



**Cyfoeth
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**Natural
Resources**
Wales

Environmental Management System (EMS)

Register of Environmental Aspects and Impacts

Title	Register of Environmental Aspects and Impacts
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Register of Environmental Aspects and Impacts

Definitions

Environmental Aspect:

Element of an organisations activities, products or services that can interact with the environment.

Environmental Impact:

Any change to the environment, whether adverse or beneficial, wholly or partially resulting from the organisations activities, products or services.

Normal conditions:

Planned and occurs every day / week.

Abnormal conditions:

Planned but infrequent, e.g. Maintenance or service

Emergency

An unplanned activity or event.

Activity	Ref.	Aspect	Impact	Condition	Control or Influence	Risk Rating (Uncontrolled)	Risk Rating (Controlled)	Controls
Business Travel	AI01	Pool / Badge Fleet Travel	CO ₂ Emissions Particulates Fossil fuel depletion	N	C	D4 High	B4 Medium	EMS Essential guide EP-13 OGB43 / OGB22 506_09_SD02
Business Travel	AI02	Leased Fleet Travel	CO ₂ Emissions Particulates Fossil fuel depletion	N	C	D4 High	C4 High	EMS Essential guide EP-13 OGB43 / OGB22 506_09_SD02
Business Travel	AI03	Grey Fleet Travel	CO ₂ Emissions Particulates Fossil fuel depletion	N	C / I	D4 High	C4 High	EMS Essential guide EP-13 OGB43 / OGB22 506_09_SD02
Business Travel	AI04	Air Travel	CO ₂ Emissions Particulates Fossil fuel depletion	N	C / I	D4 High	C3 Medium	EMS Essential guide EP-13 506_09_SD02
Business Travel	AI05	Train Travel	CO ₂ Emissions Particulates Fossil fuel depletion	N	C / I	C4 High	B4 Medium	EMS Essential guide Travel Hierarchy EP-13 506_09_SD02
Business Travel	AI06	Other Travel Ferry / Taxi / Bus / Underground	CO ₂ Emissions Particulates Fossil fuel depletion	N	C / I	B4 Medium	B4 Medium	EMS Essential guide EP-13 506_09_SD02
Business Travel	AI07	Video conferencing Audio conferencing Bicycle / Walk Home working	Energy use Zero Impact	N	C / I	A1 Low	A1 Low	EMS Essential guide EP-13 506_09_SD02

Activity	Ref.	Aspect	Impact	Condition	Control or Influence	Risk Rating (Uncontrolled)	Risk Rating (Controlled)	Controls
Buildings	AI08	Energy Use Office Equipment & Lighting	CO ₂ Emissions Resource Use	N / A	I	C4 High	B4 Medium	FM maintenance EP-22 OGB43 506_09_SD02 Building logs EWAN No 3 and 5 EMS Monitoring
Buildings	AI09	Energy Use Heating	CO ₂ Emissions Resource Use	N / A	I	C4 High	B4 Medium	FM maintenance EP-22 OGB43 506_09_SD02 Building logs EWAN No 3 and 5 EMS Monitoring
Buildings	AI10	Renewables Photovoltaic Biomass Hydro & Wind	Positive Impact Energy generation	N	C	A1 Low	A1 Low	FM maintenance EP-22 OGB43 506_09_SD02 Building logs EWAN No 3 and 5 EMS Monitoring
Buildings	AI11	Water use in buildings	Resource Use	N / A	I	B4 Medium	A3 Medium	FM maintenance EP-18 OGB43 506_09_SD03 Building logs EWAN No 3 and 5 EMS Monitoring
Buildings	AI12	Discharge to Controlled Waters (Including Septic tanks & Interceptors)	Potential Pollution	N / A / E	C	D4 High	B1 Low	Consents & Permits EP-18 OGB35 EWAN No 12
Buildings	AI13	Discharge of Trade Effluent to Sewer	Potential Pollution	N / A / E	C	D4 High	C1 Low	Consents & Permits EP-18 OGB35 EWAN No 12

Activity	Ref.	Aspect	Impact	Condition	Control or Influence	Risk Rating (Uncontrolled)	Risk Rating (Controlled)	Controls
Buildings	AI14	Water Abstraction	Resource Use	N	C	D4 High	D1 Medium	Consents & Permits
Buildings	AI15	Use of Grey Water & Rain Water Harvesting	Positive Impact	N	C	A1 Low	A1 Low	FM maintenance
Estates	AI16	Refurbishment & New Build	CO ₂ Emissions Resource Use Potential Pollution	N	C / I	C3 Medium	C2 Medium	Sustainable Risk Assessments OGB-40
Estates	AI17	Buildings Maintenance	CO ₂ emissions Resource Use Potential Pollution	N	C / I	C3 Medium	A3 Low	FM Maintenance EP-24 OGB43 EWAN 3 and 5 506_09_SD03
Estates	AI18	Grounds Maintenance	Biodiversity Chemical Use Waste	N	C	B2 Low	A1 Low	Shared Services Contract Biodiversity Reviews OGB43 OGB15 EWAN 3 and 5
Estates	AI19	Buildings Cooling Air Conditioning (F-Gas)	F-Gas fugitive emissions Ozone depletion	N / A / E	C	C4 High	C2 Medium	FM Maintenance EP-16 506_09_SD02 OGB43 EWAN No 8
Estates	AI20	Chemical & Fuel Storage	Resource Use Potential Pollution	N / A / E	C	D1 Medium	C1 Low	EP-12 506_09_SD03 OGB35 OGB15

Activity	Ref.	Aspect	Impact	Condition	Control or Influence	Risk Rating (Uncontrolled)	Risk Rating (Controlled)	Controls
Estates	AI21	Historic Land Contamination	Potential Pollution	N / E	C	D2 Medium	D2 Medium	Management Plans Historic contaminated land register Asbestos register
Estates	AI22	Management of Tenants Land Management Agreements	Resource Use Potential Pollution Loss of Biodiversity	N	C / I	D3 High	B2 Low	Management Agreements SSSI Section 15 506_09_SD02
Waste	AI23	Waste to landfill	Use of Landfill Potential Pollution	N	C / I	D4 High	D4 High	NRW OI-01 EP-14 OGB35 506_09_SD02
Waste	AI24	Recycle	Positive Impact	N	C / I	D4 High	B2 Low	NRW OI-01 EP-14 OGB35 506_09_SD02
Waste	AI25	Hazardous Waste WEEE Chemical / Oil	Emissions Potential Pollution	N	C / I	D4 High	C3 Medium	NRW OI-02 EP-14 OGB35 506_09_SD02
Waste	AI26	Fly-tipped Waste	Emissions Use of Landfill Potential Pollution	N / E	I	D4 High	C4 High	NRW OI-01 NRW OI-02 OGB35
Emergency	AI27	Pollution Incidents Flood Incidents Marine Response Fire	Emissions Potential Pollution	E	I	D4 High	C1 Low	Pollution Plans OGB17
Procurement	AI28	Procurement of Goods & Services	Impacts across entire supply chain	N	C / I	D4 High	B3 Medium	EP-11 506_09_SD02 OGB3a OGB3b OGB3c

Activity	Ref.	Aspect	Impact	Condition	Control or Influence	Risk Rating (Uncontrolled)	Risk Rating (Controlled)	Controls
Operational	AI29	National Nature Reserve (NNR) Management	CO ₂ Emissions Resource Use Timber Aggregates Chemicals	N	C	C3 Medium	C1 Low	OI-03 OI-04 OI-05
Operational	AI30	Use and Storage of Chemicals Pesticides Herbicides Bio-hazards	Resource Use Potential Pollution	N / A / E	C	C2 Medium	B1 Low	WI-04 OGB15 506_09_SD03
Operational	AI31	Oil & Fuel Storage (Bulk)	Resource Use Potential Pollution	N / A / E	C	D2 Medium	D2 Medium	EP-12 OGB35 506_09_SD03
Operational	AI32	Mobile Plant Use & Refuelling	Resource Use Potential Pollution	N / A / E	C	D2 Medium	D2 Medium	OGB11 506_09_SD03
Operational	AI33	Sampling (Collection / Analysis / Preservation & Disposal)	CO ₂ Emissions Resource Use Use of Landfill	N	C	C4 High	C2 Medium	506_09_SD02
Operational	AI34	Laboratory Management	CO ₂ Emissions Resource Use Use of Landfill Potential Pollution	N / A / E	C	D4 High	C1 Low	EP14 / EP-16 506_09_SD03

Activity	Ref.	Aspect	Impact	Condition	Control or Influence	Risk Rating (Uncontrolled)	Risk Rating (Controlled)	Controls
Operational	AI35	Site Construction	CO ₂ emissions Resource Use Use of Landfill Potential Pollution	N	C / I	D4 High	D2 Medium	EIA OGB40 BREEAM
Operational	AI36	Flood defence construction	CO ₂ emissions Resource Use Loss of Biodiversity	N	C	D4 High	D2 Medium	300_10
Operational	AI37	Riverbank Maintenance	CO ₂ emissions Resource Use Potential Pollution	N / A / E	C	C3 Medium	B3 Medium	506_09_SD02
Operational	AI38	Managing Fish Farms	Resource Use Potential Pollution	E	C	D2 Medium	D1 Medium	506_09_SD02
Operational	AI39	Electro-fishing	CO ₂ emissions Loss of biodiversity	A	C	C1 Low	B1 Low	993_08
Operational	AI40	Water Treatment (fish farms)	Resource Use Potential Pollution	N / A	C	C1 Low	B1 Low	506_09_SD03
Operational	AI41	Vehicle Washing	Resource Use Potential Pollution	N	C	C1 Low	B1 Low	EP-18 OGB35
Operational	AI42	Vehicle / Plant Cooling (F-Gas)	F-Gas fugitive emissions Ozone depletion	N / A / E	C	B4 Medium	A3 Medium	Manufacturers maintenance schedules Vehicle Air Conditioning Diagnostics Training Ref 1.07

Activity	Ref.	Aspect	Impact	Condition	Control or Influence	Risk Rating (Uncontrolled)	Risk Rating (Controlled)	Controls
Operational	AI43	Bio-security	Potential Pollution Loss of Biodiversity	N	C	D4 High	D4 High	Bio-security Guidance
Operational	AI44	Deer Larders	Potential Pollution	N / A / E	C	C2 Medium	C1 Low	Wild Venison Standard OGB5 OGB35
Operational	AI45	Tree Treatment - Electrodyne	Potential Pollution	N / A / E	C	D4 High	C2 Medium	OGB15 OGB35 FC Tech Development Branch Guidelines
Waterways	AI46	Ocean Going Vessels	Potential Pollution	E	C	C1 Low	C1 Low	364_04_SD16
Waterways	AI47	Reservoir, Dam & Embankment Management	Resource use Potential Pollution Loss of Biodiversity	A / E	C	C1 Low	C1 Low	Reservoir flood plans
Waterways	AI48	Shingle & Sand Recharge	Resource use Loss of Biodiversity	N / A / E	C	C2 Medium	C1 Low	506_09_SD03
Waterways	AI49	Navigation & Harbour Management	Potential Pollution Loss of Biodiversity	E	I	C1 Low	C1 Low	Cross Border Working Arrangements 270313
Contractors	AI50	Control of Contractors	CO ₂ emissions Resource Use Potential Pollution	N / A / E	C	D4 High	C4 High	EP-24 44_07 OGB 3 OGB 35 OGB 43

Legislative Significance

Aspect & Impact Reference	Relevant Legislation
	Natural Resources Wales Environmental Policy
08 / 09	Control of Pollution Act 1974
18 / 47 / 48	Wildlife and Countryside Act 1981
01 / 02 / 03	Road Traffic Act 1988
18	Town and Country Planning Act 1990
16 / 17 / 18	Environmental Protection Act 1990 (Duty of Care)
13 / 20 / 21 / 22 / 27 / 30 / 31 / 32 / 33 / 34 / 40 / 44	Water Industry Act 1991
13 / 20 / 21 / 22 / 27 / 30 / 31 / 32 / 33 / 34 / 40 / 44	Water Resources Act 1991
08 / 09	Noise and Statutory Nuisance Act 1993
18 / 29	Conservation (Natural Habitats, &c.) Regulations 1994
01 / 02 / 03	Road Traffic (Vehicle Emissions) (Fixed Penalty) Regulations 1997
20 / 21 / 22 / 27 30 / 31 / 32 / 33 / 34	Ground Water Regulations 1998
11 / 15 / 27	Water Resources Act 1999
08 / 09 / 15	Buildings Regulations 2000
11 / 15	Water Act 2003
20 / 21 / 22 / 23 / 25 / 26 / 33 / 34 / 35 / 45	Hazardous Waste Regulations 2005
23 / 25 / 26	Waste Electrical & Electronic Equipment Regulations 2007
04 / 08 / 09	Climate Change Act 2008
46 / 48 / 49	Marine and Coastal Access Act 2009
19 / 41 / 42 / 44	Fluorinated Greenhouse Gas Regulations 2009
19 / 41 / 42 / 44	Ozone-Depleting Substances (Qualifications) Regulations 2009
16 / 17 / 23 / 25 / 26 33 / 34 / 35	Environmental Permitting Regulations 2010
16 / 17 / 23 / 25 / 26 33 / 34 / 35 / 45	Waste (England & Wales) Regulations 2011
16 / 17 / 23 / 25 / 26 33 / 34 / 35	Controlled Waste (England & Wales) Regulations 2012

TABLE 1

Environmental Aspect and Impacts – Prioritisation Matrix

Likelihood of occurrence	Certain Constantly in normal conditions	4				
	Likely Intermittent in normal conditions e.g. monthly or weekly	3				
	Occasional Possibly may occur e.g. annually. May be due to staff or equipment failure	2				
	Unlikely To occur, no evidence of occurring, extreme situations only	1				
			A	B	C	D
Severity of consequences	Scale & Impact		Minimal Impact. Environmental impact reversible in 1 month	Minor Impact. Short-term localised impact reversible in 1 year.	Moderate Impact. Medium term implications not reversible in 1 year.	Major Impact. Long term impacts irreversible.
	Legal/ Policy/ Other			Effecting Policy & performance	Potential breach of regulations	Actual breach of regulations
	Reputation			Potential for internal complaint/ non conformance	Potential for external complaint	Because of breach actual serious complaint/ PR issue
	Carbon Emissions		Reduction in carbon emissions	No increase or decrease in carbon emissions	Minor increase in carbon emissions	Major increase in carbon emissions