

Technical Note

Pollution Prevention Plan (SA49285_TN1)

1. Introduction

- 1.1 The following pollution prevention plan has been produced in response to planning condition 4 under application reference 21/2332/FUL. The protocols detailed below are to be employed during the construction and operational phase of the proposed outdoor equestrian riding arena.
- 1.2 This proposed riding area is south of Bodfach Hall, Llanfyllin, Wales, SY22 5HS. Central site coordinates are as follows:
Eastings: 313579, Northings: 320110.
- 1.3 Potential pollutants could arise from the construction of the riding area and associated civils works, it is important to identify possible sources of pollution and apply sufficient measures to reduce the risk of any pollution incidents occurring. The identified main pollutants for the scheme are Fuel / chemical spills, silt, dust, and fire-fighting run-off. Each pollution source will have its own risk management measures, as identified in Section 2 of this plan.
- 1.4 This plan has been written with regard to 'Guidance for Pollution Prevention'. In particular GPP 1,2,5,21,22 and 24. Should a pollution incident take place on site, National Resource Wales must immediately be contacted by the Project Site Manager on the following details:



Figure 1 – Incident Hotline Number

Training shall be provided to prevent environmental incidents for site personnel. Toolbox talks are advised for a 'refresher' when undertaking new site tasks.

2. Pollution Management Controls

Silt

- 2.1 During the construction phase, silt will likely become evident, especially during the soil stripping phase. The greenfield area site levels fall towards River Cain; the following measures will be applied:
- The amount of soil stripped will be limited to the working areas required only.
 - Soil stripping should not be carried out during heavy or prolonged periods of rainfall.
 - Minimise soil stockpiles.
 - Utilise run-off lagoons and allow suspended solids to settle before disposal.
 - Site haul roads (If laid) will be brushed regularly, with sufficient temporary drainage to capture silt.
 - Either silt fences or impermeable bunding will be installed at the site boundary on east of the site, to prevent run-off into the river.
- 2.2 The site will be managed by separating out and designating 'clean' and 'dirty' areas of the operations as follows:
- A dirty area of work is to be established across the parts of the site where excavation / construction is taking place. Plant carrying out operations in these areas are to remain within the dirty area until operations are complete, including out of hours work periods. No other vehicles/plant will be permitted to enter the dirty areas of works. Note that a dirty operation consists of any work that requires excavation into the ground strata, involves soil or any other granular or slurry type material which could be transferred on the vehicle tyres to any other area of the site and/or the public highway.
 - Following initial establishment of the site and ground works, a clean area of the site is to be maintained at all times in the location of compound. This area will provide access for any short-term deliveries, general parking, act as a potential holding area for any materials, and area to provide 'transfer points.'
 - 'Transfer points' will be established to transfer waste, excavated material or new materials between the dirty areas to/from clean transfer plant.

- Upon completion of each dirty operation, all dirty plant will be cleaned using a pressure washer before being allowed to leave the site via the clean area.

- 2.3 The importance of site cleanliness and the need to abide by the above process will be communicated in the site inductions and toolbox talks to all operatives. Compliance with the process should be written into the site rules and instructions for suppliers as appropriate.
- 2.4 Whilst compliance with the above will prevent mud or other materials being deposited within the highway, should this occur, it will be cleared as soon as reasonably practicable by methods commensurate with the volume of material. Where necessary, road sweeping shall be used to ensure the carriageway surface is free of deposits. Should weather conditions result in excessive mud within the clean areas of the site, then the Principal Contractor will be required to hire a proprietary wheel washing system to clean all vehicles before they leave the site.
- 2.5 Should a wheel washing facility be required, the designated area must collect run-off which separates mud from liquids. A sump within the facility can then be emptied off site, via a licensed waste tip. It is considered good practice to re-use the water for the next vehicle, reducing water consumption on site. Wheel washing facilities must be positioned greater than 10m from any watercourse or drainage system.
- 2.6 The distance from the site area to the nearest carriageway, A490, is approximately 600m along a private track, which will greatly reduce the likelihood of depositing material onto the highway.

Concrete and Cementitious Materials

- 2.7 The alkalinity of these materials are harmful and can cause pollution. Any mixing of this material on site should be carried out on impermeable ground only.
- 2.8 Mixing and washing area to be at least 10m from any watercourse or drainage system. A re-circulation system for water re-use is required.
- 2.9 Wash water must be collected and contained for disposal as hazardous waste.

Storage of Plant and Materials

- 2.10 Refuelling of plant is to be carried out at the site compound only. Oils and fuels are to be used for this type of activity. The refuelling area must be over a flat impermeable hardstanding area, away from drains and watercourses.
- 2.11 All fuels and oils will be stored in compliance with the Control of Pollution (Oil Storage) (Wales) Regulations 2016.

- Storage of fuels, chemicals and oils must be at least 10m away from watercourses and drains.
- Storage area must be flat and avoid steep slopes.
- Storage of drums over 200l shall be stored on drip trays capable of holding 25% additional storage over the drum's maximum capacity.
- Tanks stored within bunds, shall be within a bund capable of holding 10% additional storage over the tank's maximum capacity.
- Bowsers shall be double skinned and within a bund capable of holding 10% additional storage over the bowser's maximum capacity.
- Drip trays are to be used for small mobile plant and also used at filling points.
- Spill kits will be available near vulnerable receptors (River Cain) and at the site compound area (where storage of plant and materials are present).
- All valves and hoses should be inspected regularly for signs of wear. All valves must be fitted with a lock and be locked shut when not in use.
- Storage areas must be outside of the flood zone extents.

2.12 Where spills occur, the contractor has highlighted the following method statement, following the principles of stop, contain, notify and clean-up:

- Work will be stopped immediately.
- All possible ignitions will be extinguished if the spilt material is flammable.
- The spill kit will be utilised, and contaminant sealed from spreading any further.
- Granules / pads will be used to mop up as much spill as possible.
- National Resource Wales will be contacted immediately using the numbers provided in Section 1.
- The granular material and pads with any other contaminated material will be treated as hazardous water and disposed of accordingly.
- An incident report form will be produced and sent to the HS&E Manager within 24 hours of the incident occurring.

- 2.13 Training is imperative to ensure the measure listed above are carried out efficiently, should a spillage event occur. Details of the pollution source, pathway of pollutant and receptor should be noted. The pollution control hierarchy is contained within Figure 2.



Figure 2 – Pollution Control Hierarchy (GPP 22)

- 2.14 Solid materials, which are dry and dusty will be avoided by good house keeping methods, including storing under cover and on hard standing. Skips (Where required) will be covered where there is risk of material becoming airborne.

Working Near Watercourse Specific Requirements

- 2.15 Further to the above points, work is not required in the River Cain, but within the flood zone B and C2, so the additional measures listed below will need to be followed.
- 2.16 Ecological surveys have identified River Cain as a vulnerable receptor for Atlantic Salmon and Brown Trout. No works are to take place within the river, all other matters in relation to the protection of the river have been listed within this plan and should be followed.
- 2.17 Silt management is covered within Section 2.1 of this plan.
- 2.18 All plant working within the flood zone areas will require wheels to be washed, plant also required to be visually checked on a daily basis for leaks. No plant shall be refuelled near the river, and only refuelled in the designated area on site.
- 2.19 The mixing of concrete is to be at least 10m away from the river and wider flood zone area.
- 2.20 Spill containment kits with sufficiently sized booms should be kept near the working area, should a spillage event occur.

- 2.21 Spoil from the works area should not be left within the flood plain, spoil such as silt and material from the riverbanks, shall be transported away from the river and managed within the Contractor's waste management plans.
- 2.22 In the case of the Fire Service attending the site, foam and burnt matter may be washed into the river unless action is taken as follows: Run-off on the surface must be contained using the following methods, where appropriate; poly booms and absorbent pads. If the run-off reaches the watercourse, a floating boom must be utilised.

Operation of The Arena

- 2.23 The planning statement highlights the proposed construction of the arena to consist of approximately 125mm deep silica sand with equestrian fibre, over a drainage base of clean limestone on a geotextile membrane. Surrounding the area, will be a post and rail fence.
- 2.24 As part of the equestrian arena is within flood zone, there is a slight risk of flood events migrating some of the arena silica sand within the watercourse. To mitigate this reasonably, the applicant shall surround the area (facing the river) with a shallow ground depression on the outside of the arena, which will allow for the collection of shifted sands in a practical manner.
- 2.25 Guidance for Pollution Prevention 24 allow for the use of horse manure to be collected and land spread as part of farm nutrient management plans. It is recommended any horse manure is removed regularly and should be removed from the arena if a flood warning is issued.