Risk assessment

Facility: Metal Recycling & Vehicle Depollution & Dismantling (Authorised Treatment Facility)

Location: 1C Martin Road, Tremorfa Industrial Estate, Tremorfa, Cardiff. CF24 5SD

Risk assessment carried out by: I LEWIS

Date: 08.06.2015

Data and information				Judgement				Action (by permitting)	
Receptor	**Source**	**Harm**	**Pathway**	**Probability of exposure**	**Consequence**	**Magnitude of risk**	**Justification for magnitude**	**Risk management**	**Residual risk**
What is at risk? What do I wish to protect?	**What is the agent or process with potential to cause harm?**	**What are the harmful consequences if things go wrong?**	**How might the receptor come into contact with the source?**	**How likely is this contact?**	**How severe will the consequences be if this occurs?**	**What is the overall magnitude of the risk?**	**On what did I base my judgement?**	**How can I best manage the risk to reduce the magnitude?**	**What is the magnitude of the risk after management? (This residual risk will be controlled by Compliance Assessment).**
Surface water drainage system and surface waters near the site development	Flooding of upsteram and downstream surface waters and surface water network	Loss of amenity, destruction of land/buildings/habitats	Flood water	Medium	Medium	**Medium**	Addition of hydraulic load to surface water system and assessment of surrounding area. Soakaway test and subsequent calculation of infiltration rate to ground.	Site drainage to go a soakaway system, then ground infiltration due to Dwr Cymru reqirements. Dwr Cymru will not allow connection to their network if a soakaway test detirmines the site can be drained via a soak away/Suds method. This is so that the drainage will not overload the sewer and surface water drainage network. Site to be drained to ground via specially designed SuDS systyem - 1 in 30year rainfall event.	Very Low/ Non Existent
Surface water drainage system and surface waters	Contaminated waters used by surrounding wildlife and ecological system.	Pollution of waters with hydrocarbon or other hazardous substance	Surface waters of severn estury - SSSI site	Medium	High	**Medium/high**	Close (200m+) proximity to Severn Estuary - an SSSI area.	Drainage via SuDS and other site infrastrucure, to ground rather than via the surface network	Very Low/ Non Existent

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Groundwater	Contaminated water infiltrating through ground to aquifer.	Contamination of groundwater and drinking supplies	Water abstraction for drinking supplies	Medium	High	**Medium**	Unregulated discharge and containmet of oil and hazardous substances	Maximium hazardous waste storage of 50 tonnes. All liquid wastes and fuels to be stored in suitable containers and to have secondary containment (internal bunding etc….). Operations to be subject to regular inspections and checks via a documented checklist completed by a site manager (see attached). Infrastructure will also be subject to routine maintenance programs. These are detailed below: **1**. Site Daily/Weekly Check & Action Sheet (see attached). **2**. Routine Maintenance of site infrstrucure to include; Jetting of aco drains (in accordance with manufacturers guidlines; Jetting of SuDS via access manhole point (in accordance with manufacturers guidlines); Oil skimming of interceptor chambers and manhole inspection points; maintenance of interceptor chambers - complete cleanout, washdown and inspection of interceptor on an annual basis (see attached for further details. **3**. Emergancy procedures for: oil and chemical spillages; fire; flooding -see attached for further details;. **4**. Staff Training Regime in line with EMS requirements (please see attached details). **5**.Emergancy oil spill kits available. **6**. Inline Penstock to shut drainage off in the event of a spill or other environmental incident as per engineering drawing submitted. **7**. Depollution of vehicles to take place inside building, undercover. See attached "further information" for more details.	Low

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Groundwater	Contaminated water infiltrating through ground to aquifer - contamination through hydrocarbons and suspended solids.	Contamination of groundwater and drinking supplies	Water abstraction for drinking supplies	Low	Medium	**Low**	Discharge to ground and site condition report produced.	Discharge via a class one oil/water interceptor with silt and sediment traps. The discharge via a SuDS. Details of interceptor, SuDS and catchpits are attached.	Low
Groundwater	Mobilisation of contaminents from existing contamination	Conmtamination of groundwater and drinking supplies	Water abstraction for drinking supplies	Low	Medium	**Low**	Site Condition Report produced for the site and application states that the ground beneath the site contains minor contaminents	Site will become an impermeable concrete pad. It has previously been hard standing meaning that drainage has passed through the site and infiltrated to ground. If there had have been contamination that was to be mobilised it would have been mobilised already. The installtion of the SuDS and concrete pad will mean that the discharge point is over a much smaller area than it is currently (the entire area of the yard). This will, therefore, reduce the risk further as the infiltration are is more concentrated (soakawy tests confirm sufficient infiltration rate). The "made ground" beneath the site consists mainly of historic slag type deposists which are widespread in the Tremorfa area. Much of this will be uncovered and will be draining via infiltration to ground. Depositing of this material continues today from Celsa Steelworks near the development site.	Very low

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Notes: Red triangle indicates comment containing supporting information
Yellow columns contain drop down menus that allow automatic evaluation of risk in green column