient run off / leaching to watercourses.	Low	Medium	Low	Suitable tractors and dribble bars / tankers with dribble bars used for spreading in suitable conditions with wide tyres and correct tyre pressures for field work. Wastes only spread on agreed spreadable agricultural field areas as per deployment application with wastes soil incorporated or spread into growing grass crops. Agricultural machinery in agricultural areas. Temporary storage locations far from scheduled monument.	Assess wind speed and direction before spreading and proximity to surrounding receptor. Spread when conditions are suitable with no or little wind. Wastes soil incorporated following spreading as soon as possible where spread prior to planting of next grass crops and within 12 hours. No spreading within 48 hours of forecasted heavy rainfall. Suitable equipment used for spreading and no spread areas observed.	Low