Environmental Management System

INDEX

May 2019

List of relevant Environmental Legislation

The Carriage of Dangerous Goods (Amendment) Regulations 1999

Details
Place a duty upon those involved in the carriage of dangerous goods to ensure that they know which measures must be taken to minimise any risk. These include labelling, packaging, transport documentation, bulk transport, loading, unloading and stowage. There are special regulations for radioactive and explosive goods.
Before carrying such waste, the Regulations require the consignor to:

- Identify the hazards of the goods they intend to transport
- Package the goods suitably and safely;
- Mark and label the waste correctly;
- Provide information on the waste to the vehicle operator/carrier;
- Ensure other requirements are met (e.g. suitability of vehicle and training of
- drivers)

Relevance to Organisation
Williams Plant Hire Ltd must:

- Ensure any dangerous goods/waste are appropriately labeled, packed,
- transported, loaded/unloaded and stowed,
- Identify the hazards
- Package suitably and safely;
- Mark and label correctly;
- Provide information on waste to the vehicle operator/carrier;
- Ensure other requirements are met (e.g. suitability of vehicle and
- training of drivers)

Clean Neighbourhoods and Environment Act 2005

Details
Introduces additional noise, litter and waste controls and classifies artificial lighting and insects as statutory nuisances.

Relevance to Organisation
Williams Plant Hire Ltd must:

- Not cause a statutory nuisance and so must control dust, noise, pests and pollution from artificial lighting

Control of Pollution Act 1974 (as amended)

Details
The aim of the Act is to deal with a variety of environmental issues, including waste on land, water pollution, abandoned mines, noise pollution and the prevention of atmospheric pollution. Any person who transports or makes arrangements for management of waste in the course of any business without being registered with the appropriate registration authority commits an offence, unless they are exempt.

Relevance to Organisation
Williams Plant Hire Ltd must:

- Be registered as a waste carrier if it transports waste

Controlled Waste (England and Wales) Regulations 2012 (as amended)

Details
The Controlled Waste (England and Wales) Regulations 2012 replace the Controlled Waste Regulations 1992. The regulations classify waste as household, industrial or commercial. They also list the type of waste for which local authorities may make a charge for collection and disposal.

Relevance to Organisation
Williams Plant Hire Ltd must

- Classify the waste produces into categories and should treat it in compliance with all relevant Regulations regarding waste.

Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations 1991 SI 1624 (as amended)

Details
Details the system for seizing vehicles used in the commission of waste offences. Establishes a registration system for carriers of controlled waste and provides for the seizure of vehicles used in waste offences.

Relevance to Organisation
Williams Plant Hire Ltd must:

- Be registered as a waste carrier if it transports waste

Environment Act 1995

Details
Establishes the Environment Agency as the regulatory bodies for contaminated land, control of pollution, conservation or enhancement of the environment and fisheries.

Environmental Civil Sanctions (Wales) Order 2010 SI 1821

Details
Allows the environmental regulator to impose civil sanctions on a business committing certain environmental offences, as an alternative to prosecution and criminal penalties of fines and imprisonment.

Environmental Civil Sanctions (Miscellaneous Amendments)(Wales) Regulations 2010 SI 1820

Details
Amends 2010/1821 to set out the offences for which civil sanctions may be imposed.

Environmental Permitting (England and Wales) Regulations 2016 SI 1154

Details
Consolidates the system for environmental permits and exemptions for industrial activities, mobile plant, waste operations, mining waste operations, water discharge activities, groundwater activities and radioactive substances activities.

Relevance to Organisation
Williams Plant Hire Ltd must:

- Register relevant exemptions and apply for an environmental permit as necessary.
- Comply with requirement of exemption and permit

The Environmental Protection (Miscellaneous Amendments) (England and Wales) Regulations 2018

Details
These Regulations require operators of waste sites who hold an environmental permit issued before 6 April 2008 to have a written management system in place, which identifies and minimises the risks of pollution from their waste operation, including risks from the operation itself, accidents and incidents, non-compliance with the environmental permit, complaints and risks arising from site closure.

The written management system must be reviewed 'from time to time' and kept up to date. Those reviews should be in writing. Operators are also required to keep a written record of the activities which they carry out under their permit.

It is compulsory for sites (which carry out waste management activities as their primary purpose) to show that they have one of the following qualifications:

CIWM/WAMITAB Operator Competence Scheme, or
Competence Management System: Requirements.

Relevance to Organisation
Williams Plant Hire Ltd must:

- Operate in accordance with their EMS
- Review their EMS
- Ensure technical competence is maintained on site
- Report technical competence to NRW in quarterly returns

Environmental Protection Act 1990

Details
Defines within England, Scotland and Wales the legal framework for duty of care for waste, contaminated land and statutory nuisance.

Relevance to Organisation
Williams Plant Hire Ltd must:

- Prevent as far as possible the illegal disposal, treatment and storage of waste by Williams Plant Hire Ltd and by anyone who handles the waste on their behalf.
- Not transfer waste to anyone who is not licensed or permitted to accept it
- Prevent the escape of waste
- Provide a written description of waste
- Keep waste transfer notes for a minimum of 2 years (for permitted site the permit requires these records to be held for 6 years)
- Store waste correctly and avoid accumulation of waste
- Ensure that where any of our processes emits dust, steam, odour or light, steps will be taken to control the emission and we will ensure any emission to the atmosphere will not prejudice health or be a nuisance.

Hazardous Waste (England and Wales) Regulations 2005
Hazardous Waste (Wales) (Amendment) Regulations 2009 SI 2861 etc
Hazardous Waste (England and Wales) (Amendment) Regulations 2016

Details
Requires producers of hazardous waste to notify (register) their premises and requires the separation of waste streams where appropriate. It requires cradle to grave documentation (hazardous waste consignment notes) for the movement of hazardous waste.

Relevance to Organisation
Williams Plant Hire Ltd must:

- Hold hazardous waste consignment notes for all transfers of hazardous waste
- Retain the consignment notes for a minimum of 3 years.

- Register its sites that produce > 500 Kg of hazardous waste per year
- The requirements for dealing with Hazardous Waste are different in Scotland and Northern Ireland to England and Wales.
- For England and Wales, hazardous waste is dealt with under the Hazardous Waste Regulations (amended under the Amendment Regulations 2009 which imposes the 500kg exemption threshold, more recently by the Waste (England and Wales) Regulations 2011 that removed multiple collection consignment notes) and most recently, by the 2016 Amendment Regulations that remove the premises code requirement. Any business in Wales that generates more than 500 kgs/year of waste classed as 'Hazardous' under the European Waste Catalogue (EWC) must register as a hazardous waste producer with Natural Resource Wales before they can have hazardous waste collected from their site. There are exemptions. Where a site produces less that 500kgs per year, it does not need to register and can have its hazardous waste collected without a registration number. **THIS IS NOT REQUIRED IN ENGLAND FROM 1 APRIL 2016.**

The Landfill (England and Wales) Regulations 2002

Details
The regulations separate landfills into three types: hazardous, non-hazardous or inert wastes and ban the disposal of certain wastes to landfill, for example, liquid waste,certain hazardous wastes and tyres.
Two new rules apply to non hazardous waste from 30 October 2007:
a) Liquid wastes will be banned from landfill
b) Waste must be treated before it can be sent to landfill

Relevance to Organisation
Williams Plant Hire Ltd must:
- Ensure pre-treatment (segregation) of our waste removed from site
- Ensure that no liquids, loose whole tyres or hazardous waste are sent to landfill.

Waste (England and Wales) Regulations 2011 SI 988

Details
Requires businesses to apply the waste management hierarchy, introduces a two-tier system for waste carrier and broker registration, and excludes some categories of waste from waste controls.

Relevance to Organisation
Williams Plant Hire Ltd must:
- Ensure Waste Transfer Notes and hazardous waste consignments notes contain the relevant SIC codes and waste hierarchy declaration.
- Apply the waste hierarchy to it's activities.

Water Industry Act 1999

Details
- Request for supply.
- Charges.
- Adequate supply to support works

Relevance to Organisation
Williams Plant Hire Ltd must:
- Ensure they have permission to use water on site.

Water Resources Act 1991

Details
Under the Water Resources Act it is an offence to cause pollution of any watercourse

Relevance to Organisation

- Williams Plant Hire Ltd must ensure they do not cause pollution of any watercourse

Town and Country Planning Act 1990 (TCPA)
Town and Country Planning (Development Plan) Regulations 1999 (SI 1999 No. 3280)

Details
Imposes controls over land-use and new development.

Relevance to Organisation

Williams Plant Hire Ltd must

- Submit application for development permission to include: site, design, external appearance, land use, means of access and landscaping.

Control of Substances Hazardous to Health (Amendment) Regulations 2004 (SI 2004 No. 3386) COSHH).

Details
Protects employees and other persons likely to be affected against risks to their health resulting from exposure to substances hazardous to health

Relevance to Organisation

Williams Plant Hire Ltd must

- Protect employees and the environment. Employers must use, as necessary, control measures, training plus routine exposure monitoring and health surveillance.
- The assessment records need to meet the requirements of COSHH and must also support the environmental risk assessment in terms of the properties of hazardous chemicals present.

1. Environmental Impacts Plan and Controls

Emissions to Air [A]						
Process / Activity / Equipment on Site	**Potential Impact**	**Is impact controlled by equipment?**	**Is equipment /environment included on maintenance checklist?**	**Is impact controlled by a procedure?**	**Person using the procedure received training?**	**Comments**
Chemical storage/Unauthorised wastes	If any authorised or unauthorised chemicals stored on site they could cause emissions to air.	Unauthorised chemicals would be stored in covered unauthorised waste skip which is covered and waste removed from site as matter of urgency. Any chemicals such as cleaning chemicals used on site are stored in storage cupboards or maintenance sheds	yes	Yes – SOP No 1 The waste acceptance procedure helps prevent unauthorised chemicals or waste being received. Potentially contaminated waste would be rejected or if deposited contained and investigated in accordance with procedure.	ongoing	
Sorting and processing of inert wastes outside building	Potential to produce dust emissions	Dust suppression by water bowser/hose	yes	Yes – SOP No 10	Ongoing	
Vehicle and machinery usage on site	Dust and CO2 emissions	Dust suppression by water bowser/hose Vehicles and machinery maintained adequately	yes yes	Yes – SOP No 10 Yes – SOP No 7	Ongoing Qualified maintenance crew and outside	

					contractors used when needed	
Energy Usage [E]						
Process / Activity / Equipment on Site	**Potential Impact**	**Is impact controlled by equipment?**	**Is equipment included on maintenance checklist?**	**Is impact controlled by a procedure?**	**Person using the procedure received training?**	**Comments**
Office/processing building electrical usage	The impacts associated with electricity production are well documented (e.g. Air emissions) There is scope to reduce these impacts by using electricity efficiently on site.	Electricity meter Energy efficiency considered when equipment replaced	yes - PAT testing	No	Qualified electrician used	Energy efficiency is ongoing matter to be addressed by management
Vehicle and machinery usage on site	Emissions associated with use of diesel equipment	Vehicles/plant maintained to maintain their efficiency. Efficiency considered when plant and vehicle replaced	yes	Yes – SOP No 7	Qualified maintenance crew and outside contractors used when needed	Energy efficiency is ongoing matter to be addressed by management
Emissions to Water [W]						
Process / Activity / Equipment on Site	**Potential Impact**	**Is impact controlled by equipment?**	**Is equipment included on maintenance checklist?**	**Is impact controlled by a procedure?**	**Person using the procedure received training?**	**Comments**
Surface water run-off from outside storage areas	Under normal conditions surface water run-off should be uncontaminated. However, if contamination occurs by accident, it has the potential to cause	Yes Yard area hardstanding which allows natural drainage	n/a	Yes – SOP No 1 and No6	Ongoing	

	water pollution to local watercourse if there is a site drain failure					
Surface water runoff from within the processing building	Potentially contaminated water flowing onto hardstanding which would drain the groundwater or to the River Severn	Yes sealed sump system will collect any liquids within the building	n/a	Yes SOP No1 and No6	Ongoing	
Re fuelling of plant	Only potential to cause problem if there is a spillage	Refuelling equipment maintained adequately and spillage equipment available	Yes	Yes – SOP No 13	Ongoing	
Chemical storage	Any chemicals which are found following tipping are placed in a sealed skip. Only potential to cause problem is there is a spillage	Yes Any spillage apart from refuelling (see above) would be within building or office.	Yes	Yes – SOP No 13	Ongoing	
Sorting of waste outside	Only soils and inerts accepted on the hardstanding at site. All other wastes are sorted within the building with sealed drainage	Outside yard area of hardstanding for storage of inerts/uncontaminated soils	Yes	Yes – SOP No 1,2 + 3	Ongoing	
Unauthorised waste	Only soils and inerts accepted at site for storage and processing on the outside hardstanding areas and any contaminated soils could have potential for harm to water.	Unauthorised waste stored in covered quarantine area Spillage procedure in place	Yes	Yes – SOP No 1 Due to limited waste types accepted likelihood of unauthorised wastes being taken into site is low. In addition acceptance procedure helps prevent unauthorised chemicals	Ongoing	

				or waste being received. Potential contaminated waste would be rejected or if deposited contained and investigated in accordance with procedure.		
Waste Disposal [D]						
Process / Activity / Equipment on Site	**Potential Impact**	**Is impact controlled by equipment?**	**Is equipment included on maintenance checklist?**	**Is impact controlled by a procedure?**	**Person using the procedure received training?**	**Comments**
Various waste streams from treatment operations	Need to comply with waste hierarchy and Duty of care procedures – waste streams are products ie secondary aggregates, soils and potentially unsuitable materials for disposal. Very high rate of recovery.	N/a	Yes	Yes – SOP No 1	Yes	
Waste equipment from in house activities	Disposal must be in accordance with WEEE, ALV and duty of Care	No	N/A	No	Ongoing	
Nuisance (e.g. Noise, Odour) [N]						
Process / Activity / Equipment on Site	**Potential Impact**	**Is impact controlled by equipment?**	**Is equipment included on maintenance checklist?**	**Is impact controlled by a procedure?**	**Person using the procedure received training?**	**Comments**
Noise from site activities Crushing/Screening/waste acceptance and sorting	Section III of the Environmental Protection Act 1990 , noise can be classified as a statutory nuisance	Yes	Yes	Yes – SOP No 1, SOP No 4, SOP No 9, SOP No 10, SOP No11 and SOP No 12	Ongoing	
Noise from transport movement on site	Section III of the Environmental Protection Act 1990 , noise can be	Yes	General vehicle maintenance	Yes SOP No12	Qualified maintenance crew or	

	classified as a statutory nuisance				outside contractors used	

Land Contamination (e.g. storage of hazardous substances) [L]						
Process / Activity / Equipment on Site	**Potential Impact**	**Is impact controlled by equipment?**	**Is equipment included on maintenance checklist?**	**Is impact controlled by a procedure?**	**Person using the procedure received training?**	**Comments**
Refuelling of plant	Only potential to cause problem is there is a spillage	Refuelling equipment maintained adequately and spillage equipment available	Yes	Yes – SOP No 13	Ongoing	
Chemical Storage – none on permitted site only chemicals for office and plant maintenance in maintenance sheds	Only potential to cause problem is there is a spillage	Yes Any spillage apart from refuelling (see above) would be within building or office.	Yes	Yes - SOP No 13	Ongoing	
Unauthorised wastes	If any authorised waste accepted at the site they could cause emissions to land	Yes - Quarantine skip available if needed	Yes	Yes – SOP No 1 Due to limited waste types accepted for storage and processing outside on hardstanding the likelihood of unauthorised wastes being taken into site is low. In addition acceptance procedure helps prevent unauthorised waste or chemicals being received.	Ongoing	

				Potential contaminated waste would be rejected or if deposited contained and investigated in accordance with procedure. All other waste processed and stored within a building with sealed drainage or in covered skips.		

Site specific risk assessment for Williams Plant Hire Ltd, Aberbechan Wharf, Newtown, SY16 3AW

Bespoke Facility: Waste Operation: Transfer and segregation of Non hazardous Waste. Treatment of waste to produce soil, soil substitutes and aggregate

Location: Williams Plant Hire Ltd, Aberbechan Wharf, Newtown, SY16 3AW

Location of environmentally sensitive sites (km / m): SSSI / SPA within 5m of permit boundary

Risk assessment carried out by: Ceri Environmental Consulting Ltd

Date: 15th January 2019

Risk criteria:	
Parameter 1	Permitted activities - The storage and repackaging of waste (D15, R13,D14) ad treatment consisting of manual sorting, mechanical sorting, separation, baling, shredding,crushing or compaction,(D9,R3, R4,R5).
Parameter 2	Permitted waste types - Non Hazardous as listed in application other than waste consisting solely or mainly of dusts, powders or loose fibres or waste in liquid form
Parameter 3	Quantity of waste accepted at the facility: <24,999 tonnes per annum.
Parameter 4	The activities shall not be carried out within an Air Quality Management Area (AQMA) designated for particulate matter in the form of PM10.
Parameter 5	All waste shall be stored within a building with sealed drainage or in secure covered containers. Specified wastes in table 2 of Operational Techniques stored on hardstanding. Site is not located within groundwater source protection zones 1 or 2
Parameter 6	The activities are within 5m of a European Site (candidate or Special Area of Conservation, proposed or Special Protection Area or Ramsar site) or a Site of Special Scientific Interest (SSSI).
Parameter 7	The activities will not be within 5 metres of a watercourse

Data and information				Judgement before mitigation				Action / Mitigation	
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 consequence 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?**
Local human population	Releases of particulate matter (dusts) and micro-organisms (bioaerosols).	Harm to human health - respiratory irritation and illness.	Air transport then inhalation.	High	Medium	**High**	Permitted waste types are inert and non hazardous and do not include dusts, powders or loose fibres and have a low potential to produce bioaerosols, but the treatment activities will produce particulate matter so a high magnitude risk is estimated. The permitted level of throughput and potential size of the facility means there is potential for exposure to business locations close to the site (apart from the operator and employees). There is potential for increased dust generation from permitted activities during prolonged dry periods e.g. summer months and	Appropriate measures, including, damping down and dust control measures on plant and equipment will be employed. Care will be taken when operating in very dry and/or windy conditions. Site will be monitored and activities controlled in accordance with Environmental Management System (EMS)	Low
Local human population	As above	Nuisance - dust on cars, clothing etc.	Air transport then deposition	High	Low	**Medium**	As above. Local residents (at approx 85m) and nearby business may be sensitive to dust.	As above	Low

Data and information				Judgement before mitigation				Action / Mitigation			
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 consequence 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?**		
Local human population, livestock and wildlife.	Litter	Nuisance, loss of amenity and harm to animal health	Air transport then deposition	Low	Low	**Low**	Local residents (at approx 85m away) sensitive to litter, litter hazard to livestock nearby however permitted waste types have low litter potential.	Monitoring and control measures in place in accordance with the EMS. Appropriate measures will include clearing litter arising from the activities from affected areas outside the site.	Very low		
Local human population	Waste and mud on local roads	Nuisance, loss of amenity, mud on the road	Vehicles entering and leaving site.	Medium	Medium	**Medium**	Road safety, local residents often sensitive to mud on roads.	Monitoring and control measures in place in accordance with the EMS. Appropriate measures will include clearing mud arising from the activities from affected areas outside the site.	Low		
Local human population	Odour	Nuisance, loss of amenity	Air transport	Low	Low	**Low**	Local residents (over 250m away) and nearby buinesses may be sensitive to odour, however permitted waste types have very low odour potential.	Odour will be monitored and controlled in accordance with the EMS	Very low		
Local human population	Noise and vibration	Nuisance, loss of amenity, loss of sleep.	Noise through the air and vibration through the ground.	Medium	Medium	**Medium**	Local residents often sensitive to noise and vibration. Nearest house at some distance ie approx 85m	Noise will be monitored and controlled in accordance with the EMS. Opening hours will limit noise generation to daytime.	Low		
Local human population	Scavenging animals and scavenging birds	Harm to human health - from waste carried off site and faeces. Nuisance and loss of amenity.	Air transport and over land	Low	Medium	**Low**	Permitted wastes unlikely to attract scavenging animals and birds but may become nesting / breeding sites.	Pest monitoring and control measures will be in place in accordance with the EMS.	Very low		
Local human population	Pests (e.g. flies)	Harm to human health, nuisance, loss of amenity	Air transport and over land	Low	Medium	**Low**	Permitted waste types unlikely to attract pests.	As above	Very low		

Data and information				Judgement before mitigation				Action / Mitigation			
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 consequence 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?**		
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	Low	**Low**	Permitted waste types are non hazardous and inerts so any waste washed off site will add to the volume of the local post-flood clean up workload, rather than the hazard. Flood risk is assessed as zone 2 where a 1 in1000 event could occur.	Environmental management system identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances including flood risk management.	low		
Local human population and / or livestock after gaining unauthorised access to the waste operation	All on-site hazards: wastes; machinery and vehicles.	Bodily injury	Direct physical contact	Medium	Low	**Low**	Permitted waste types are non hazardous household commercial, industrial and inerts therefore only a low magnitude risk is estimated	Managed in accordance with an EMS. security system is in place to deter unauthorised entry. Site in a rural area with low risk of being broken into.	Low		
Local human population and local environment.	Arson and / or vandalism causing the release of polluting materials to air (smoke or fumes), water or land.	Respiratory irritation, illness and nuisance to local population. Injury to staff, fire fighters or arsonists/vandals. Pollution of water or land.	Air transport of smoke. Spillages and contaminated firewater by direct run-off from site and via surface water drains and ditches.	Medium	Medium	**Medium**	Permitted waste types do not include sludges or loiquids and are non hazardous so only medium magnitude risk is estimated.	A written environmental management system is in place which includes fire and spillages. Spread of fire restricted by separation of wastes . Tyres limited to max 50 tonnes.	Low		
Local human population and local environment	Accidental fire causing the release of polluting materials to air (smoke or fumes), water or land.	Respiratory irritation, illness and nuisance to local population. Injury to staff or fire fighters. Pollution of water or land.	As above.	Medium	Medium	**Medium**	As above.	As above. Permitted activities do not include the burning of waste.	Low		
All surface waters close to and downstream of site.	Spillage of liquids, leachate from waste, contaminated rainwater run-off from waste e.g. containing suspended solids.	Acute effects: oxygen depletion, fish kill and algal blooms	Direct run-off from site across ground surface, via surface water drains, ditches etc.	Low	Low	**Low**	Permitted waste types present low risk of contaminated run off . Waste types do not include sludges or liquids so only a low magnitude risk is estimated.	All potentially polluting liquids will be provided with secondary containment including non- wastes such as fuels. Wastes from potentially contaminated sites require analysis. Spillage procedures in place in EMS.	Very low		

Data and information				Judgement before mitigation				Action / Mitigation			
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 consequence 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?**		
All surface waters close to and downstream of site.	As above	Chronic effects: deterioration of water quality	As above. Indirect run-off via the soil layer or direct run off via drainage system	Low	Low	**Low**	Waste types are non-hazardous and inert so harm is likely to be temporary and reversible.	As above	Very low		
Abstraction from watercourse downstream of facility (for agricultural or potable use).	As above	Acute effects, closure of abstraction intakes.	Direct run-off from site across ground surface, via surface water drains, ditches etc. then abstraction.	Low	Low	**Low**	Watercourse must have medium / high flow for abstraction to be permitted, which will dilute contaminated run-off.	As above.	Very low		

Data and information				Judgement before mitigation				Action / Mitigation			
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 consequence 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?**		
Groundwater	As above	Chronic effects: contamination of groundwater, requiring treatment of water or closure of borehole	Transport through soil/groundwater then extraction at borehole.	Low	Low	**Low**	Permitted wastes unlikely to contaminate groundwater.	As above	Very low		
Local human population	Contaminated waters used for recreational purposes	Harm to human health - skin damage or gastro-intestinal illness.	Direct contact or ingestion	Very Low	Medium	**Medium**	Unlikely to occur.	As above	Very low		
Protected sites - European sites and SSSIs , protected species such as water voles and reptiles	Any	Harm to protected site/species through toxic contamination, nutrient enrichment, smothering, disturbance, predation etc.	Any	Low	Medium	**Medium**	Waste operations may cause harm to and deterioration of nature conservation sites. SSSI and SPA within 5m of the permit boundary.	The Montgomery Canal is a SSSI and SPA. The canal is witjhin 5m of the permit boundary but the canal is elevated in relation to the site surface. The is no pathway for for any contaminated liquid to enter the canal. Nutrient enrichment from dusts possible but controlled through the EMS. No change to disturbance or predation which is controlled though the EMS	Low		
River Severn	Runoff from waste stockpiles	Harm to water quality from suspended solids and nutrient enrichment	Direct to River Severn	Medium	Medium	**Medium**	Only specified wastes stored close to the River Severn on hardstanding. Water will generally drain away. Bund created around the top of the bank to prevent runoff directly to the Severn	Installation of low bund and monitoring and repairing if necessary.	Low		

PERMIT VARIATION TO EXTEND THE AREA

WILLIAMS Plant Hire Ltd

Site address :

Aberbechan Wharf

Newtown

Powys

SY16 3AW

HABITATS ASSESSMENT

CERI ENVIRONMENTAL CONSULTING LTD

Specialists in Waste & Environmental Management

SAWMILLS COTTAGE
SAWMILLS, KERRY
NR. NEWTOWN,
POWYS SY16 4LL
Tel/Fax: 01686 670546
email: enquiries@cerienvironmental.co.uk

Version 1.0

January 2019

Introduction

This risk assessment will assess the specific risk posed by the proposed facility to the Montgomery Canal SSSI and SPA. This site requires an assessment under the Countryside Rights of Way Act and the Habitats Directive as the site is within 5 metres of the designated sites.

Assessment Procedure

An assessment of the risks posed by the operation of a household, commercial and industrial waste transfer station and to assess the relevant hazards posed by the proposed site to the relevant receptor. The potential effect of emissions from the site have been assessed and where an impact is possible mitigation measures have been developed to reduce the impact to acceptable levels. In other words the assessment looks at the inherent potential of a substance or physical situation to cause harm, the nature of the potential receptor which could be effected by the hazard, pathways between the hazard and the receptor and the risk those hazards pose to the receptor.

As a result of this assessment mitigating factors can be built into the design and operation of the proposed facility, if they are needed, to reduce the risk to the receptors. This can be done in a number of ways such as removing or interrupting the pathway between hazard and receptor or reducing the hazard at source.

Hazard Identification

Potential hazards to the ecological features of the receptor site can be assessed in terms of :

- Toxic contamination from
  - toxic leachate
  - landfill gas
  - toxic wastes
  - contaminated dusts

• Nutrient enrichment from	nutrient rich leachate nutrient rich wastes
• Habitat loss from	land encroachment explosive wastes landfill gas monitoring boreholes
• Siltation	mud suspended solids
• Smothering	dust/particles from vehicles dust from periphery dust from wastes
• Disturbance	visual human presence noise/vibration
• Predation/displacement	other birds attracted to the site gulls/corvidores rodents

Receptor

The potential ecological receptor near to the site which is relevant for this assessment is the:

Site of Special Scientific Interest (SSSI) under (CRoW) within 2Km

Special protection Area (SPA)

Montgomery Canal (SSSI and SPA) which is 5metres away from the northern boundary of the existing site. It should noted that the canal in elevated in relation to the ground level of the waste facility.

The Core management Plan (see appendix 1) states that the special interest of the SSSI and SPA is the presence of Luronium natans and other aquatic flora. The Core Management plan is attached in Appendix 1 of this report.

Potential Hazards

Toxic contamination and Nutrient Enrichment

The proposed facility is a non hazardous, household, commercial and industrial treatment and transfer site and there will, therefore, be no contaminated dusts or toxic wastes accepted at the site which could affect the SSSI. The impact of non hazardous dust is discussed in a later section relating to smothering risk.

As the Montgomery Canal is elevated in relation to the surface of the transfer station it will not be possible for any contaminated water to flow into the canal. In effect there is no linkage for surface water to affect the SSSI and SPA.

Habitat Loss

Habitats loss could result from the physical take up of habitat or buffer zone. There will be no encroachment resulting from the facility. Other forms of encroachment could be via the installation of boreholes etc on sensitive sites. However, no such encroachment will occur.

Siltation

Siltation could potentially result from suspended solids being discharged from the site to the receptor sites or from mud being washed off site surfaces and discharging into the surface water. As discussed above there should be no significant risk to the SSSI as surface water contaminated with suspended solids will not be able to flow into the SSSI/ SPA.

Smothering

Smothering could potentially result from dust and particulates being generated at the site and being deposited on the receptor site via air emissions. These emissions could be due to vehicle movements both within and outside the site boundary and from airborne particulates from treatment activities on the site. Due to a combination of dust suppression measures on site, such a damping down, reduced working in very windy conditions, careful site operations to reduce the dropping distance of loads and that the sorting operations are carried out within a building which has a wall to the full height adjacent to the canal etc it can be concluded that there is low risk posed to the receptor site.

Disturbance

The site has been operating since 2006 and the variation will not significantly change the operations. There will be no visual impact on the receptor site or other disturbance such as from noise. Human presence from the site will again not affect the receptor.

Predation/Displacement

Pest including rodents and birds are not likely to be attracted to the facility due to the nature of the waste types accepted but if rodents are evident there are

inspection and control measures in place to reduce the hazard at source. Due to the control measures, the nature of the waste facility and the distance from the receptor site to the facility predation is not considered to be a significant hazard.

Conclusions

It can be concluded that, provided the site is operated in accordance with the Environmental Management System, the proposed facility will have no significant impact on the ecological receptor site discussed in this risk assessment.

Appendix 1 Core Management Plan for the Montgomery Canal SSSI and SPA

Montgomery Canal

Site details

Country	Wales
Unitary Authority	East Wales
Centroid*	SJ245100
Latitude	52.6825
Longitude	-3.1156
SAC EU code	UK0030213
Status	Designated Special Area of Conservation (SAC)
Area (ha)	51.46

* This is the approximate central point of the SAC. In the case of large, linear or composite sites, this may not represent the location where a feature occurs within the SAC.

General site character

Inland water bodies (Standing water, Running water) (73.6%)
Heath, Scrub, Maquis and Garrigue, Phygrana (2.4%)
Dry grassland, Steppes (21.6%)
Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites) (2.4%)

Natura 2000 standard data form for this site as submitted to Europe (PDF, < 100kb).

Location of Montgomery Canal SAC/SCI/cSAC

Note:

When undertaking an appropriate assessment of impacts at a site, **all** features of European importance (both primary and non-primary) need to be considered.

Annex I habitats that are a primary reason for selection of this site

Not applicable

Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site

Not applicable.

Annex II species that are a primary reason for selection of this site

1831 Floating water-plantain **Luronium natans**

This is the largest and the most extensive population of **floating water-plantain *Luronium natans*** in Britain and is a highly significant lowland population. In favourable management conditions the species can be dominant over kilometre lengths of canal, carpeting the shallow bed and flowering and setting seed in abundance. This is a semi-natural population, having colonised from drift material or seed but needing periodic human disturbance for continued growth; in this respect the canal is a substitute for the species' former slow-moving, mesotrophic river niche, which has been largely destroyed in lowland Britain.

Annex II species present as a qualifying feature, but not a primary reason for site selection

Not applicable.

Many designated sites are on private land: the listing of a site in these pages does not imply any right of public access.

CYNGOR CEFN GWLAD CYMRU
COUNTRYSIDE COUNCIL FOR WALES

CORE MANAGEMENT PLAN
INCLUDING CONSERVATION OBJECTIVES

FOR

MONTGOMERY CANAL SAC (& SSSI)

Version: 1

Date: 22nd January 2008

Approved by: David Mitchell

More detailed maps of management units can be provided on request.
A Welsh version of all or part of this document can be made available on request.

Cyngor Cefn Gwlad Cymru
Countryside Council for Wales

NATURA 2000

Ramsar

Llywodraeth Cynulliad Cymru
Welsh Assembly Government
CORFF NODDEDIG | SPONSORED BODY

CONTENTS

PREFACE

This document provides the main elements of CCW's management plan for the site(s) named. It sets out what needs to be achieved on the site(s), the results of monitoring and advice on the action required. This document is made available through CCW's web site and may be revised in response to changing circumstances or new information. This is a technical document that supplements summary information on the web site.

One of the key functions of this document is to provide CCW's statement of the Conservation Objectives for the relevant Natura 2000 site(s). This is required to implement the Conservation (Natural Habitats, &c.) Regulations 1994, as amended (Section 4). As a matter of Welsh Assembly Government Policy, the provisions of those regulations are also to be applied to Ramsar sites in Wales.

1. VISION FOR THE SITE

This is a descriptive overview of what needs to be achieved for conservation on the site. It brings together and summarises the Conservation Objectives (part 4) into a single, integrated statement about the site.

At least 75% of the canal lengths have open water supporting a rich assemblage of floating-leaved, emergent and submerged plants at a cover of 30% or greater. Plant species include broad-leaved pondweed, autumnal water-starwort, rigid hornwort, alternate water milfoil, white water lily, greater duckweed, long-stalked pondweed, flat-stalked pondweed and perfoliate pondweed. Some sections of canal are tree-lined and here, the diversity of aquatic plants is lower, but may include important species such as floating water-plantain. Water plants, such as the invasive, non-native Canadian pondweed, and filamentous algae, which indicate nutrient enrichment, are scarce.

Aquatic invertebrates, especially those indicative of good water quality, such as dragonflies and damselflies and water beetles, are abundant along the canal. More than ten species of dragonflies and damselflies breed here.

On average there is a 1m wide strip of diverse marginal vegetation, which includes species such as meadowsweet, common skullcap, flowering rush, angelica, common valerian, greater tussock sedge and water dock. Reed sweet grass is confined to this 1m shelf and is not present in the central channel.

The populations of floating-water plantain and other regionally rare water plants are stable or increasing across the site as a whole. The population of grass-wrack pondweed is increasing to best historic levels. Populations of all of these plants are sustainable in the long term, their distribution along the canal is not contracting, sufficient habitat exists to support each one and the factors that may affect these plants or their habitats are all under control.

Alien aquatic and land-based species, such as Japanese knotweed, water fern, least duckweed and floating pennywort are absent from the canal.

2. SITE DESCRIPTION

2.1 Area and Designations Covered by this Plan

Grid reference(s): SJ220058 SJ223060 SJ254203 SO169967 SO173970

Unitary authority: Powys

Area (hectares): 55.9

Designations covered: Montgomery Canal SAC and Montgomery Canal SSSI share exactly the same boundary.

Map 1 shows the coverage of this document.

2.2 Outline Description

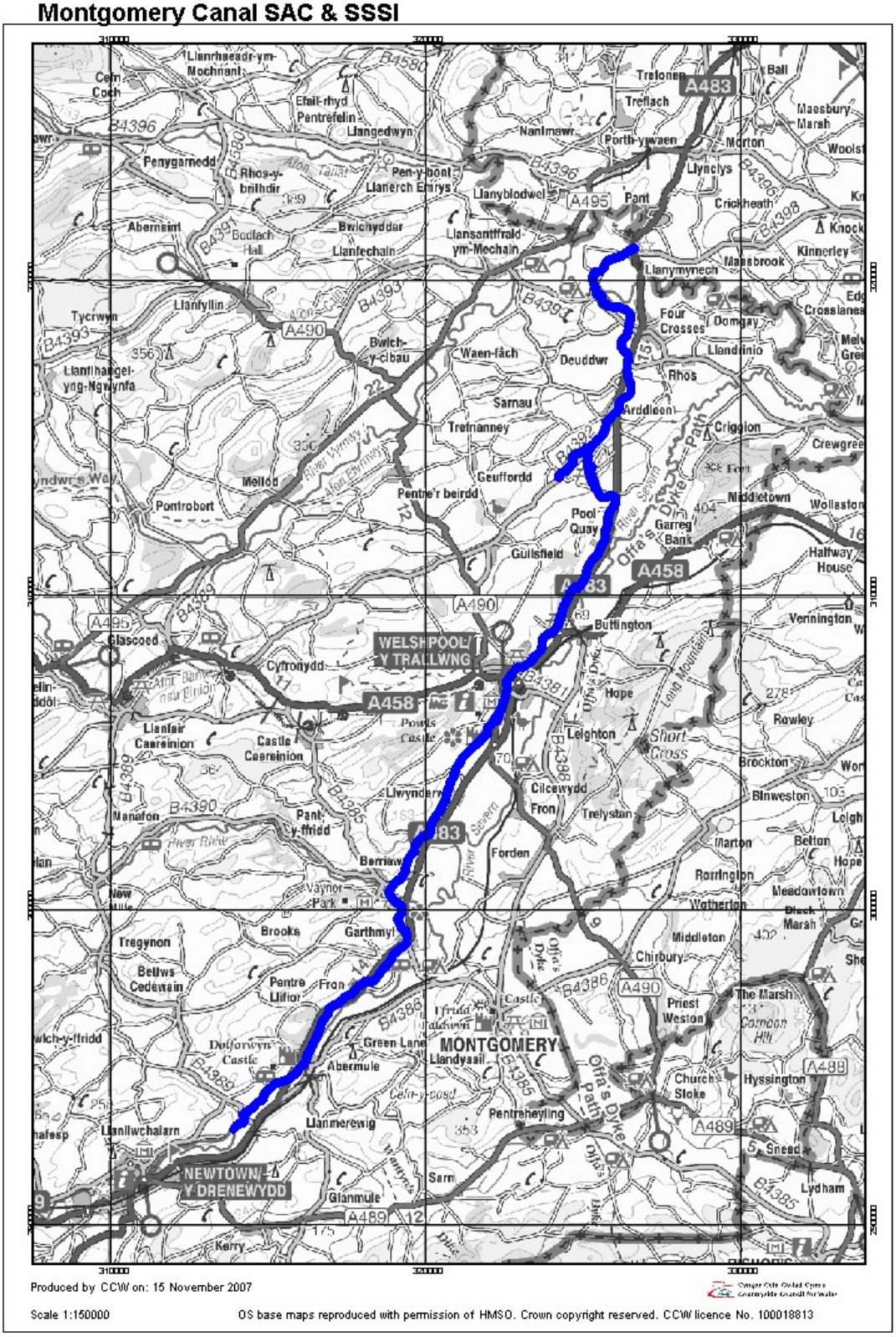
The Montgomery Canal is a partially restored but largely unused waterway. It runs for approximately 36 kilometres from near Aberbechan (three kilometres north-east of Newtown) to the English border at Llanymynech. It also has a small number of linked off-line reserves (kept as small individual management units); these were created to protect examples of the habitats and species found in the canal when restoration of the canal was started in the 1970s.

It supports the largest, most extensive population of floating water-plantain *Luronium natans* in lowland Britain. This is a semi-natural population, having colonised from drift material or seed but needing periodic human disturbance for continued growth; in this respect the canal is a substitute for the species' former slow-moving, mesotrophic river niche, which has been largely destroyed in lowland Britain.

The floating water-plantain is just one of a number of species of submerged, floating and marginal plant species that make up the canal habitat SSSI feature. This habitat is distributed along the entire length of the canal within the SSSI; the interest and quality varies from species-poor to species rich, depending a number of factors, including water depth and management frequency.

MAP 1:

Montgomery Canal SAC & SSI



Produced by CCW on: 15 November 2007

Scale 1:150000

2.3 Outline of Past and Current Management

Originally the canal was a branch of the Shropshire Union Canal that was connected to the wider English Canal network. The Montgomery Canal in Wales was completed in the early 19th Century and was used to transport various products from this part of Wales. The canal was viable until the First World War, from when there was a gradual deterioration in maintenance and the canal was closed in 1936. Eventually the canal became the responsibility of the British Waterways Board and since the late 1970s there has been some restoration of the canal structure to create the site, as it currently exists.

More recently there has been limited boat traffic along the canal, centred on Welshpool, and British Waterways has maintained the canal through a programme of weed cutting and minor dredging to safeguard water supply and the habitat interests of the site. At present, the lack of funds means that it is difficult to maintain the ideal depth and width of open water over the entire canal that is required to support sustainable aquatic plant communities.

Following collaboration between a number of partners, a strategy for the sustainable restoration of the Montgomery Canal was published in 2005 (**Montgomery Canal Partnership 2005)**. This sets out how the canal will be managed and all its various interests will be safeguarded as the canal is restored and connected to the wider canal network. CCW had considerable input into this document, which sets out the standards that will be applied to ensure that the nature conservation interests of the site are safeguarded. This has been used as the basis for the conservation objectives and performance indicators given in Section 4 of this plan.

2.4 Management Units

The plan area has been divided into management units to enable practical communication about features, objectives, and management. This will also allow us to differentiate between the different designations where necessary. In this plan the management units have been based on distribution of the SAC feature and current management of the canal, which is all owned by British Waterways. The units are usually focussed on separating out those lengths where floating water-plantain is abundant, whilst other lengths currently have a low cover or frequency of this species. This has also taken into account the most recent available survey information available for the canal (Newbold 2001).

For a more detailed map of the management units please see accompanying Unit Map.

The following table confirms the relationships between the management units and the designations covered:

Unit Ref number	Unit Name	SAC	SSSI	CCW owned
1	Llanymynech to Carreghofa Lock	✔	✔	
2	Vynrwy Aqueduct to Pentrehelin	✔	✔	
3	Pentrehelin to Bell House	✔	✔	
4	Bell House to Red Bridge	✔	✔	
5	Guilsfield Arm	✔	✔	
6	Wern Reserve	✔	✔	
7	Red Bridge to Pool Quay	✔	✔	
8	Pool Quay to Buttington	✔	✔	
9	Welshpool	✔	✔	

10	Whitehouse Reserve	✔	✔	
11	Powis Castle to Berriew	✔	✔	
12	Brithdir Reserve	✔	✔	
13	Berriew to Garthmyl	✔	✔	
14	Garthmyl to Red House	✔	✔	
15	Red House to Glanhafren	✔	✔	
16	Glanhafren to Freestone Lock	✔	✔	

3. THE SPECIAL FEATURES

3.1 Confirmation of Special Features

Designated feature	***Relationships, nomenclature etc***	***Conservation Objective in part 4***
SAC features		
Floating water-plantain *Luronium natans*	EU Species Code: 1831	1
SPA features		
Not applicable		
Ramsar features		
Not applicable		

SSSI features (there may be others)		
Open Water (Canal) Habitat	Defined partly by some of the plants listed below	2
Assemblage of rare and scarce aquatic plants	Includes floating water plantain and grass-wrack pondweed	Not completed
Floating water-plantain	This is exactly the same as the SAC feature	1
Grass-wrack pondweed *Potomogeton compressus*	Regionally rare species	Not completed
Autumnal water-starwort *Callitriche hermaphroditica*	Regionally rare species	Not completed
Flat-stalked pondweed *Potamogeton friesii*	Regionally rare species	Not completed
Perfoliate pondweed *Potamogeton perfoliatus*	Regionally rare species	Not completed
Long-stalked pondweed *Potamogeton praelongus*	Regionally rare species	Not completed
Greater duckweed *Lemna polyrhiza*	Regionally rare species	Not completed
Assemblage of aquatic invertebrates	Regionally rare species	Not completed

3.2 Special Features and Management Units

This section sets out the relationship between the special features and each management unit. This is intended to provide a clear statement about what each unit should be managed for, taking into account the varied needs of the different special features. All special features are allocated to one of seven classes in each management unit. These classes are:

Key Features

KH - a 'Key Habitat' in the management unit, i.e. the habitat that is the main driver of management and focus of monitoring effort, perhaps because of the dependence of a key species (see KS below). There will usually only be one Key Habitat in a unit but there can be more, especially with large units.
KS – a 'Key Species' in the management unit, often driving both the selection and management of a Key Habitat.
Geo – an earth science feature that is the main driver of management and focus of monitoring effort in a unit.

Other Features
Sym - habitats, species and earth science features that are of importance in a unit but are not the main drivers of management or focus of monitoring. These features will benefit from management for the key feature(s) identified in the unit. These may be classed as 'Sym' features because:

a) they are present in the unit but may be of less conservation importance than the key feature; and/or
b) they are present in the unit but in small areas/numbers, with the bulk of the feature in other units of the site; and/or
c) their requirements are broader than and compatible with the management needs of the key feature(s), e.g. a mobile species that uses large parts of the site and surrounding areas.

Nm - an infrequently used category where features are at risk of decline within a unit as a result of meeting the management needs of the key feature(s), i.e. under Negative Management. These cases will usually be compensated for by management elsewhere in the plan, and can be used where minor occurrences of a feature would otherwise lead to apparent conflict with another key feature in a unit.
Mn - Management units that are essential for the management of features elsewhere on a site e.g. livestock over-wintering area included within designation boundaries, buffer zones around water bodies, etc.
x – Features not known to be present in the management unit.

The table below sets out the relationship between the special features and management units identified in this plan:

Montgomery Canal	**Management unit Ref.**								
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
SAC	✔	✔	✔	✔	✔	✔	✔	✔	✔
SSSI	✔	✔	✔	✔	✔	✔	✔	✔	✔
SAC features									
1. Floating water-plantain	**Sym**	**KS**	**KS**	**Sym**	**KS**	**KS**	**Sym**	**KS**	**KS**
SSSI features – incomplete									
2. Open Water (Canal) Habitat	KH	KH	KH	KH	KH	KH	KH	KH	KH

Montgomery Canal	**Management unit Ref.**						
	10	**11**	**12**	**13**	**14**	**15**	**16**
SAC	✔	✔	✔	✔	✔	✔	✔
SSSI	✔	✔	✔	✔	✔	✔	✔
SAC features							
1. Floating water-plantain	**KS**	**KS**	**KS**	**Sym**	**Sym**	**KS**	**KS**
SSSI features - incomplete							
2. Open Water (Canal) Habitat	KH	KH	KH	KH	KH	KH	KH

4. CONSERVATION OBJECTIVES

Background to Conservation Objectives:

a. Outline of the legal context and purpose of conservation objectives.

Conservation objectives are required by the 1992 'Habitats' Directive (92/43/EEC). The aim of the Habitats Directives is the maintenance, or where appropriate the restoration of the 'favourable conservation status' of habitats and species features for which SACs and SPAs are designated (see Box 1).

In the broadest terms, 'favourable conservation status' means a feature is in satisfactory condition and all the things needed to keep it that way are in place for the foreseeable future. CCW considers that the concept of favourable conservation status provides a practical and legally robust basis for conservation objectives for Natura 2000 and Ramsar sites.

Box 1
Favourable conservation status as defined in Articles 1(e) and 1(i) of the Habitats Directive

"The conservation status of a natural habitat is the sum of the influences acting on it and its typical species that may affect its long-term natural distribution, structure and functions as well as the long term survival of its typical species. The conservation status of a natural habitat will be taken as favourable when:

- Its natural range and areas it covers within that range are stable or increasing, and
- The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- The conservation status of its typical species is favourable.

The conservation status of a species is the sum of the influences acting on the species that may affect the long-term distribution and abundance of its populations. The conservation status will be taken as 'favourable' when:

- population dynamics data on the species indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis."

Achieving these objectives requires appropriate management and the control of factors that may cause deterioration of habitats or significant disturbance to species.

As well as the overall function of communication, Conservation objectives have a number of specific roles:

- Conservation planning and management.

  The conservation objectives guide management of sites, to maintain or restore the habitats and species in favourable condition.

- Assessing plans and projects.

Article 6(3) of the 'Habitats' Directive requires appropriate assessment of proposed plans and projects against a site's conservation objectives. Subject to certain exceptions, plans or projects may not proceed unless it is established that they will not adversely affect the integrity of sites. This role for testing plans and projects also applies to the review of existing decisions and consents.

- Monitoring and reporting.

  The conservation objectives provide the basis for assessing the condition of a feature and the status of factors that affect it. CCW uses 'performance indicators' within the conservation objectives, as the basis for monitoring and reporting. Performance indicators are selected to provide useful information about the condition of a feature and the factors that affect it.

The conservation objectives in this document reflect CCW's current information and understanding of the site and its features and their importance in an international context. The conservation objectives are subject to review by CCW in light of new knowledge.

b. Format of the conservation objectives

There is one conservation objective for each feature listed in part 3. Each conservation objective is a composite statement representing a site-specific description of what is considered to be the favourable conservation status of the feature. These statements apply to a whole feature as it occurs within the whole plan area, although section 3.2 sets out their relevance to individual management units.

Each conservation objective consists of the following two elements:

1. Vision for the feature
2. Performance indicators

As a result of the general practice developed and agreed within the UK Conservation Agencies, conservation objectives include performance indicators, the selection of which should be informed by JNCC guidance on Common Standards Monitoring[1].

There is a critical need for clarity over the role of performance indicators within the conservation objectives. **A conservation objective, because it includes the vision for the feature, has meaning and substance independently of the performance indicators, and is more than the sum of the performance indicators**. The performance indicators are simply what make the conservation objectives measurable, and are thus part of, not a substitute for, the conservation objectives. Any feature attribute identified in the performance indicators should be represented in the vision for the feature, but not all elements of the vision for the feature will necessarily have corresponding performance indicators.

As well as describing the aspirations for the condition of the feature, the Vision section of each conservation objective contains a statement that the factors necessary to maintain those desired conditions are under control. Subject to technical, practical and resource constraints, factors which have an important influence on the condition of the feature are identified in the performance indicators.

[11] Web link: http://www.jncc.gov.uk/page-2199.

4.1 Conservation Objective for Feature 1: Floating water-plantain *Luronium natans* (EU Species Code: 1831)

Vision for feature 1

The vision for this feature is to maintain the extent and distribution of *L. natans* within the Montgomery Canal at favourable conservation status, where all of the following conditions are satisfied:

- The *L. natans* population in favourable condition will reflect the natural carrying capacity of the canal habitat and will be limited principally by species ability to spread or be relocated (vegetative or otherwise), the suitability of the rooting medium and competition between species as part of habitat succession.
- Recreation pressure, principally through boat movements and fisheries management, will not significantly affect the maintenance of the species, or its ability to disperse throughout the canal network and any associated off-line reserves.
- The ecological status of the water environment, including elements of water quality and physical habitat quality, will be sufficient to support the population of *L. natans* in favourable condition.
- All factors affecting the achievement of the above conditions are under control.

Performance indicators for Feature 1

The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators.

Performance indicators for feature condition		
Attribute	***Attribute rationale and other comments***	***Specified limits***
A1. Extent of *L. natans*	The base-line area (measured from 2001 survey for mapped continuous stands only) is 1.5 hectares. The lower limit is set to allow for up to a 25% decline to allow for natural fluctuations or management activity (like dredging) necessary to restore open water conditions. In reality this is too time-consuming to measure, so will usually be covered by monitoring distribution (A2), unless a new comprehensive mapping survey is completed.	*Upper limit*: None required. *Lower limit*: 1.1 ha
A2. Distribution of *L. natans*	This has been set to ensure the size of the population is safeguarded. It also provides a means of ensuring that the species can recolonise areas subject to dredging and weed cutting to maintain open water and water flow. Note that some units are composed of a number of contiguous km lengths. There are no recent records for this species in Units 4, 12 or 13, but at low density this species is very difficult to find.	*Upper Limit*: present along whole length of canal. *Lower limit*: Present in all non-navigable channel kms where it was found in 2001; AND present in 75% of samples and 75% of the mapped area in 2001 in Vyrnwy aqueduct. **Also present in** offline reserves at Wern, Guilsfield Arm, Whitehouse

Performance indicators for feature condition		
Attribute	***Attribute rationale and other comments***	***Specified limits***
	Each offline reserve has also been treated as a separate unit. The performance indicator limits are over and above the minimum standards set by JNCC because the plant is so widespread along the canal.	and Brithdir Pools. Also requires evidence of spreading by runners, and spreading around site by fragments

Performance indicators for factors affecting the feature		
Factor	***Factor rationale and other comments***	***Operational Limits***
F1. Water Quality	The water determines the quality of the habitat and plant community in which this species grows. These standards are higher than may be required for this species to safeguard the SSSI feature. It is recognised that these standards may be replaced by better standards more specific to canals as and when they become available. The standard will only be failed if failure is sustained and is for criteria wider than biochemical oxygen demand and dissolved oxygen. There should be no deterioration from existing levels. These targets should be replaced by experience of the existing data available from the Environment Agency or emerging Water Framework Directive targets over the coming years.	*Upper limit*: As an interim guide the total phosphorus target for the whole canal is <40µg L^{-1} TP. None required for other elements. *Lower limit*: The current target is to seek to attain General Quality Assessment Grade A or B for biological water quality, and General Quality Assessment Grade B for water chemical quality.
F2. Water Clarity	It is considered essential to use a Secchi disk because observation alone cannot be a reliable measure of light penetration. This should not be measured during or after periods of heavy rain.	*Upper limit*: not required *Lower limit*; Secchi disk should be visible at depth of 1m in 90% of observations

4.2 Conservation Objective for Feature 2: Open Water (Canal) Habitat

Vision for feature 2

The vision for this feature is to maintain the extent, distribution and quality of the floating, submerged, emergent and marginal vegetation that constitutes the canal vegetation habitat feature within the Montgomery Canal at favourable conservation status, where all of the following conditions are satisfied:

- The canal vegetation in favourable condition will reflect the natural carrying capacity of the canal habitat and will be limited principally by species ability to spread or be relocated (vegetative or otherwise), the suitability of the rooting medium and competition between species as part of habitat succession.
- The ecological status of the water environment, including elements of water quality, depth and clarity, will be sufficient to support species-rich canal vegetation with a variety of submerged, floating and marginal species and the populations of locally rare or uncommon species in favourable condition.
- Recreation pressure, principally through boat movements and fisheries management, will not significantly affect the maintenance of the canal vegetation, or its ability to disperse throughout the canal network and any associated off-line reserves.
- All factors affecting the achievement of the above conditions are under control.

Performance indicators for Feature 2

The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators.

Performance indicators for feature condition		
Attribute	***Attribute rationale and other comments***	***Specified limits***
A1. Extent of Canal Vegetation	Lower limit is same as upper limit because the whole canal should support canal vegetation of some description. This can be assessed on the basis of all areas being maintained as open water, but allowing for the fact that once over a certain proportion of the channel is dominated by marginal species then a need for dredging will be required. This will effectively be delivered by the performance indicator- A2.	*Upper limit*: 37.5 ha, as limited by available open water habitat. *Lower limit*: 37.5 ha
A2. Canal Vegetation **– Quantity And Distribution**	Based on the JNCC Standard **Common Standards Monitoring** guidance for this attribute for this feature. This should be assessed for individual kilometre lengths.	*Upper limit*: No more that 70% of the channel width should be covered by marginal vegetation *Lower limit*: Submerged and floating leaved aquatics should cover at least 30% of the canal channel, AND Marginal (emergent) should cover at least 30% of channel width.
A3. Canal Vegetation – **Species Richness**	Based on the JNCC Standard **Common Standards Monitoring** guidance for this attribute for this feature. It has been modified according to site-specific requirements to allow for a rotational programme of canal maintenance (dredging & weed cutting), so that not all kilometres lengths have to meet the standard at any one time. This maintenance is to ensure optimal conditions of open water are maintained for the canal habitat and species. The performance standards have been set on the basis of monitoring fixed kilometre lengths, but the management units in this plan may be composed of more than one kilometre length. The list of species that qualify as aquatic or emergent is site specific. *Elodea* or	*Upper limit*: Not required *Lower limit*: 75% of the Canal Vegetation is 'species-rich' canal vegetation in good condition, characterised by the presence of: at least 6 **aquatic** and 6 **emergent** species at DAFOR level Occasional in every 1km of channel;, AND an average of 7 **aquatic** and 7 **emergent** species per 150 metre sample over full channel length.

	other alien species do not count as aquatic species for this assessment. The different figure for the average is to allow some lengths to be far more species rich than others. According the JNCC guidance this is the number of species to be expected in good quality canal vegetation within a 150m sample unit. It is possible that this is over ambitious for this site.	
A4. Canal Vegetation – **Introduced Species**	Other species may be added to list if the need arises.	*Upper limit*: Each of *Azolla* spp., *Crassula helmsii*, *Hydrocotyle ranunculoides and Myriophyllum aquaticum* occupy less than 50 m of the whole designated site; AND None of these invasive species should be present at DAFOR cover more than Rare in any 150 m survey site. *Lower limit*: none required
A5. Canal Vegetation – **negative indicator species**	Failure is unlikely on this attribute alone, but it will be monitored.	*Upper limit:* Filamentous algae and combined cover of *Spirodella /Lemna/Azolla*, each less than 10% cover on average *Lower limit*: none required
A6. Indicators of local distinctiveness:	Populations of rare species and other species characteristic of high quality canal systems should persist. The continued presence of populations should be checked during section surveys.	*Upper limit:* none required *Lower limit*: the following species populations should be maintained in the following number of kilometre lengths. *Alisma lanceolatum* 4 *Butomus umbellatus* 1 *Callitriche hamulata* 7 ***Callitriche hermaphroditica*** 5 *Carex acutiformis* 9 *Hottonia palustris* 2 *Hydrocharis morsus-ranae* 10 *Myriophyllum alterniflorum* 10 *Potamogeton alpinus* 2 *Potamogeton crispus* 6 *Potamogeton friesii* 2 *Potamogeton obtusifolius* 24 ***Potamogeton perfoliatus*** 4 ***Potamogeton praelongus*** 2 ***Spirodela polyrhiza*** 2

Performance indicators for factors affecting the feature		
Factor	***Factor rationale and other comments***	***Operational Limits***
F1. Water Quality		These are exactly the same as for Feature 1.
F2. Water Clarity	This is assessed by looking at water clarity. It is considered essential to use a Secchi disk because observation alone cannot be a reliable measure of light penetration	This is exactly the same as for Feature 1.
F3. Channel shading	Tree and hedgerow maintenance can affect the amount of light getting to the water surface. This in turn can affect the quality of the habitat. In parts of the site supporting significant populations of *L. natans* this would not apply as the priority is to safeguard the SAC feature.	*Upper Limit*: On average no more than 5% of the channel surface should be shaded by overhanging vegetation in each km length. *Lower Limit*: not required

5. ASSESSMENT OF CONSERVATION STATUS AND MANAGEMENT REQUIREMENTS

This part of the document provides:

- A summary of the assessment of the conservation status of each feature.
- A summary of the management issues that need to be addressed to maintain or restore each feature.

5.1 Conservation Status and Management Requirements of Feature 1: Floating water-plantain *Luronium natans* (EU Species Code: 1831)

Conservation Status within the site of Feature 1

Results of the most comprehensive survey in 2001 (Newbold 2001) showed that this species is widespread along the length of the canal, although there are some lengths where there are no records because of its very low density, recent dredging activity or its local absence. This information had led CCW to conclude that the population was healthy and that this should warrant an assessment of favourable condition.

However, there are concerns about water quality that may account for the current lack of species-richness in some parts of the canal. Whilst this may be of lesser concern for this feature the status of this feature has been currently assessed as **unfavourable (2007)**, pending further discussion and investigation with the Environment Agency (February 2006). This assessment has not been done for each management unit.

Some areas are dominated by *Elodea* spp, which can out compete the more sensitive species (including *L. natans*).

It can be stated with certainly (November 2007) that the population of this feature is currently large and abundant in management units 2 (Vyrnwy Aqueduct to Pentrehelin) and 15 (Red House to Glanhafren).

- **Dredging** – Silting up means that shallow water and competing marginal species restrict the availability of open water and early successional conditions that this species requires to thrive.

  British Waterways are mindful of their responsibilities on this site and work in partnership with CCW to ensure that existing populations are safeguarded during any works that are necessary to maintain water flows and physical structure of the canal.

  New funding sources for proper dredging are continually being sought, and it is hoped that a focussed and sustainable restoration to a controlled but navigated waterway would provide the means to safeguard the future of the site and this feature.

- **Water quality** – There concerns about the quality of the water that feeds into the canal. This is currently being investigated by the Environment Agency as part of their review of consents process.

  It is possible that once proper dredging can occur that this may improve water flow and help to improve quality by removing a nutrient source.

5.2 Conservation Status and Management Requirements of Feature 2: Canal Vegetation

Conservation Status within the site of Feature 2

Results of the most comprehensive survey in 2001 (Newbold 2001) showed that species richness was very variable, although the data has only been analysed to assess richness per kilometre. Some lengths have a high number of species, but there are many kilometres (18) that have 3 species of aquatics or less. This information had led CCW to conclude that this feature is currently in unfavourable, unclassified condition.

More recent feature monitoring in 2005 (report currently not available) was done on a sample of seven separate kilometre lengths selected as representative of conditions along the length of the canal. Of those sites, only two passed the threshold for number of aquatic species; these equated to management units 2 and 10, which are already known to be the most species-rich areas on the canal.

There are clearly issues over species richness. Much of this is probably due to shallow water depths and siltation because there is insufficient funding for a proper dredging programme. This means that some areas are dominated by vigorous marginal species like *Glyceria maxima*. Some areas are dominated by *Elodea* spp, which can out compete the more sensitive species (including *L. natans*).

There are also concerns about water quality (mentioned for Feature 1) that may account for the current lack of species-richness in some parts of the canal.

The status of this feature has been currently assessed as **unfavourable (2007)**. British Waterways need to be able to access sufficient funds to plan for a proper programme of dredging with arisings being removed off site. The concerns over water quality are pending further discussion and investigation with the Environment Agency (February 2006). This assessment has not been done for each management unit.

- **Dredging** – Silting up means that shallow water and competing marginal species restrict the availability of open water and early successional conditions that this species requires to thrive. British Waterways are mindful of their responsibilities on this site and work in partnership with CCW to ensure that existing populations are safeguarded during any works that are necessary to maintain water flows and physical structure of the canal.

  New funding sources for proper dredging are continually being sought, and it hoped that a focussed and sustainable restoration to a controlled but navigated waterway would provide the means to safeguard the future of the site and this feature.

  There is insufficient information available to say which units currently require management action to create sufficiently deep and open water to permit species-rich vegetation to develop, but data from 2001 suggests that at present there is no need for action in management units 2, and 8 to 12, although south of Llwynderw (km 22) towards Berriew and beyond (km26) all but one individual kilometre lengths have fewer than 6 aquatic species.

- **Water quality** – There are concerns about the quality of the water that feeds into the canal. This is currently being investigated by the Environment Agency as part of their review of consents process.

  It is possible that once proper dredging can occur that this may improve water flow and help to improve quality by removing a nutrient source.

6. ACTION PLAN: SUMMARY

This section takes the management requirements outlined in Section 5 a stage further, assessing the specific management actions required on each management unit. This information is a summary of that held in CCW's Actions Database for sites, and the database will be used by CCW and partner organisations to plan future work to meet the Wales Environment Strategy targets for sites.

Unit Number	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
001	000063	Llanymynech to Carreghofa Lock	Concerns over water quality which needs investigation. Also, the lack of money available to fund a dredging programme to provide a more sustainable water depth for the habitat and species features.	Yes
002	000068	Vyrnwy Aqueduct to Pentrehelin	Concerns over water quality which needs investigation. Also, the lack of money available to fund a dredging programme to provide a more sustainable water depth for the habitat and species features.	Yes
003	000069	Pentrehelin to Bell House	Concerns over water quality which needs investigation. Also, the lack of money available to fund a dredging programme to provide a more sustainable water depth for the habitat and species features.	Yes

Unit Number	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
004	000070	Bell House to Red Bridge	Concerns over water quality which needs investigation. Also, the lack of money available to fund a dredging programme to provide a more sustainable water depth for the habitat and species features.	Yes
005	000071	Guilsfield Arm	Concerns over water quality which needs investigation. Also, the lack of money available to fund a dredging programme to provide a more sustainable water depth for the habitat and species features.	Yes
006	000072	Wern Reserve	Concerns over water quality which needs investigation.	Yes
007	000073	Red Bridge to Pool Quay	Concerns over water quality which needs investigation. Also, the lack of money available to fund a dredging programme to provide a more sustainable water depth for the habitat and species features.	Yes
008	000074	Pool Quay to Buttington	Concerns over water quality which needs investigation. Also, the lack of money available to fund a dredging programme to provide a more sustainable water depth for the habitat and species features.	Yes
009	000075	Welshpool	Concerns over water quality which needs investigation. Also, the lack of money available to fund a dredging programme to provide a more sustainable water depth for the habitat and species features.	Yes
010	000076	Whitehouse Reserve	Concerns over water quality which needs investigation. Also, the lack of money available to fund a dredging programme to provide a more sustainable water depth for the habitat and species features.	Yes
011	000077	Powis Castle to Berriew	Concerns over water quality which needs investigation. Also, the lack of money available to fund a dredging programme to provide a more sustainable water depth for the habitat and species features.	Yes
012	000078	Brithdir Reserve	Concerns over water quality which needs investigation.	Yes
013	000079	Berriew to Garthmyl	Concerns over water quality which needs investigation. Also, the lack of money available to fund a dredging programme to provide a more sustainable water depth for the habitat and species features.	Yes
014	000080	Garthmyl to Red House	Concerns over water quality which needs investigation. Also, the lack of money available to fund a dredging programme to provide a more sustainable water depth for the habitat and species features.	Yes

Unit Number	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
015	000081	Red House to Glanhafren	Concerns over water quality which needs investigation. Also, the lack of money available to fund a dredging programme to provide a more sustainable water depth for the habitat and species features.	Yes
016	000082	Glanhafren to Freestone Lock	Concerns over water quality which needs investigation. Also, the lack of money available to fund a dredging programme to provide a more sustainable water depth for the habitat and species features.	Yes

7. GLOSSARY

This glossary defines the some of the terms used in this **Core Management Plan**. Some of the definitions are based on definitions contained in other documents, including legislation and other publications of CCW and the UK nature conservation agencies. None of these definitions is legally definitive.

Action	A recognisable and individually described act, undertaking or **project** of any kind, specified in section 6 of a **Core Management Plan** or **Management Plan**, as being required for the **conservation management** of a site.
Aquatic species	A species of floating leaved or submerged plant, as defined on a list given by JNCC[2] for canal feature monitoring.
Attribute	A quantifiable and monitorable characteristic of a **feature** that, in combination with other such attributes, describes its **condition**.
Common Standards Monitoring	A set of principles developed jointly by the UK conservation agencies to help ensure a consistent approach to **monitoring** and reporting on the **features** of sites designated for nature conservation, supported by guidance on identification of **attributes** and monitoring methodologies.
Condition	A description of the state of a feature in terms of qualities or **attributes** that are relevant in a nature conservation context. For example the condition of a habitat usually includes its extent and species composition and might also include aspects of its ecological functioning, spatial distribution and so on. The condition of a species population usually includes its total size and might also include its age structure, productivity, relationship to other populations and spatial distribution. Aspects of the habitat(s) on which a species population depends may also be considered as attributes of its condition.
Condition assessment	The process of characterising the **condition** of a **feature** with particular reference to whether the aspirations for its condition, as expressed in its **conservation objective**, are being met.
Condition categories	The **condition** of **feature** can be categorised, following **condition assessment** as one of the following[3]: Favourable: maintained; Favourable: recovered; Favourable: un-classified; Unfavourable: recovering; Unfavourable: no change;

[2] See JNCC guidance on Common Standards Monitoring http://www.jncc.gov.uk/page-2232

	Unfavourable: declining; Unfavourable: un-classified; Partially destroyed; Destroyed.
Conservation management	Acts or undertaking of all kinds, including but not necessarily limited to **actions,** taken with the aim of achieving the **conservation objectives** of a site. Conservation management includes the taking of statutory and non-statutory measures, it can include the acts of any party and it may take place outside site boundaries as well as within sites. Conservation management may also be embedded within other frameworks for land/sea management carried out for purposes other than achieving the conservation objectives.
Conservation objective	The expression of the desired **conservation status** of a **feature,** expressed as a **vision for the feature** and a series of **performance indicators**. The conservation objective for a feature is thus a composite statement, and each feature has one conservation objective.
Conservation status	A description of the state of a **feature** that comprises both its **condition** and the state of the **factors** affecting or likely to affect it. Conservation status is thus a characterisation of both the current state of a feature and its future prospects.
Conservation status assessment	The process of characterising the **conservation status** of a **feature** with particular reference to whether the aspirations for it, as expressed in its **conservation objective**, are being met. The results of conservation status assessment can be summarised either as 'favourable' (i.e. conservation objectives are met) or unfavourable (i.e. conservation objectives are not met). However the value of conservation status assessment in terms of supporting decisions about **conservation management**, lies mainly in the details of the assessment of feature **condition**, **factors** and trend information derived from comparisons between current and previous conservation status assessments and condition assessments.
Core Management Plan	A CCW document containing the conservation objectives for a site and a summary of other information contained in a full site **Management Plan**.
Emergent species	A species of floating or submerged plant, as defined on a list given by JNCC[4] for canal feature monitoring.
Factor	Anything that has influenced, is influencing or may influence the **condition** of a **feature**. Factors can be natural processes, human activities or effects arising from natural process or human activities, They can be positive or negative in terms of their influence on features, and they can arise within a site or from outside the site. Physical, socio-economic or legal constraints on **conservation management** can also be considered as factors.
Favourable condition	See **condition** and **condition assessment**
Favourable conservation status	See **conservation status** and **conservation status assessment.**[5]
Feature	The species population, habitat type or other entity for which a site is designated. The ecological or geological interest which justifies the designation of a site and which is the focus of conservation management.
Integrity	See **site integrity**

[3] See JNCC guidance on Common Standards Monitoring http://www.jncc.gov.uk/page-2272

[4] See JNCC guidance on Common Standards Monitoring http://www.jncc.gov.uk/page-2232

[5] A full definition of favourable conservation status is given in Section 4.

Key Feature	The habitat or species population within a **management unit** that is the primary focus of **conservation management** and **monitoring** in that unit.
Management Plan	The full expression of a designated site's legal status, **vision**, **features**, **conservation objectives**, **performance indicators** and management requirements. A complete management plan may not reside in a single document, but may be contained in a number of documents (including in particular **the Core Management Plan**) and sets of electronically stored information.
Management Unit	An area within a site, defined according to one or more of a range of criteria, such as topography, location of **features**, tenure, patterns of land/sea use. The key characteristic of management units is to reflect the spatial scale at which **conservation management** and **monitoring** can be most effectively organised. They are used as the primary basis for differentiating priorities for conservation management and monitoring in different parts of a site, and for facilitating communication with those responsible for management of different parts of a site.
Monitoring	An intermittent (regular or irregular) series of observations in time, carried out to show the extent of compliance with a formulated standard or degree of deviation from an expected norm. In **Common Standards Monitoring**, the formulated standard is the quantified expression of favourable **condition** based on **attributes**.
Operational limits	The levels or values within which a **factor** is considered to be acceptable in terms of its influence on a **feature**. A factor may have both upper and lower operational limits, or only an upper limit or lower limit. For some factors an upper limit may be zero.
Performance indicators	The **attributes** and their associated **specified limits**, together with **factors** and their associated **operational limits,** which provide the standard against which information from **monitoring** and other sources is used to determine the degree to which the **conservation objectives** for a **feature** are being met. Performance indicators are part of, not the same as, conservation objectives. See also **vision for the feature**.
Plan or project	**Plan**: a document prepared or adopted by a public body or statutory undertaker, intended to influence decisions on the carrying out of **projects.** **Project:** Any form of construction work, installation, development or other intervention in the environment, the carrying out or continuance of which is subject to a decision by any public body or statutory undertaker. Decisions on plans and projects which affect Natura 2000 and Ramsar sites are subject to specific legal and policy procedures.
Site integrity	The coherence of a site's ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it is designated.
Site Management Statement (SMS)	The document containing CCW's views about the management of a site issued as part of the legal notification of an SSSI under section 28(4) of the Wildlife and Countryside Act 1981, as substituted.
Special Feature	See **feature**.
Specified limit	The levels or values for an **attribute** which define the degree to which the attribute can fluctuate without creating cause for concern about the **condition** of the **feature**. The range within the limits corresponds to

	favourable, the range outside the limits corresponds to unfavourable. Attributes may have lower specified limits, upper specified limits, or both.
Unit	See **management unit.**
Vision for the feature	The expression, within a **conservation objective**, of the aspirations for the **feature** concerned. See also **performance indicators.**
Vision Statement	The statement conveying an impression of the whole site in the state that is intended to be the product of its **conservation management.** A 'pen portrait' outlining the **conditions** that should prevail when all the **conservation objectives** are met. A description of the site as it would be when all the **features** are in **favourable condition**.

8. REFERENCES

References

Joint Nature Conservation Committee (JNCC). 2004. Guidance on Common Standards Monitoring (CSM):Vascular Plants, Version February 2004. JNCC Report, JNCC, Peterborough.
Available via website at: http://www.jncc.gov.uk

Joint Nature Conservation Committee (JNCC). 2005. Guidance on Common Standards Monitoring (CSM): Freshwater, Version March 2005. JNCC Report, JNCC, Peterborough.
Available via website at: http://www.jncc.gov.uk

Montgomery Canal Partnership 2005. **Montgomery Canal: Regeneration through Sustainable Restoration (A Conservation Management Strategy).** British Waterways.
http://www.britishwaterways.co.uk/images/Montgomery_Canal_Conservation_Management_Strategy.pdf

Newbold, C. 2001. **The Montgomery Canal A Macrophyte Survey 38pp [727 individual mapping sheets**]. Private survey report for British Waterways.

WILLIAMS PLANT HIRE LTD

INCIDENT MANAGEMENT PLAN

AUGUST 2019
V2.0

INTRODUCTION

This incident management plan has been produced to form a document that can be used in the event of a range of incidents, which could occur at the site.

There are a number of documents already produced, which refer to how incidents for specific issues are dealt with and the following documents are relevant to incident management.

Fire Prevention Plan

The incident management plan is split into the following sections:-

A Site Plans
Site layout CEC/WPH/02

B Key Site and Emergency Contacts

C List of Substances and Storage Facilities

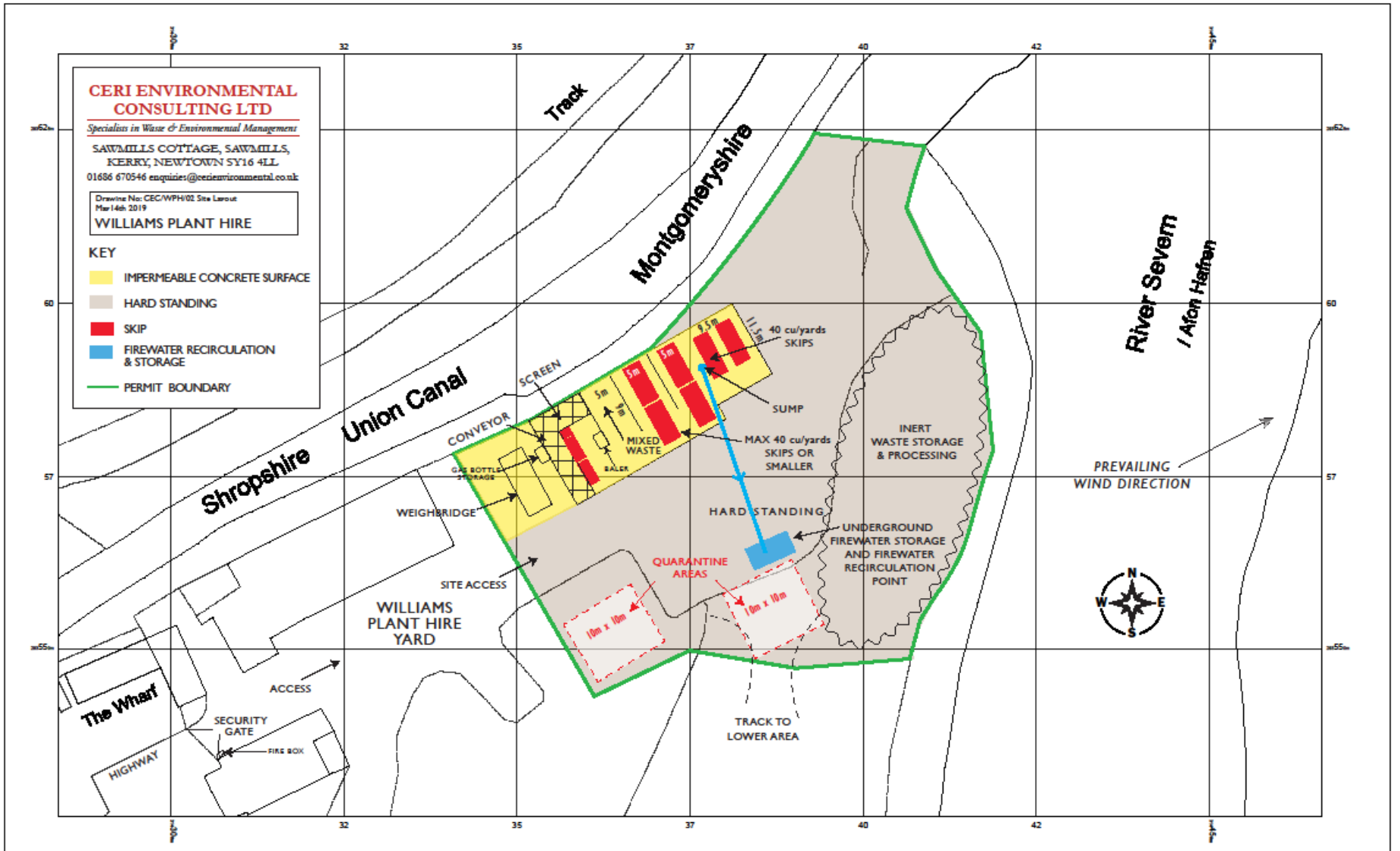
D Preventing Accidents / Incidents and what to do if they happen

E Complaints Procedure in the event of Complaints being received

WILLIAMS PLANT HIRE

25m

Scale 1:500



North

Centre Coordinates:314376,293681
Production Date: 13/12/2018 09:55:23

Supplied by: www.ukmapcentre.com
Serial No:162567

B – Key Site and Emergency Contacts

This table contains information and contacts you may need in an emergency

SITE DETAILS			
Location: Aberbechan Wharf, Newtown, Powys			
Postcode: SY16 3AW			
Site Access Grid Reference: SO 14293 93530			
SITE CONTACTS	Name	Office Hours	Out of hours
Owner:	Keith Williams	01686 630244	
Manager:			
Security Contact:			
EMERGENCY SERVICES		Office Hours	Out of hours
Emergency		999	999
Medical:		999	999
Police:		999	999
Fire:		999	999
REGULATORS		Office Hours	Out of hours
Health and Safety Executive (HSE)		0345 300 9923	0151 922 9235
Local Authority: Powys CC		01597 826000	01597 825275
Natural Resources Wales		0300 0653000	
NRW (24 hour emergency hotline)		0300 0653000	
UTILITY / KEY SERVICES	Name	Office Hours	Out of hours
Water undertaker:	Severn Trent	0800 7834444	0800 7834444
Electricity supplier:			
Oil supplier:			
Maintenance contractor:			
Electrician:			
Plumber:			
Locksmith:			
Joiner:			
OTHER KEY CONTACTS	Name	Office Hours	Out of hours
Specialist advisors:	Ceri Environmental Consulting Ltd	01686 670546	07751112118

C - List of Substances and Storage Facilities

The following is a list of liquids, powders etc that are stored on the permitted site.

Material	**Combustible**	**Volume m^3**	**Pile Dimensions m**	**Type and size of Secondary Containment**
Mixed waste awaiting processing	Y	135	9 x 5 x3	On sealed drainage
Wood (picking line tipping skip)	Y	1.5 tipping skip	1.5m^3 tipping Skip	On sealed drainage
Metals (picking Line tipping skip)	Y	1.5 tipping skip	1.5m^3 tipping Skip	On sealed drainage
Paper/ Cardboard (picking Line tipping skip)	Y	1.5 tipping skip	1.5m^3 tipping Skip	On sealed drainage
Light Waste for disposal	Y	31	40 cu/yd skip	On sealed drainage
Mixed metals	Y	31	40 cu/yd skip	On sealed drainage
Wood	Y	31	40 cu/yd skip	On sealed drainage
Paper/ carboard	Y	31	40 cu/yd skip Loose or baled	On sealed drainage
Light Waste for disposal	Y	31	40 cu/yd skip	On sealed drainage
Glass	N	10	12 cu/yd skip	On sealed drainage
Plasterboard	N	15	20 cu/yd covered skip	On sealed drainage
Sorted steel	N	31	40 cu/yd skip	On sealed drainage

Sorted aluminium	N	31	40 cu/yd skip	On sealed drainage
Green waste as delivered or chipped/ shredded	Y	31	40 cu/yd skip	On sealed drainage
Inerts Soils, Materials for processing to WRAP Protocol Aggregates	N	1,000	Pile sizes will vary but maximum of 1,500 tonnes, max 3m high	
Unauthorised wastes	Y	31	40 cu/yd skip	Covered container
Gas bottles	Y			Cage
Diesel		Non on permitted area		

D - Preventing Accidents / Incidents ….. and what to do if they happen

The following table is a list of the things that could go wrong and harm the environment.

Possible Accident / Incident	What would the harm be?	How do we reduce the chances of it happening?	What to do if it happens
Spillages			
Spillages during refuelling of plant and equipment.	Contamination of land, groundwater and watercourses.	Inspect and validate all in-coming wastes. Train the staff Supervise fuel refilling. Use drip trays and spill materials. Plant and equipment will be refueled in designated areas and will use drip trays and spill materials.	Follow the spill response in SOP No13 of the Management Plan. It describes what to do in the event of a spill. Staff aware of where spill kits are stored.

Possible Accident / Incident	What would the harm be?	How do we reduce the chances of it happening?	What to do if it happens
Slow seepage of liquids from imported contaminated materials. Slow seepage can be less noticeable than ‘spills’.		Quarantine skip for any waste which is suspected of being contaminated	
Overfilling			
Overfilling of oil / fuel tanks during delivery.	Contamination of land, groundwater and watercourses.	Stock level control checks, supervised delivery and high level alarms.	Spill response procedure as described above.
Failure of Plant or Equipment			
Leakages; due to faulty pipe work, valves, over-pressure, blockages, corrosion, severe weather, ground movement etc.	Contamination of land, groundwater and watercourses.	Plant and equipment maintenance programme	Spill response procedure as described above.
Puncture; of vessels and tanks etc due to impact – such as trucks.		Movement of drums and containers using safe techniques	
Fire			
Fire from plant and equipment and waste stored	Smoke and pollution, Firewater causes contamination of land, groundwater and watercourses.	No smoking policy. Fire training and emergency drills. Keeping storage to within limits specified in the Fire prevention Plan and ensuring storage times are kept to a minimum.	Follow Fire procedure SOP No 16 describing what to do in the event of a fire and as described in the Fire prevention Plan.
Odour Release			
Odour generated from composting	Odours may be detected	Ensure that any malodourous	Remove waste from site to a

Possible Accident / Incident	What would the harm be?	How do we reduce the chances of it happening?	What to do if it happens
operations during turning and shredding	outside the site boundary	waste is sent off site for disposal. Short storage times for biodegradeable wastes	suitable disposal site.
Dust Emissions off Site			
Release of dust off site	Dust may be deposited outside the site boundary	Management of dust generation in accordance with the Dust Procedure SOP No 10	Stop operations until conditions improve or apply dust suppression systems to prevent emissions leaving the site boundary.
Flood			
Due to ingress of watercourse floodwater, blocked drains, burst water main, use of fire water.	Contamination of raw materials, buildings, land, drainage system, groundwater and watercourses with fire and flood water.	All areas of the permitted site are above the flood levels for River Severn.	Pump any contaminated water from site to tanker and remove to specialist facility – not likely to be contaminated due to nature of waste on site
Failure of Services			
Due to failure of supply; water, electricity. Due to utility supply being struck and broken / cut.	No significant hazard to environment	Ensure location of services are identified before any engineering works are undertaken.	Repair services asap
Vandalism			
Unauthorised entry and tampering or malicious damage to property, plant and equipment.	Contamination of land, groundwater and watercourses.	Secure gate and perimeter fence. No tanks or valves on site except on plant. Plant and equipment locked out of hours.	Spill response procedure as described above.

E - Actions in the Event of Complaints being received

In the event of any complaints being received either directly to the site or indirectly via NRW the complaints procedure in accordance with SOP No 14 shall be implemented using the complaints form and the form in schedule 5 of the environmental permit to notify NRW.

QUALITY PROCEDURE

Effective Date : 15th August 2019

Date review required : 15th August 2020

SOP approved by : Mr Keith Williams

COMPANY DETAILS AND RESPONSIBLE PERSON

1. Operator name, site address and telephone number

   Williams Plant Hire Ltd
   Aberbechan Wharf
   Newtown
   Powys
   SY16 3AW
   Tel : 01686 630244

2. Person with overall responsibility for compliance

   Mr Keith Williams

Purpose of the Quality Procedure

This procedure relates to the transfer and treatment of wastes at Aberbechan Wharf, Newtown

Documentation Review

The quality systems adopted shall be reviewed at least every year, sooner if necessary, and where necessary revisions shall be made. Any revisions shall be recorded on form QA/01.

SITE IMPROVEMENT ACTION PLAN

Williams Plant Hire Ltd – Aberbechan Wharf, Newtown

Date logged	Issue identified by or from	Issue	Action required	Target date	Person responsible	Date actioned	Notes

SITE IMPROVEMENT ACTION PLAN

Date logged	Issue identified by or from	Issue	Action required	Target date	Person responsible	Date actioned	Notes