Site Specific Risk Assessment

Risk assessment for proposed land-spreading activity – Penrallteifed, Llechryd, Cardigan, Ceredigion, SA43 2LU

Risk assessment carried out by: Mr Daniel James & Mrs Carys James Date: September 2025

Data				Judgement				Action	
Receptor What is at risk? What do I wish to protect?	*Source* The agent or process with potential to cause harm	*Harm* The harmful consequences if things go wrong	*Pathway* How the receptor might come into contact with the source	*Probability of exposure* How likely is this contact?	*Consequence* Severity of the consequences if this occurs	*Magnitude of risk* The overall magnitude of the risk	*Justification for magnitude* Basis of my judgement	*Risk management* How I can best manage the risk to reduce the magnitude	*Residual risk* Magnitude of the risk after management
Surface water – ditches, watercourses and ponds	Nutrients, organic matter	Surface water pollution	Direct application to surface water, underdrainage and run off, run off from slopes, soil erosion	Low	High	Medium	No spread areas, buffer zones in place and accurate spreading with dribble bar.	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	Low	High	Low	The materials have very low PTEs to be applied at proposed rates as detailed in application. Nitrogen applied is significantly less than crop requirements. Phosphate applied is less than either crop requirement or crop offtake.	Appropriate rate and timing of application. Comply with COGAP, EPR and Sludge Regs. Carry out soil analysis of all fields regularly. Material spread into growing grass crops or spring wheat. Sludge soil incorporated within 12hrs where spread prior to spring wheat planting. Spread at specified timings and application rates with the use of flow metres.	Low
Humans and animals	Spreading activities – physical	Harm to humans or animals	Trespass, accidental contact	Low	Medium	Low	Agricultural areas with limited public access. Public footpaths in fields Penrallteifed 1, 9 and 10.	Application during appropriate conditions, times of low use & awareness of access issues. No grazing of fields for at least 3 weeks following application.	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.	Comply with COGAP, Cross Compliance and Sludge Regs. Apply at specified rates.	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. Nitrogen applied is significantly less than crop requirements. Phosphate applied is less than either crop requirement or crop offtake.	Apply according to RB209 recommendations and COGAP. Application rates in agricultural benefit statement not to be exceeded. Carry out soil analysis of all fields regularly. Spreading carried out with the use of flow metres.	Low
Air	Odour during delivery and spreading activities	Odour issues and complaints	Airborne compounds	Low	Medium	Low	Nearby residents often sensitive to odour. Sludges from dairy waste treatment have moderately offensive odour.	Spread with low trajectory precision dribble bar applicator into growing grass or spring wheat crops. Sludge soil incorporated within 12hrs where spread prior to spring wheat planting. Prevailing wind direction will be monitored and site-specific odour management plan to be followed.	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 spreading periods where possible e.g. bank holidays and weekends. Delivery during daylight hours where possible	Low
Hedgerows and trees	Physical damage from spreading equipment	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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Afon Teifi SSSI Afon Teifi is of special interest for a range of river types and associated riverside habitats; flowering plants; bryophytes; otter; Cetti's warbler; bottlenose dolphin; brown hairstreak; fish; dragonflies and a variety of other invertebrates as well as both breeding and wintering bird communities and for geomorphological features.	Deterioration of site through contamination, nutrient enrichment, habitat loss, siltation, smothering, soil erosion, runoff.	Harm to protected site, habitat & species through contamination, nutrient enrichment, disturbance.	Spreading activity, flooding, nutrient run off or leaching to watercourses.	Low	Medium	Medium	No spreading areas to watercourses. Wastes applied at specified rates and timings. Nitrogen applied is significantly less than crop requirements. Phosphate applied is less than either crop requirement or crop offtake. No fields bordering SSSI, proximity of most fields from SSSI. Proximity of nurse tank locations and slurry bag location, spreading areas to SSSI.	Spread when conditions are suitable and as stated in ag benefit statement. Material to be spread into growing grass or spring wheat crops, sludge soil incorporated within 12hrs where spread prior to spring wheat planting. Spread using precision dribble bar applicator. 10m no spread areas enforced to watercourses. No spreading within 48 hours of forecasted heavy rainfall.	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. Nurse tanks and slurry bag locations are 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 and 50m no spread zones to springs, boreholes, wells.	Low

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Afon Teifi / River Teifi Special Area of Conservation (SAC) Habitat types and/or species for which this site is designated: Bullhead, River lamprey, Brook lamprey, Floating water plantain, Otter, Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels, Sea lamprey, Atlantic salmon, Rivers with floating vegetation often dominated by water-crowfoot	Deterioration of conservation area through contamination, nutrient enrichment, habitat loss, siltation, smothering, soil erosion, soil runoff.	Harm to conservation area, habitat & species through contamination, nutrient enrichment, disturbance.	Spreading activity, flooding, nutrient run off or leaching to watercourses, soil erosion and soil run off.	Low	Medium	Medium	No spreading areas to watercourses. Wastes applied at specified rates and timings. Nitrogen applied is significantly less than crop requirements. Phosphate applied is less than either crop requirement or crop offtake. No fields bordering SAC, proximity of most fields from SAC. Proximity of nurse tank locations and slurry bag location, spreading areas to SAC.	Spread when conditions are suitable and as stated in ag benefit statement. Material to be spread into growing grass or spring wheat crops, sludge soil incorporated within 12hrs where spread prior to spring wheat planting. Spread using precision dribble bar applicator. 10m no spread areas enforced to watercourses. No spreading within 48 hours of forecasted heavy rainfall.	Low
Ancient Woodland	Physical damage from spreading equipment, nutrient run off / leaching.	Harm to ancient woodland, habitat and species through contamination, nutrient enrichment, disturbance, physical damage.	Spreading activity, nutrient run off or leaching, soil erosion and soil run off.	Low	Medium	Medium	Spreading undertaken only on fields at appropriate timings. No spread buffers zones to ancient woodland.	No spreading in periods where heavy rain is forecast or if land is waterlogged. No spread buffers enforced to ancient woodland.	Low