

# Site Specific Risk Assessment

Risk assessment for proposed land-spreading activity –  
 Hook Farm, Ambleston, Haverfordwest, Pembrokeshire, SA62 5QX & Middle Woodstock Farm, Clarboston Road, Woodstock, Pembrokeshire,  
 SA63 4TG

Risk assessment carried out by: Mr Daniel James & Mrs Carys James      Date: February 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 for liquid sludges and rear discharge muck spreaders for sludge cakes. Stockpiles for sludge cakes sited in suitable locations away from watercourses.	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.	Low
Groundwater /Soils	Nutrients and PTES	Groundwater pollution and excessive nutrient build up	Over-application to land, run off, leaching	Low	High	Low	The materials have low PTEs to be applied at proposed rates as detailed in application. Lower than average annual addition limits under Sludge Regs. Nitrogen applied is significantly less than crop recommendations. Phosphate applied is equal to or less than crop offtakes.	Appropriate given 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 for liquid sludges and rear discharge muck spreaders for sludge cakes. 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	Low	Medium	Low	Agricultural areas with limited public access.  No public footpaths in fields to be spread.	Application during appropriate conditions & awareness of access issues.  Spread at times of low 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, stockpile areas for sludge cakes not fully cleared	Low	Medium	Low	Wastes applied at specified rates. The materials are low in available nitrogen. Phosphate applied is equal to or less than crop offtakes. Stockpile areas fully cleared and spread for sludge cakes, no return to same stockpile areas within 2 years.	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	The water clarification liquid sludges and sludge cakes have no noticeable odour.	Liquid sludges spread with a low trajectory dribble bar, sludge cakes with rear discharge muck spreaders. Prevailing wind direction and weather will be monitored. Liquid sludges in temporary storage are in covered nurse tanks.	Low
Air	Dust during spreading	Dust complaints	Dust during windy conditions	Low	Low	Low	Liquid sludges - materials have low potential for dust.  The sludge cakes also have low potential for any dust. There is a low risk of dust during loading and spreading.	Assess wind speed and direction before spreading and proximity to surrounding receptors. Spread when conditions are suitable. This especially applies to spreading of the sludge cakes.	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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What is at risk? What do I wish to protect?	The agent or process with potential to cause harm	The harmful consequences if things go wrong	How the receptor might come into contact with the source	How likely is this contact?	Severity of the consequences if this occurs	The overall magnitude of the risk	Basis of my judgement	How I can best manage the risk to reduce the magnitude	Magnitude of the risk after management
<p>Afon Cleddau Gorllewinol / Western Cleddau River SSSI</p> <p>(The Western Cleddau River is of special interest primarily for important populations of Otter, European bullhead, European river lamprey, Brook lamprey, Sea lamprey. Also for its range of river habitats including beds of submerged aquatic plants, with floating vegetation often dominated by water-crowfoot. As well as a variety of associated river habitats.)</p>	Deterioration of site through contamination, nutrient enrichment, habitat loss, smothering, disturbance	Harm to protected site through contamination, nutrient enrichment, disturbance etc.	Spreading activity, flooding, nutrient run off or leaching	Low	Medium	Medium	<p>20m no spread buffer in field Hook Field 4 to SSSI.</p> <p>No spreading areas enforced to watercourses.</p> <p>Liquid sludges spread with a low trajectory dribble bar applicator, sludge cakes spread with rear discharge muck spreaders. Spreading at appropriate timings.</p> <p>Stockpiles of sludge cakes sited in suitable low risk locations.</p> <p>Proximity of stockpiles of sludge cakes and nurse tank locations to SSSI.</p> <p>The wastes are low in available nitrogen. Phosphate applied is equal to or less than crop offtakes.</p> <p>Noise from spreading activity – agricultural machinery working in agricultural fields.</p>	<p>Assess wind speed and direction before spreading and proximity to surrounding receptors when spreading all fields, but Hook Farm fields Hook Field 1, 2 &amp; 4 in particular. 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. Liquid sludges spread with a low trajectory dribble bar applicator, sludge cakes spread with rear discharge muck spreaders. 10m no spread areas enforced to watercourses. Ensure field conditions are appropriate for spreading.</p> <p>Arable fields cultivated asap following spreading with waste incorporated into the soil within 24 hours where spread prior to planting of next crops.</p>	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	<p>Spreading undertaken only on fields at appropriate timings.</p> <p>Stockpiles of sludge cakes sited in suitable low risk locations.</p>	<p>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.</p>	Low

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<p>Afonydd Cleddau / Cleddau Rivers SAC</p> <p>(designated for the European bullhead, European river lamprey, Brook lamprey, Otter, Sea lamprey ; rivers with floating vegetation often dominated by water-crowfoot ; active raised bogs; &amp; Alder woodlands on floodplains)</p>	Deterioration of area through contamination, nutrient enrichment, habitat loss, smothering, disturbance	Harm to protected conservation area through contamination, nutrient enrichment, disturbance etc.	Spreading activity, flooding, nutrient run off or leaching	Low	Medium	Medium	<p>20m no spread buffer in field Hook Field 4 to SAC.</p> <p>No spreading areas enforced to watercourses.</p> <p>Liquid sludges spread with a low trajectory dribble bar applicator, sludge cakes spread with rear discharge muck spreaders. Spreading at appropriate timings.</p> <p>Stockpiles of sludge cakes sited in suitable low risk locations.</p> <p>Proximity of stockpiles of sludge cakes and nurse tank locations to SAC.</p> <p>The wastes are low in available nitrogen. Phosphate applied is equal to or less than crop offtakes.</p> <p>Noise from spreading activity – agricultural machinery working in agricultural fields.</p>	<p>Assess wind speed and direction before spreading and proximity to surrounding receptors when spreading all fields. 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. Liquid sludges spread with a low trajectory dribble bar applicator, sludge cakes spread with rear discharge muck spreaders. 10m no spread areas enforced to watercourses. Ensure field conditions are appropriate for spreading.</p> <p>Arable fields cultivated asap following spreading with waste incorporated into the soil within 24 hours where spread prior to planting of next crops.</p>	Low

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Designated Marsh Fritillary Butterflies Protected Species Area  (Hook Farm fields 1, 2,,4, 6, 7, 8 & 10 fall within the area and Hook Farm field 20 is near area)	Deterioration of area through contamination, nutrient enrichment, habitat loss, smothering, disturbance	Harm to area through contamination, nutrient enrichment, disturbance etc.	Spreading activity, flooding, nutrient run off or leaching, disturbance during activity	Low	Medium	Medium	<p>No spreading areas enforced to watercourses.</p> <p>Liquid sludges spread with a low trajectory dribble bar applicator so as not to coat crops when spread into growing crops, sludge cakes spread with rear discharge muck spreaders. Spreading at appropriate timings on spreadable areas under deployment.</p> <p>Liquid sludge / sludge cake to be soil incorporated where spread prior to planting of next crops.</p> <p>Stockpiles of sludge cakes sited in suitable low risk locations occupying as small a footprint as practicable.</p> <p>The wastes are low in available nitrogen. Phosphate applied is equal to or less than crop offtakes.</p> <p>Noise from spreading activity – agricultural machinery working in agricultural fields.</p>	<p>Assess wind speed and direction before spreading and proximity to surrounding receptors when spreading Hook Farm fields. Spread when conditions are suitable with no or little wind and when the potential of any gusts is not in the direction of sensitive receptors.</p> <p>Liquid sludges spread with a low trajectory dribble bar applicator, sludge cakes spread with rear discharge muck spreaders. 10m no spread areas enforced to watercourses. Ensure field conditions are appropriate for spreading.</p> <p>Liquid sludge / sludge cake to be soil incorporated as soon as possible and within 24 hours where spread prior to planting of next crops.</p> <p>High work rates to ensure spreading period lengths are not drawn out longer than necessary.</p>	Low

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<p>Afon Cleddau Dwyreiniol / Eastern Cleddau River SSSI</p> <p>(The Eastern Cleddau River is of special interest primarily for important populations of Otter, European bullhead, European river lamprey, Brook lamprey, Sea lamprey. Also for its range of river habitats including beds of submerged aquatic plants, with floating vegetation often dominated by water-crowfoot. As well as a variety of associated river habitats.)</p>	Deterioration of site through contamination, nutrient enrichment, habitat loss, smothering, disturbance	Harm to protected site through contamination, nutrient enrichment, disturbance etc.	<p>Spreading activity, flooding, nutrient run off or leaching</p> <p>Middle Woodstock field Gwarcoed 15 is 275m at the nearest point from the SSSI.</p>	Low	Medium	Medium	<p>No spreading areas enforced to watercourses.</p> <p>Wastes applied at specified rates on spreadable areas.</p> <p>Liquid sludges spread with a low trajectory dribble bar applicator. Spreading at appropriate timings.</p> <p>The wastes are low in available nitrogen. Phosphate applied is equal to or less than crop offtakes.</p> <p>Noise from spreading activity – agricultural machinery working in agricultural fields.</p>	<p>Assess wind speed and direction before spreading and proximity to surrounding receptors when spreading Middle Woodstock field Gwarcoed 15. Liquid sludge spread with a low trajectory dribble bar applicator. 10m no spread areas enforced to watercourses. Ensure field conditions are appropriate for spreading.</p> <p>Spread into the growing grass for this field at appropriate timings.</p> <p>High work rates to ensure spreading period lengths are not drawn out longer than necessary.</p>	Low

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Wallis Moor SSSI  (This site is designated due to its biological qualities, especially its wet heath and marshy grassland. It also has an important population of the nationally scarce marsh fritillary butterfly)	Deterioration of site through contamination, nutrient enrichment, habitat loss, smothering, disturbance	Harm to protected site through contamination, nutrient enrichment, disturbance etc.	Spreading activity, flooding, nutrient run off or leaching  Middle Woodstock fields Court Farm 33 & 34 are 62m and 212m at the nearest points from the SSSI.	Low	Medium	Medium	No spreading areas enforced to watercourses.  Wastes applied at specified rates on spreadable areas.  Liquid sludges spread with a low trajectory dribble bar applicator. Spreading at appropriate timings.  Proximity of nurse tank locations to SSSI.  The wastes are low in available nitrogen. Phosphate applied is equal to or less than crop offtakes.  Noise from spreading activity – agricultural machinery working in agricultural fields.	Assess wind speed and direction before spreading and proximity to surrounding receptors when spreading Middle Woodstock fields Court Farm 33 & 34. Liquid sludge spread with a low trajectory dribble bar applicator. 10m no spread areas enforced to watercourses. Ensure field conditions are appropriate for spreading.  Spread into the growing crops for these fields at appropriate timings.  High work rates to ensure spreading period lengths are not drawn out longer than necessary.	Low