CPH APPENDIX 9

GENERIC ENVIRONMENTAL MANAGEMENT PLANS (GEMP'S)

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GENERIC ENVIRONMENTAL MANAGEMENT PLAN 1: GENERAL ENVIRONMENTAL PROTECTION MEASURES FOR CONSTRUCTION AND FORESTRY OPERATIONS

1. General Site Management

Potential Environmental	Environmental Control Measures	Relevant Project CPH Guidance
Visual intrusion from the site offices and welfare facilities etc. to people and wildlife	 The potential for visual intrusion to be taken into account when planning the location for storage of all site infrastructure, vehicles and equipment Site to be maintained in a clean and tidy condition. All materials to be stored tidily. All litter and waste to be removed at regular intervals and disposed of in accordance with the waste management plan Bunding around site compounds to be designed to look as natural as possible and to provide as much screening as possible 	 All committed mitigation and conditions (included as Appendix 1) Site waste management plan (Appendix 13) Legal requirements and sources of best management practice (Appendices 2 and 3)
Oil / fuel spill to land or watercourse	 All oil storage tanks to be located on impermeable bases with an impervious bund capable of retaining at least 110% of tank/drum volume Tank couplings to be located within bund Storage areas to be located 30m away from water bodies and 10m from watercourses For all "appropriate" watercourses and water bodies where permanent, non-mobile storage areas must be at least 100m away from the watercourse or water body Site plant refuelled in designated areas, at least 30m from "appropriate" water bodies and watercourses Filler handles to be trigger-spring type and suspended within bund when not in use Handles to be padlocked when not in use Transport of fuels and oils across sensitive areas of the site (as identified by the environmental manager(s)) in drums or other containers to be avoided as far as possible All drums to be stored safely in site compounds and protected from vehicle impact Adequate oil absorbent and containment materials to be held in areas on all parts of the site and staff briefed on how to use this effectively Oil contaminated water from bunded areas and drip trays to be removed by means of a manually controlled positive lift pump, or other measures (such as oil-absorbent pads, for drip trays) to be agreed in advance with the relevant local authority Contaminated water/materials to be disposed off site to appropriate disposal site with necessary paperwork in place in accordance with the Site Waste 	 GEMP 12 All committed mitigation and conditions (included as Appendix 1) Site waste management plan (Appendix 13) Legal requirements and sources of best management practice (Appendices 2 and 3)

Potential Environmental Risk	Environmental Control Measures	Relevant Project CPH Guidance
	 Management Plan Mobile fuel and lubricant servicing units to have quality delivery hoses with trigger-type delivery nozzles Oil powered pumps, generators etc to be located on impervious drip trays surrounded by earth or sand bunds located >10m from watercourses, or >30m from "appropriate" watercourses and water bodies All staff to be aware of necessary emergency procedures in case of spill 	
Pollution of the water environment	 All refuse and debris to be gathered, collected and removed daily to avoid risk of polluting watercourses Site drainage (e.g. run-off from soil heaps or steep rutted cleared slopes, haul roads and water crossing points) should be planned to avoid polluting watercourses No water from excavations and dewatering activities should be allowed to enter surface waters directly Construction plant washing facilities (including wheel washes) should be designed to operate on total recirculation wherever possible. If not possible effluent should be collected and discharged to the foul sewer (in agreement with Scottish Water) or disposed of offsite by licensed waste contractor. If this not possible discharge to the water environment will need adequate settlement, removal of oil and authorisation by SEPA The source of any water used to suppress dust or in wheel washes must be in accordance with legal requirements. If in doubt about what is permissible consult with SEPA Cement, grout and unset concrete must not be allowed to enter the water environment. No operations involving concrete transfer between vehicles or into vehicles to take place within 30m of watercourses and waterbodies. Drainage from excavations where concrete has been poured shall not be pumped or allowed to issue directly into the water environment without appropriate treatment and prior approval of SEPA Avoid transportation of fuels and oils across sensitive areas of the site (as identified by the environmental manager(s)) where possible and where this cannot be avoided ensure protection measures are in place in case of accident Site plant should only be refuelled in designated safe areas. These to be identified prior to work commencing on site. No refuelling to take place within 30m of waterbodies and watercourses All plant and equipment to be maintained appropriately including checking for leaks and cleaning/removing visible oil All site staff to be trained i	 GEMPs 8, 10, 12, 13, and 14 All committed mitigation and conditions (included as Appendix 1) Site waste management plan (Appendix 13) Legal requirements and sources of best management practice (Appendices 2 and 3)

Potential Environmental Risk	Environmental Control Measures	Relevant Project CPH Guidance
	 machinery In the event of spillage, follow emergency procedures, notify SEPA immediately by telephone and take action immediately to minimise any spill and its spread, and notify SEPA as quickly as possible by telephone Any contaminated soil to be disposed of to a licensed waste disposal site in accordance with legal requirements 	
Watercourse and surface water engineering works including culverts	 Engineering works in watercourses and all surface waters to be avoided wherever possible when detailing the design Authorisation must be obtained from SEPA for all watercourse engineering works including culverting works that fall under the Controlled Activities Regulations (CAR) and they should be designed to meet good practice 	GEMP 8 Appendix 24 (Watercourse Crossing Schedule)
Inadequate control of waste	 Sewage to be discharged only in accordance with the conditions of necessary consents If temporary sanitation cannot be connected to the public foul sewerage system apply to SEPA for authorisation for any discharge in compliance with CAR Regulations Waste management plan to be collated and implemented throughout the contract in accordance with all legal requirements and best practice 	 Site waste management plan (Appendix 13) Legal requirements and sources of best management practice contained in Appendices (2 and 3)
Noise and vibration disturbance to people and wildlife	 Vehicle engines to be switched off when not in use All vehicles to be properly maintained 	 Noise Management Plan (Appendix 23) Committed mitigation and conditions (Appendix 1)
Dust control and air pollution	 All soil storage areas to be watered to reduce risk of dust in times of dry weather All off-site construction access roads to be regularly swept and bowsed Long-term earth bunds to be seeded if advised by the environmental manager(s) All skips to be covered where there is risk of spread of dust Vehicle engines to be switched off when not in use All vehicles to be properly maintained 	 GEMP 13 All committed mitigation and conditions (included as (Appendix 1) Legal requirements and sources of best management practice (Appendices 2 and 3)
Agricultural impacts	 All site staff to avoid contact with livestock adjacent to the site All gates to be kept closed and any damaged fences, walls etc to be made good immediately to prevent livestock from straying Stockproof fencing to be erected prior to any works associated with crossing of a watercourse by a bridge or culvert, to prevent livestock gaining access to the works Contact Scottish Government Rural Directorate (SGRD) to identify any restrictions relating to the prevention of spread of diseases and/or movement of soil prior to work commencing in any location on site All restrictions/precautions identified by SGRD relating 	 All committed mitigation and conditions (included as (Appendix 1) Legal requirements and sources of best management practice (Appendices 2 and 3)

Potential Environmental Risk	Environmental Control Measures	Relevant Project CPH Guidance
	 to movement of soil and livestock to be adhered to All vehicles and footwear to be treated with SGRD approved disinfectant prior to taking entry to site if required by landowner / occupier 	
Impacts arising from lack of knowledge about environmental risks	 Environmental training/induction for all site staff prior to working on site Ongoing training and review of relevant procedures with site staff throughout the contract Ongoing monitoring of the effectiveness of mitigation and procedures and update as required Ongoing monitoring, review and update of environmental control measures in method statements 	 Committed mitigation and conditions (Appendix 1) Legal requirements and sources of best management practice (Appendices 2 and 3)
Wastage of non- renewable resources and valuable resources	 Control of water, electricity, paper consumption etc to minimum practicable by adequate management systems and publicity Plan all site activities to minimise use of non-renewable resources Vehicle engines to be switched off when not in use All vehicles to be properly maintained 	 Committed mitigation and conditions (Appendix 1) Legal requirements and sources of best management practice (Appendices 2 and 3)

2. Working Hours

Potential Environmental Risk	Environmental Control Measures	Relevant Project CPH Guidance
Unnecessary disturbance to the local community and wildlife if hours are exceeded	 Contractors to adhere to agreed working hours or apply for permissions from the local authority to work outwith agreed hours (NB all local authorities require adequate time to process out of hours working applications) 	Community Liaison Plan (Appendix 6)

3. Access and Traffic Management

Potential Environmental Risk	Environmental Control Measures	Relevant Project CPH Guidance
Environmental impacts from required public road improvements	 Undertake site visits to identify necessary mitigation Plan works carefully to reduce environmental risks Implement works taking account of required mitigation and environmental best practice Check all pre-construction works have been implemented before works begin 	 Table 12.1 in the ES All committed mitigation (Appendix 1) Legal requirements and sources of best management practice

Potential Environmental Risk	Environmental Control Measures	Relevant Project CPH Guidance
	 Apply for Road Construction Consents from relevant local authority as necessary for new bellmouths on public roads if not already implemented (see next column) 	(Appendices 2 and 3)
Traffic congestion on trunk and local roads Increased community severance	 Plan all construction activities taking account of relevant traffic management plans Liaise with local authority roads departments and other major commercial users as required, including liaison with roads departments regarding winter maintenance Construction traffic to adhere to programmed activities and agreed working hours No construction traffic to undertake works outwith the agreed activities and hours unless by prior agreement Construction traffic including logging trucks only to use permitted public roads (Appendix 22) Construction traffic including logging trucks to adhere to contract requirements relating to cyclist, pedestrians and equestrians and code of conduct for HGV drivers (including allowing queuing traffic to pass) All roads used for construction to be inspected prior to use, condition recorded with photographs, monitored during use, repaired as required and further photographs taken 	 Community Liaison Plan (Appendix 6) Traffic management plans (see Appendix 22) All committed mitigation and conditions (Appendix 1) Legal requirements and sources of best management practice (Appendices 2 and 3)
Deterioration of current condition of roads used for access for construction Dust from mud lying on the road affecting properties and habitats	 All agreed mitigation measures to control dust to be implemented Vehicle wheels and chassis to be regularly cleaned to prevent deposition of construction site material on the road Travel plan for construction personnel to be prepared in advance of construction beginning and issued to each worker on the project Plan to advise against parking in private accesses or driveways, lay-bys, or in car parks associated with local facilities Shared travel to be promoted where feasible 	

4. Site Clearance and Forestry Works

Potential Environmental Risk	Environmental Control Measures	Relevant Project CPH Guidance
Loss of biodiversity	 Site works to be designed outwith areas of greatest nature conservation value wherever practicable Request help from the project environmental manager(s) to identify areas of concern (if requirement indicated on site specific plans) Respect and avoid wildlife exclusion zones within the working corridor Plan restoration before clearance and follow relevant plans in Sections 10, 11, 12 and 15 	 Appendix C in the ES Special Study Area Plans (Appendix 11) Habitat Protection Plans (Appendix 10) Species Protection Plans (Appendix 12)

Potential Environmental Risk	Environmental Control Measures	Relevant Project CPH Guidance
	 Consider potential for pollution of watercourses from erosion and identify site specific mitigation measures Ensure all required pre-construction surveys, including breeding bird checks, have been completed before any clearance works start (check with the project environmental manager(s)) Minimise vegetation clearance (especially trees and shrubs and other important habitats) 	
Damage to habitats and species outside the site boundary	 Avoid incursion into adjacent habitats outwith the site boundary where possible. Design tracks to allow adequate width for all required vehicles including sufficient passing places for vehicles to pass and to turn Take account of any requirements agreed with landowners 	 Appendix C in ES (included in Appendix 1 in CPH) Special Study Area Plans (Appendix 11)
Disturbance to protected species	Follow all agreed mitigation for protected species and all licence conditions	 Committed Mitigation (Appendix 1) Species Protection Plans (Appendix 12) Special Study Area Plans (Appendix 11)
Disturbance to breeding birds	Follow all agreed mitigation for breeding birds	 Section 1.7.4 in Appendix C of ES and Addenda See also Appendix 1 of CPH Special Study Area Plans (Appendix 11) Species Protection Plan (Appendix 12)
Damage to trees and shrubs and other habitats from stored materials	Store soil and other materials in accordance with best practice and do not allow any increase to natural ground levels beneath tree canopies	See GEMP 10
Loss of boulders with moss and lichens	Boulders identified as needing removal to be stored within the site boundary and re-used in restoration works. Boulders to be stored in the same orientation as their natural location	
Unnecessary removal of trees within the site boundary	 Mark all important trees to be retained within the LOD's Refer to specific detailed Forestry Wayleave Design Plans 	 Landscape Plans and Forestry Wayleave Design Plans (Appendices 15 and 16)
Loss of seed bank and damage to soil structure	Store turfs/top soil separately and in accordance with best practice in areas agreed with the environmental manager(s) and landowners/occupiers	• GEMP 10
Damage to known and unidentified archaeological	 Request advice from Archaeological Clerk of Works for all sites shown on GIS and implement required measures including demarcation of sensitive areas, 	Section 1.10 in Appendix C of ES (included in Appendix 1

Potential Environmental Risk	Environmental Control Measures	Relevant Project CPH Guidance
resources	 establishment of buffer zones etc Keep Historic Scotland and the relevant Council Archaeologist informed of programme for on-site works where soils to be stripped through SPT Project Environmental Team Allow time for recording of any archaeological and historic features which are found 	in CPH) • GEMP 19 Archaeology and Cultural Heritage
Noise disturbance	 Use appropriate machines and ensure well maintained Programme timing of activities to avoid impact at nearby properties at night if permission to work at night is given Use temporary screens to mitigate noise from activities in close proximity to residential properties and other sensitive locations including schools, nursing homes, etc, as required Develop and maintain good relationships with the landowners/, occupiers and the local community and ensure the Community Liaison Officer remains involved throughout the project 	 Section 1.13 in Appendix C of ES (included in Appendix 1 in CPH) Community Liaison Plan (Appendix 6) Noise Management Plan (Appendix 23)
Air pollution	 Plan activities on site to ensure risk of pollution from wind blown dust reduced to minimum Employ mitigation measures to control dust Use appropriate plant and maintain all machines Do not undertake any unauthorised burning of materials on site Sheet loads which could give rise to dust during transit 	 GEMP 13 Section 1.14 in Appendix C of ES (included in Appendix 1 in CPH)
Land contamination	 Best practice measures to be implemented to ensure no pollution from vehicles, fuelling activities etc If suspected contaminated land encountered seek advice from project environmental manager(s) and employ best practice measures in testing, treatment/disposal and validation, and inform the relevant landowner/occupier 	 GEMP 11 Section 1.5.4 in Appendix C of ES (included in Appendix 1 in CPH)
Pollution of watercourses, drainage ditches etc	 Plan works in accordance with best practice set out in best practice guidance documents and drawing on experience from what has worked well on other sites Identify potential for risks from construction activities with potential to create silt and identify protection measures Identify potential for risks from other construction activities and identify protection measures Request help from the Project Environmental Team for all sensitive sites identified in site EMP's 	 Section 1.6 in Appendix C of ES (included as Appendix 1) GEMP 8 SEPA best practice guidance documents (Appendix 3)
Risk of flooding of surrounding habitats	 Plan works to maintain hydrology beneath construction areas or include ditches in design Design all works in accordance with best practice 	Access Track Construction Methodology (Appendix 18)
Disturbance to contaminated materials	 Follow all agreed mitigation for dealing with contamination Inform the landowner/occupier 	• GEMP 11 Section 1.5.4 in Appendix C of ES (included in Appendix 1 in CPH)
Fire risk	Establish emergency procedures for use in case of fire	 Appendix 14

Potential Environmental Risk	Environmental Control Measures	Relevant Project CPH Guidance
	 Brief staff on fire risk from cigarettes etc in dry conditions in heath and other habitats Train all site staff in use of fire beaters etc No fires to be lit on site unless agreed with the landowner/occupier, environmental manager and appropriate authorities in advance 	

5. Earthworks

Potential Environmental Risk	Environmental Control Measures	Relevant Project CPH Guidance
Damage to habitats adjacent to the works	 Avoid incursion into adjacent habitats outwith the site boundary Design tracks to allow adequate width for all required vehicles to complete necessary earthworks and include sufficient width for vehicles to pass and to turn 	 GEMP 4 Appendix C ES (included in Appendix 1 in CPH) Special Area Plans (see Appendix 11)
Risk of damage to soil structure	The majority of earthworks will be temporary and soil will be re-used in restoration works (unless contaminated)	• GEMP 10
Risk of undermining tree roots adjacent to the works	Consider potential for construction activities to affect tree roots in proximity to the works and either plan to avoid impacts or ask Technical Specialists for advice on how to mitigate the impacts	• GEMP 10
Unnecessary loss of trees within the site boundary	 Mark all important trees to be retained within the LOD's Refer to specific detailed Forestry Wayleave Design Plan's and landscape plans 	Appendices 15 and 16
Damage to archaeological resources	 Follow all agreed mitigation for dealing with known archaeology and archaeological finds 	 Section 1.10 in Appendix C of ES (included as Appendix 1) GEMP 19
Noise disturbance	Implement all general best practice and other agreed noise mitigation measures	 Section 1.13 in Appendix C of ES (included as Appendix 1) Community Liaison Plan (Appendix 22) Noise Management Plan (Appendix 26)
Dust at nearby properties and on habitats	Implement all agreed dust control mitigation measures and implement best practice	Section 1.14 in Appendix C of ES (included in Appendix 1 in CPH) GEMP 13

Potential Environmental Risk	Environmental Control Measures	Relevant Project CPH Guidance
Land contamination	 Follow all agreed mitigation for dealing with contamination 	 Section 1.5.4 in Appendix C of ES (included in Appendix 1 in CPH) GEMP 11
Pollution of watercourses with silt, fuel or oil	 Plan works in accordance with best practice set out in best practice guidance documents and drawing on experience from what has worked well on other sites Identify potential for risks from construction activities with potential to create silt and identify protection measures Identify potential for risks from other construction activities and identify protection measures Request help from the project environmental manager(s) for all sensitive sites identified in EMPs 	 GEMPs 8 and 12 Section 1.6 in Appendix C of ES (included in Appendix 1 in CPH) SEPA best practice guidance documents (see Appendix 3)
Disturbance of contaminated materials	 Follow all agreed mitigation for dealing with contamination 	 GEMP 11 Section 1.5.4 in Appendix C of ES (included in Appendix 1 in CPH)
Risk of flooding of surrounding habitats	 Plan works to maintain hydrology beneath construction areas or include ditches in design Design all works in accordance with best practice 	 Access Track Construction Methodology (ATCM) (Appendix 18) Committed mitigation (Appendix 1)
Fire risk	 Establish emergency procedures for use in case of fire Brief staff on fire risk from cigarettes etc in dry conditions in heath and other habitats 	Appendix 15
Inadequate visual integration of the site works with the surrounding landscape	 Earthworks designs to be informed by inputs from the Landscape Architect and advice contained in appropriate Landscape Plans Earthwork cut and fill slopes to be rounded at the top and bottom of the slopes and vertical profile varied where appropriate (as defined by the Landscape Architect) 	 Section 8 in CPH Appendix 15 All committed mitigation and conditions (Appendix 1) Legal requirements and sources of best management practice (Appendices 2 and 3)
Unstable slopes which could lead to material being deposited on adjacent habitats or in nearby watercourses	 All earthworks to be planned in accordance with best engineering practices Cut vegetation turfs from stripped areas of the site to be placed on new earthworks in proximity to the location from which they were removed Consider use of seeding (discuss first with SNH) and /or geotextiles where suitable turfs are not available Temporary stockpiles should be bunded to prevent potential silty run-off 	• GEMP 10 • GEMP 8
Risks to properties or travellers from falling rocks, peat slippages or other	 All on-site activities to be planned taking account of the risk of peat slippage Ongoing review of the success of design and mitigation measures in all areas of the site 	 ATCM (Appendix 16) GEMP 6 GEMP 6

Potential Environmental Risk	Environmental Control Measures	Relevant Project CPH Guidance
debris		

6. Siting depots tower compounds and other storage areas

Potential Environmental Risk	Environmental Control Measures	Relevant Project CPH Guidance
Loss of or disturbance to features of ecological importance	 Site locations to avoid features of ecological importance-avoid identified important habitat, mammal and bird areas 	 HSPPs (Appendix 10) SSAPs (Appendix 11) SPPs (Appendix 12)
Loss of or disturbance to features of archaeological significance	Site location to avoid features of archaeological importance	• GEMP 19
Causing nuisance or damage to landowner interests	 Ensure any landowner requirements for locations and timing of works are taken into account 	Committed mitigation Appendix C of ES (included in Appendix 1 of CPH)
Visual intrusion at nearby properties	Consider visual effects of infrastructure at residential receptors and site to take advantage of natural screening wherever possible	 Section 8 of CPH Landscape Design Plans (Appendix 15) Community Liaison Scheme (Appendix 6)
Noise at nearby properties	 Consider whether noise could be an issue at chosen site and if necessary use temporary screening (bunds; fencing etc) 	 Noise Management Plan (Appendix 23) Community Liaison Scheme (Appendix 6)
Dust at nearby properties or on habitats	 Ensure any dry soils are dampened as necessary to reduce dust Keep access roads clean 	 GEMP 13 Community Liaison Scheme (Appendix 6)
Traffic congestion on access roads	 Plan access when choosing sites and agree proposals with relevant local authority Avoid use of lay-bys on key tourist routes and at peak tourist times 	Traffic Management Plans (Appendix 22)
Effects of run-off from hard standing on local hydrology and habitats	 Plan works to maintain important hydrological patterns and ensure run-off is successfully attenuated and treated prior to discharge Consider need for and design where necessary cut-off ditches surrounding establishment areas and seek advice from SEPA on design and where water from the drains should discharge to 	 GEMP 8 Private Water Supplies (Appendix 20) Emergency Procedures (Appendix 14)
Foul drainage	In locations where there is no mains drainage use self contained chemical toilets and ensure no discharge to land or water	 SEMP (Section 4) Waste Management Plan (Appendix 13)

7. Site Restoration

Potential Environmental Risk	Environmental Control Measures	Relevant Project CPH Guidance
Damage to habitats	 Best practice to be followed in restoration of all sites including that provided by SNH and the Forestry Commission All restoration to take account of any identified important habitat and species Opportunities to deliver local biodiversity enhancements to be identified by the Ecological Clerk of Works and implemented at suitable sites identified in the site plans Natural regeneration of habitats to be promoted by design measures 	 HSPPs (Appendix 10) Best practice guidance (Appendix 3) Guidance on Restoration (Appendix 17)
Damage to archaeological resources	 All restoration to take account of any identified important archaeological sites Any required replanting and /or reseeding to be undertaken at appropriate times of the year and with the agreement of landowners and the Landscape Architect 	• GEMP 19
Visual intrusion/ inadequate visual integration of the site works with the surrounding landscape	 All restoration to take account of any landowner agreements Restoration plans included in the Landscape Design Plan for generic habitat types and specific plans made for individual sites to be followed where a requirement for specific measures has been identified by the Landscape Architect Restoration works to be designed to ensure successful integration of the site with surrounding land uses and habitats The ground should be re-graded to fit with natural contours 	 Best practice guidance (Appendix 3) Landscape Design Plans (Appendix 15) Guidance on Restoration (Appendix 17)
Erosion/loss of soil arisings	All removed soils and peat to be reused for restoration to be stored carefully and replaced on site in accordance with restoration programme	• GEMP 10
Drainage impacts	All drainage to be made good	Committed mitigation Appendix C of ES (included in Appendix 1 in CPH)
Severance/ disturbance to public access routes	• Restoration plans in areas used for public access to take account of access requirements and ensure that new planting does not interfere with access and also delivers visual benefits where possible	 Landscape Design Plans (Appendix 15)

GENERIC ENVIRONMENTAL MANAGEMENT PLAN 2: TOWER ERECTION

Requirement	Check	Action	Reference Documents
Identify appropriate site plans for specific tower	 Identify all environmental constraints to be taken into account including any landowner/occupier commitments Check all required preconstruction surveys have been undertaken Check whether a specialist needs to be involved in setting out the site 	 Check relevant site constraints plan to identify all environmental constraints Check what specific requirements have been identified for the tower location 	 Zoned maps (Appendix 10) Relevant HSPPs (Appendix 10) SAPPs (Appendix 11) SPPs (Appendix 12)
Check whether the tower is located within the catchment of an SPA or SAC	Ground conditions, vegetation and topography (particularly in the areas between the tower and the watercourse) and identify localised environmental conditions and potential sensitivities	 Check site location within zoned maps in Appendix 10 to check whether in an SAC See specific tower construction mitigation in SAC catchments included in Appendix 11 and Section 6 Plan site activities taking account of these specific mitigation measures and all relevant best practice guidance including CIRIA C648 (see Appendix 3) 	 Zoned maps (Appendix 10) Relevant SAPP (Appendix 11)
Site visit	 Identify site access. Liaise with SPT wayleave staff for updates regarding landowners / occupiers Contact landowner / occupier to agree access requirements Identify site sensitivities Identify closest properties Identify whether any piling is required Identify the preferred shape for the construction area within the LOD taking account of environmental constraints Identify whether any 	 Take advice from the environmental manager(s) and specialists as appropriate If piling is required assess potential for disturbance and define necessary detailed mitigation measures Identify appropriate shape for the working area 	• Zoned maps (Appendix 10)

Requirement	Check	Action	Reference Documents
	specific temporary fencing or marking are required to protect environmental features or to safeguard livestock		
Plan detailed works within the tower LOD to avoid environmental impact wherever possible and to meet all requirements of the contract including for soil storage; buffer zones to watercourses; etc	Plan works within the LOD to reduce environmental impact wherever practicable	 Use the advice from the environmental manager(s) and environmental specialists in planning the detailed works Detail mitigation measures for the specific location Plan to deliver necessary fencing or cones to site with minimum number of journeys 	• GEMPs 1, 8, 10, 19
Fence the work site	Check the fencing is placed in the work area location identified on site	 Comply with identified site requirements Ensure all necessary liaisons with landowner/land manager completed in advance of work Fence site work area carefully and reduce intrusion into adjacent habitats to minimum necessary for the job 	• GEMP 1
Define pollution mitigation measures	Consider what pollution prevention measures are required	 Check relevant EMPs and ES information Consider risks and design further specific measures if required Agree measures with SEPA 	 GEMPs 1, 8, 12, 13 Appendix 24
Form excavations	 Consider type and quantity of materials to be removed Consider whether there is any known risk of encountering contaminated land 	 Store removed materials in accordance with best practice Store topsoil and subsoil separately within the work area Top soil bunds not to exceed 2m in height If suspected contaminated land is encountered, seek advice from environmental manager(s) or specialists 	• GEMPs 10, 11 and 12

Deministry		A - 1	Defenses
Requirement	Спеск	Action	Documents
		 Remove any contaminated land in accordance with best practice to a licensed facility as required Ensure vehicles do not track over stored soils 	
Erect tower legs and concrete foundations	 Required mitigation measures to reduce risks from concrete spillage to the environment Appropriate methods for delivery of concrete to tower location Location for wash out of concrete delivery vehicle in agreement with landowner / occupier 	 Undertake all works in accordance with best practice and implement all agreed mitigation (Appendices 1 and 3) Ensure that all concrete wash out is disposed of in accordance with the waste management plan and legal and best practice 	 GEMP 8 Appendix 13
Replace materials removed from excavations in the same order that soil layers were removed	 Ensure materials don't spill out of the site working area when removing formwork 	 Undertake all works in accordance with best practice and implement all agreed mitigation 	 Appendix 1 GEMP 10
Erect tower	 Identify how steel work should be delivered to site Check site identified for laydown Check whether the location is suitable for a crane to be used If not, arrange for use of an erection derrick and winch and arrange to be flown to site by the most appropriate means 	Undertake work in accordance with all identified and required mitigation and best practice	GEMP 1 Appendix 1
Conductor stringing	 Identify required equipment to be taken to site Specify designated storage areas Check access routes for vehicles to site and any particular site restrictions (eg in sensitive locations) Check appropriate risk assessments (including environmental risks) have been completed before using helicopters Identify any obstacles (roads, railways and lower voltage lines) and sensitive features 	 Follow necessary procedures identified in the community liaison plan All affected landowners to be contacted in advance and notified of proposed flying times and dates by SPT Wayleave Officers General notices to be placed in key locations and activities advertised in local newspapers Comply with the Contractor's Method Statement for protection of obstacles during 	Appendix 6

Deministry		A - (*	Defenses
Requirement	Спеск	Action	Reference
	 (watercourses, ecological, archaeological, hedgerows etc) and design protective scaffolding in accordance with the Contractor's Method Statement Ensure all necessary consultations/required discussions have been completed 	stringing	Documents
Ensure that the site is kept tidy at all times and managed to reduce the risks of pollution (noise, water, dust etc) to the minimum necessary for safe implementation of the works	 Check that all required mitigation is being implemented 	 Environmental manager(s) and all site staff to take a proactive approach to site environmental management Regular checks of the location to be made and all required mitigation implemented 	 GEMPs 1, 8, 10, 12, 13, 14 Appendices 13 and 23
Restore the site at the end of construction removing all protective matting, plant, equipment, wastes and surplus materials and replacing peat and soils carefully in the order in which they were removed and stored	Check that all required mitigation and any specifics of the restoration plan are being implemented	 Follow identified restoration plans for tower location which should include any agreements with landowners Check whether any seeding required 	 GEMPs 1, 6, 10 Appendices 10 and 17

GENERIC ENVIRONMENTAL MANAGEMENT PLAN 3: TOWER REMOVAL

Requirement	Check	Action	Reference Documents
Identify appropriate access to tower to be removed	 Whether an existing access can be used Any requirement for extending track Condition of ground – can matting be used or is stone or geotextile required? Whether the tower is in the near vicinity of a designated site 	 Use Site Specific Information Plans to identify requirements Undertake site visit to check specific site needs 	 Zoned Maps (Appendix 10) SAPPs (Appendix 11) HSPPs (Appendix 10)
De-stringing	 Identify any obstacles 	 Identify requirements for 	 Zoned Maps

Requirement	Check	Action	Reference Documents
	 (roads, railways and lower voltage lines) and sensitive features (watercourses, ecological, archaeological, hedgerows etc) and design protective scaffolding in accordance with the Contractor's Method Statement All necessary surveys and licensing requirements in place 	 specific locations including all identified special measures and implement Check environmental sensitivities before starting works Check all areas where there is risk of disturbance to protected species Take advice from environmental management team to ensure environmental interests are safeguarded Comply with the Contractor's Method Statement for protection of obstacles during stringing 	(Appendix 10) • SAPPs (Appendix 11) • HSPPs (Appendix 10)
Dismantling towers	 Preferred location for felling Whether tower requires to be felled onto straw bales Whether tower requires to be unbolted and lowered to the ground in sections using a crane or derrick Whether tower sections should be placed in a skip or flown from site 	 Identify requirements for specific location including all identified special measures and implement Check all waste removed from site in accordance with the waste management plan 	 Zoned Maps (Appendix 10) GEMPs 1 and 8 Appendix 13
Removal of foundations	 Requirements for removal of foundations Any needs for dewatering activities That waste management has been planned 	 Agree any pollution control measures with SEPA Remove concrete foundations to 1m depth Back fill excavations Remove surplus materials form site in accordance with the waste management plan 	 Zoned Maps (Appendix 10) GEMPs 1 and 8 Appendix 13
Ensure that the site is kept tidy at all times and managed to reduce the risks of pollution (noise, water, dust etc) to the minimum necessary for safe implementation of the works	Check that all required mitigation is being implemented	 Environmental staff and all site staff to take a proactive approach to site environmental management Regular checks of the location to be made and all required mitigation implemented 	 GEMPs 1, 8, 13 Appendix 23
Restore the tower site and access to it removing all protective matting,	Required mitigation and any specifics of the restoration plan	 Follow identified restoration plans for tower location Check whether any 	 GEMPs 6 and 10 Appendices 15 and 17

Requirement	Check	Action	Reference Documents
plant, equipment, wastes and surplus materials and replacing peat and soils carefully		seeding required	

GENERIC ENVIRONMENTAL MANAGEMENT PLAN 4: CONSTRUCTION OF PERMANENT AND TEMPORARY ACCESSES

Requirement	Check	Action	Reference
Identify whether the track will be permanent or temporary or an upgrade of an existing track	 If permanent that the necessary permissions are in place including any required planning permissions All required pre-construction surveys are completed What specific mitigation measures are necessary Where the LODs for the tracks are 	 Identify necessary measures for the individual track – check Site Specific Information Plans and relevant environmental management plans Plan works to take account of these measures Use the access strategy to inform detailed design Use spurs from existing tracks wherever possible Use appropriate guidance 	 Zoned Maps (Appendix 10) SAPPs (Appendix 11) HSPPs (Appendix 10) Appendix 18
Avoid construction of new tracks wherever possible	 Check ground conditions Consider landowner requirements Where the LOD's for the tracks are 	 Confirm track type- use access strategy Use overlay or geotextile or geogrid in preference to stone overlay where possible Avoid new earthworks wherever possible 	Appendix 18
Identify appropriate stone for overlay	Proposed materials will not cause unnecessary pollution including silt	 Confirm proposed stone for any location with the environmental manager 	
Detail the design for the track	 Agreed access routes Appropriate design for that location Requirements for water crossings All CAR requirements in place before construction begins Whether peat can be avoided All necessary consultations complete Any restrictions in terms of timing of works (eg bird breeding etc) Any potential impacts to rights of way 	 Consult SEPA on proposed drainage measures Undertake necessary liaison with appropriate land owners/managers and roads authorities Use access track constraints protocol (See Appendix 16) to help design track Design new tracks to agreed design principles as set out in the access strategy and in the ATCM and in accordance with best practice 	 Appendix 18 GEMPs 1, 7, 8

Requirement	Check	Action	Reference
		 Ensure track is designed to reduce its environmental impact Design adequate drainage to ensure hydrology of the area is not affected significantly Plan works to reduce disturbance to wildlife Plan works to encourage stable slopes and reduce risks of slippages 	Documents
Construction of the track	 Appropriate vehicles to use for construction Junctions with public roads have approved bellmouth detail 	 Comply with any timing restrictions for the works Remove vegetation carefully and topsoil and subsoil layers and store in accordance with best practice Use turfs on side slopes of tracks and ditches to reduce instabilities and safeguard the seedbank Apply for road construction consents from relevant local authority as necessary for new bellmouths on public roads 	 HSPPs (Appendix 10) Appendix 18 GEMPs 1, 6, 7, 8 and 10
Impacts of track are no greater than assessed in ES	Monitor effectiveness of drainage measures	 Ensure culverts and ditches are not blocked Monitor quality of run- off and redesign drainage attenuation measures if required 	 Appendix 18 GEMPs 7 and 8

GENERIC ENVIRONMENTAL MANAGEMENT PLAN 5: CONSTRUCTION OF SITE COMPOUNDS

Requirement	Check	Action	Reference Documents
Identify suitable sites for temporary construction compounds in proximity to the line	 Environmental constraints including closest properties No site compounds are proposed in the vicinity of Sheriffmuir/Cocksburn/ Dumyat That no site compounds are planned to be located within sensitive ecological areas including designated nature conservation sites (e.g. Natura Sites and SSSI's) If proposed in IHAs, IBAs or IMAs as identified in the ES and Addenda check whether proposals could be significant in terms of the interest of the area That site compounds and storage areas are kept to the minimum necessary for safe implementation of the works, especially in sensitive locations 	 Identify suitable sites for construction compounds using the information in the geodatabase Liaise with SEPA Do not pursue any location where significant adverse environmental effects could result or where noise etc could be a nuisance Check final consent conditions before choosing locations (see Appendix 1) 	 Zoned Maps (Appendix 10) SAPPs (Appendix 11) HSPPs (Appendix 10) Appendix 1
Agree proposed sites with SPT	 Need for any specific planning permissions 	 Agree locations with relevant landowners/occupiers Liaise with relevant local authority Obtain all necessary permissions 	Appendix 1
Consider access to chosen site	Whether this is possible from a consented access track or from an alternative existing track	 Liaise with relevant landowners/occupiers Liaise with relevant local authority Obtain all necessary permissions for any required additional track 	Appendices 1 and 18
Design compound	 Consider required earthworks Consider what surfacing/bunding etc is required What drainage is 	 Ensure environmental manager(s) is involved in planning the site Liaise with necessary consultees which could include the relevant 	 Appendix 1 GEMPs 1, 5, 8 and 10

Requirement	Check	Action	Reference
	 required and how run off will be managed and discharged Consider safety requirements including fencing and entrance and exits How materials can best be stored to avoid risk to the environment How buildings and plant can be sited to avoid unnecessary visual intrusion Whether the works proposed could add to flood risk 	 local authority, SEPA and SNH Plan works carefully including necessary cut off ditches, surfacing, entrance and exit, fencing, siting of buildings, storage areas and plant etc 	Documents
Establish compound	All site specific mitigation measures are identified for implementation	 Take photographs prior to work beginning to inform restoration plan Identify and implement all required specific mitigation measures Inform landowner/occupier when work is to begin Store soils and seed bed carefully and re-use in landscaping compound 	 Appendix 1 GEMPs 1, 5 and 10 Appendices 15 and 17
Agree and implement a site waste management plan and oil and fuel storage plan	 How wastes can best be streamed and managed on site Check how oils and fuels can be best stored safely on site 	 Plan site to allow efficient and safe management of all wastes, oils and fuels Liaise with SEPA 	 GEMPs 1 and 12 Appendix 13
Careful siting of other potentially polluting materials such as cement	 Is a batching plant planned for the site Where a concrete wash out area could be safely established 	Liaise with SEPA and agree locations with landowners/occupiers	GEMPs 1 and 8
Where there is no mains drainage self contained chemical toilets will be required with no discharge to land or watercourses	 Check available services and utilities 	 Consult necessary bodies and plan works to meet all legal requirements 	GEMPs 1 and 8
Maintain the site in a tidy condition	All site aware of requirement	Establish routine practices to ensure site is tidy and all potential pollutants are carefully managed in accordance with legal and best practice	GEMP 1Appendix 13
Restore site at end of construction	All materials removed from site	Ensure any polluted materials (eg cement wash out areas) are	GEMPs 1 and 10 Appendices 13 and 17

Image: Second	Requirement	Check	Action	Reference
removed and disposed of at a suitaby licensed facility Ensure all buildings, fencing etc are removed and not buried on site • Re-use all stored soils in restoration • Ensure site is restored to landowner/occupier and SPT satisfaction				Documents
	Requirement	Check	Action removed and disposed of at a suitably licensed facility • Ensure all buildings, fencing etc are removed and not buried on site • Re-use all stored soils in restoration • Ensure site is restored to landowner/occupier and SPT satisfaction	Reference Documents

GENERIC ENVIRONMENTAL MANAGEMENT PLAN 6: PEAT MANAGEMENT

Peat habitat may be encountered on certain sections of the route and construction of access tracks and towers will not necessarily be able to avoid all areas of peat. Guidance in this plan should be followed in areas where peat is encountered and cannot be avoided.

Requirement	Check	Action	Reference Documents
Avoid areas of peat wherever possible	Ensure in avoiding peat other environmental constraints are not encountered	 Check relevant site constraints plans to identify areas of peat 	 Zoned maps (Appendix 10) HSPP 1 (Appendix 10)
Maintain local hydrological conditions necessary for peat formation, maintenance and regeneration	 Sensitivities of adjacent habitats and need to maintain hydrological pathways intact The type of peatland which will be affected and its particular hydrological regime (raised bog maintained predominantly by rain fall; blanket bog by rainfall and lateral groundwater flow etc) Check for variations in peat character along track lines 	 Choose track type and detailed tower location to suit local peat conditions (depth and type) – see Access Track Construction Methodology (ATCM) in Appendix 18 Define detailed mitigation to maintain peatland hydrology Consider how site will be restored on completion at early stage (see Section 9) Request help from project team ecological/hydrological experts as required Choose appropriate reinforcement techniques for tracks to suit local conditions Define a water management strategy for all areas where peat is replaced on restoration following completion of construction works (see Section 3.3 of the ATCM, Appendix 18) 	 Appendix 17 GEMP 8 Appendix 18 Denny Substation Peat Management Plan Denny Substation CPH
Ensure large loads (embankments, reinforcement stone, heavy vehicles and materials etc) do not compress peat and create a	 Check vulnerability of habitats on either side of track/tower site to changes in water content of peat Check environmental constraints to ensure that by designing track 	 Determine load bearing capacity of area (e.g. assess the California Bearing Ratio (CBR)) Design track to avoid interruption of adequate water flow to maintain habitats 	Appendix 18

Requirement	Check	Action	Reference Documents
barrier to water movement which could cause pooling at one side and drying out at the other or cause peat to slump by displacement	to spread load other impacts do not result	 Design track/site to spread load over as wide an area as possible in land made available Consider the potential for peat slump and design to control risk Consider implications of the impact of the design for restoration (see Appendix 18) Use floating tracks on 	Appendix 18
through top layers of peat into softer peat below unless local landform and peat character requires earthworks for safety and stability reasons	 Orion on on only in original of peat When planning works allow time for slow loading of peat to reduce likelihood of shear failure 	 Design floating tracks in accordance with Section 3.5.2 of the ATCM, Appendix 16 Minimise cut and fill where local landform and peat character allow Use simple in-situ field tests to give indication of shear strengths (e.g. shear vane testing or using a cone penetrometer) Control loading phases to allow gradual compression and consolidation of peat and avoid shear overstress (not more than 150mm depth of stone laid per day) Allow for large initial settlement in short settlement period (site staff to let road settle initially and build up low spots) Use light weight fill or geosynthetic materials on tracks to reduce overloading of peat and reduce risk of shear failure Monitor settlement effects on-site before construction traffic uses tracks and prepared areas Consider using steeper gradients (if feasible) on small sections to reduce need for eatthworks 	 Denny Substation Peat Management Plan Denny Substation CPH

Requirement	Check	Action	Reference
Consider stability issues	Check gradients in field	 Avoid steep slopes Avoid saturated peatland areas where possible If unavoidable use reinforcement techniques (if site specific ground investigations suggest these are acceptable) in discussion and agreement with the environmental manager(s) 	 Documents Appendix 18 Denny Substation Peat Management Plan Denny Substation CPH
Carefully design all access tracks including drainage	 Check whether track will be permanent or temporary Check vehicle types which will use the track in any location Consider drainage requirements of track and also of channels through peat at early stage Source fill locally where possible to reduce transportation needs and to ensure stone similar to that on site Check any constraints in fill type (see site specific plans) Define line of track to avoid areas with steep gradients Check depths of peat in any area and where variable use geosynthetics as separation and filtration layer or as a reinforcement layer between fill materials and the top of the peatland vegetation (to help retain structural integrity) 	 Refer to best practice guidance for permanent and temporary tracks (see ATCM) Design track to meet vehicle requirements (maximum gradient, turning circles etc and therefore route) Ensure maximum gradient is 8-10% (1 in 12 to 1 in 10) Short lengths of track (less than 200m) may be graded to 12.5% (1 in 8) provided average gradient of track does not exceed 1 in 10 Ensure minimum gradient is not less than 2.5% (1 in 40) to permit efficient drainage of surface Design camber and associated ditches to meet best practice (see Section 3.6.3 of ATCM, Appendix 16) Design track camber to aid effective drainage (between 4.5% (1 in 22) to 8% (1 in 12.5) When crossing hillsides use crossfall of 4.5% to 8% towards the uphill side of the track Design tracks to avoid use of temporary retaining structures such as gabion baskets (ie seek not to use floating tracks across sloping ground where retention would be 	 Appendix 18 Denny Substation Peat Management Plan Denny Substation CPH

Requirement	Check	Action	Reference
			Documents
Requirement	Check	 Action required to support the downslope side) Use cross drains to intercept runoff in areas with long straight gradients All side slopes to be cut at 33% (1 in 3). In steeper sensitive areas a steeper batter should be constructed if possible to reduce landtake Design tracks to practical minimum running width to reduce scarring and area requiring reinstatement Design track with adequate passing places to avoid unnecessary intrusion into or disturbance of adjacent habitats (see Section 3.4.6 of ATCM, Appendix 16). In sensitive areas install the minimum number of passing places that are reasonable for health and safety requirements, to minimise impacts. Wherever possible passing places should be located to minimise environmental impacts (visual, ecological and archaeological etc) Design floating tracks to ensure that drainage through or under the track will be maintained to prevent the track acting as a dam Use geosynthetics to better spread the load from granular fill Minimise cut and fill Use locally sourced fill where possible Choose fill type to suit gradient (smoother, rounder materials on lower gradients and angular material such 	Reference Documents
		steeper surfaces to	
		provide better grip-see	

Requirement	Check	Action	Reference Documents
		Section 3.4.2 of ATCM, Appendix 16) Discuss works with landowner/occupier	
Store stripped materials carefully	 Seek advice from Ecological Clerk of Works 	 Follow guidance in EMP Agree storage areas with landowner/occupier 	 GEMP 10 Denny Substation Peat Management Plan Denny Substation CPH
Use of floating tracks on peat	Define peat level	Use ATCM to define appropriate access track	 Denny Substation Peat Management Plan Denny Substation CPH
Design tracks on deep peat to avoid bulging	Define peat areas	 Use ATCM to define appropriate access track Try and avoid areas of deep peat (>1m) 	 Denny Substation Peat Management Plan Denny Substation CPH
Choose appropriate geosynthetic materials for tracks and for use at tower sites	Consider potential for material to rip, puncture or burst under local stress concentrations caused by irregularities in the fill	Use geosynthetics of sufficient strength (non woven geotextiles or geomembranes will be better suited to track construction on soft ground than geotextiles)	 Denny Substation Peat Management Plan Denny Substation CPH
Use geosynthetics appropriately	 Define fill thickness required using guidance for CBR [see Table 3.3 of ATCM] 	 Place geosynthetics in accordance with ATCM (Appendix 18) 	 Appendix 18 Denny Substation Peat Management Plan Denny Substation CPH
Consider appropriate restoration techniques for peat habitats	Check restoration considered at early stage to guide design	 Define probable restoration techniques for each site before construction begins All drains which are no longer required as tracks are removed should be blocked off Consider using local plant material such as mulched heather in peatland restoration to reduce loss of water by evaporation. Do not use straw which could introduce alien seed Seek advice from the Technical Specialists as required Restore disturbed areas to match adjacent vegetation Use natural restoration 	 Appendix 17 Denny Substation Peat Management Plan Denny Substation CPH

Requirement	Check	Action	Reference Documents
		techniques using stripped soils and natural regeneration from replaced seed bank unless advised otherwise by the SHETL Environmental Management Team • Monitor success of restoration	

GENERIC ENVIRONMENTAL MANAGEMENT PLAN 7: WATERCOURSE CROSSINGS

Introduction

Watercourse crossings (bridges and culverts) will be required in some locations along the route corridor. Construction of these structures presents potential risks to the environment. These include:

- interference with fish migration and spawning, mammal movement, rare plants and their habitats and with riparian and linear wildlife corridors,
- loss of aquatic and riparian habitat,
- alteration of the flow regime,
- harmful discharges during construction and operation, and
- interference with angling or obstruction of angler's movement along a channel.

These impacts can be minimised by applying sound design principles to the structures and by following best working practices during their construction. The SEPA Good Practice Guide (No 24) Construction of River Crossings, PPG5 Works in, near or liable to affect Watercourses and CIRIA C648 Control of Water Pollution from Linear Construction Projects – Technical Guidance should be referred to, and adhered with, in planning works.

All watercourse crossings will require some level of authorisation under the Controlled Activities Regulations (CAR) 2010 and conditions associated with each authorisation should be strictly followed.

A Watercourse Crossing Schedule has been collated that includes all relevant watercourse crossings (see Appendix 23).

Management Plan

General

- Plan all works in accordance with best practice.
- Consult SEPA on proposals.
- Seek to avoid watercourse engineering works wherever possible.
- Where this is not possible seek to use existing crossings, upgrading as required.
- Only build new crossings where there is no other feasible alternative (see ATCM in Appendix 18).
- Ensure all necessary authorisations under the Controlled Activities Regulations (CAR) are in place.
- Comply with all CAR authorisation conditions and relevant General Binding Rules (e.g. GBR 6).
- Ask the environmental manager(s) for advice in planning water crossings and adhere to approved plans/ crossing locations.
- Ensure all required pre-construction surveys have been completed before starting works.
- Take account of activities of other users of the water environment in planning works.

Temporary watercourse crossings

These should:

- Not impede fish passage through the system.
- Have access constructed of suitable material and in a manner that will not give rise to rutting, ponding and silt run-off.
- Have silt laden run-off directed to silt lagoons.
- Increase silt control measures with increasing gradient.
- Carefully store any disturbed materials.

Fording of watercourses

- Should be avoided if at all possible.
- Should only be considered to gain access to the opposite bank, where no alternative option exists and under approval of SEPA.
- If required, access should be restricted to one crossing point.
- Where feasible, traffic movements should be limited.
- In-stream and bank-side preparation and rehabilitation will be required.

In-stream works

- Should be kept to an absolute minimum.
- Planned in accordance with SEPA best practice and agreed with SEPA.
- All construction machinery operating in-stream should be mechanically sound to avoid leaks of oils, hydraulic fluid. Where practicable plant for in stream works should contained with bio-fuel and biodegradable hydraulic oils.
- Machinery should be steam cleaned and checked prior to commencement of in-stream works.
- All in-stream works must be carried out in accordance with an approved method statement.
- Check if there are any timing restrictions to works because of protected species (eg spawning salmonids, otter, water vole etc) or landowner commitments.
- Permanent diversions of watercourses should be avoided wherever possible and only undertaken after written agreement and with SEPA and appropriate consenting in place.
- If required, they should be designed to replicate the existing natural watercourse including meanders, riparian vegetation and other features where appropriate following best practice.
- Where stock has access to the works fencing may be necessary in order to allow the regeneration of native riparian and aquatic marginal vegetation.

GENERIC ENVIRONMENTAL MANAGEMENT PLAN 8: WORKING IN OR NEAR WATERCOURSES

Introduction

Construction activities in or near water have the potential to cause serious pollution or impact on the bed and banks of a watercourse and on the quality and quantity of the water. Most pollution incidents are avoidable. With careful planning the risk of site work causing pollution can be reduced. Many measures needed to prevent pollution cost very little, especially if they are included at the planning stage of any activity.

Major causes of environmental harm associated with working in or near watercourses include:

- silt e.g. disturbance of river bed or bank, dewatering and pumping of excavations, run-off from exposed ground, plant washing, roads and river crossings.
- cement and concrete which is very alkaline and corrosive and can cause serious pollution
- chemicals and solvents oil storage, refuelling, vehicle and plant washing, trade materials etc.
- bridge cleaning debris e.g.dust, debris & wastewater.
- herbicides e.g. aerial application.
- waste materials (including special waste) e.g. oily wastes, spent acids and solvents.

Good practice includes:

- Ensuring comprehensive risk assessments have been undertaken and subsequent risk management plans are implemented.
- Use of decking/barges below the works (acting as a bund in case of spillage).
- Use of primary and secondary booms to contain pollutants in the event of substances entering the water.
- Erecting dust screens on bridges if any major works are required.

Relevant Legislation

Most activities with the potential for affecting watercourses or groundwater will require an authorisation under the Water Environment (Controlled Activities) (Scotland) Regulations 2010 (CAR) Any abstractions of water over 50m³ per day used for construction will require authorisation from SEPA.

Management Plan

General

- Identify all activities that will be undertaken in or near watercourses.
- Communicate risks associated with working in or near watercourses to all personnel.
- Identify all activities that will require an authorisation under CAR and ensure authorisations are obtained. Comply with all conditions or General Binding Rules.
- Undertake necessary risk assessments in advance of activities.
- Obtain all necessary authorisations.
- Communicate method statements to all relevant personnel through activity plans.

- Monitor the success of all measures and re-design if necessary.
- Give staff regular tool box talks about the risks of working near water and the potential to cause pollution.
- Undertake regular checks on site to ensure that pollution prevention measures are in place and are successful.
- Be vigilant about any works with cement near water.
- Store cement and other pollutants in a secure location.
- Ensure plant and vehicles are not washed within 30m of a watercourse or waterbody.
- Ensure that oil and fuels are used and stored in accordance with best practice (see GEMP 12).

Pre-Works Checks

Requirement	Check	Action	Reference Documents
No fording of watercourses and other waterbodies by vehicles and plant permitted unless agreed in advance and permitted by SEPA	 For any location where fording could be required Check whether this could be avoided 	 Discuss any requirement for fording with SEPA and obtain all necessary licences 	 Zoned Maps (Appendix10) GEMP 1
Any field drains affected by construction works to be reinstated	 Locations of field drains which could be at risk Contingency plan in place if field drain broken and could lead to run-off entering the burn 	 Liaise with landowners/occupiers Map locations of drains Ensure site staff know what to do in case of emergency and can implement contingency plan to prevent pollution Reinstate any drains disturbed by the works to the satisfaction of SPT and affected parties 	 GEMP 1 Appendix 14
Works to culverts and bridges over watercourses to be discussed and agreed with SEPA and all necessary CAR licences obtained	What works to culverts and bridges over water courses are required	 Identify what works to culverts and bridges over watercourses are required Identify if additional passage of stream flows is necessary for works to be undertaken Identify locations of underdrains or subdrains on any cut slopes to control flows Refer to SEPA's Culvert Design Guidance in designing works Design works in accordance with relevant guidance including Scottish Government draft guidance 	Appendices 2 and 3

Requirement	Check	Action	Reference Documents
		 Compile a method statement and work plan for each separate operation to a culvert or bridge Agree each operation with SEPA and seek necessary licences 	
Plan works in or near a water body (any land feature that holds water: e.g. loch, pond, river, burn etc.) carefully including measures to protect against pollution, silting and erosion in accordance with recognised best practice	What works in or near a water body are required	 Identify all required works in or near a water body Plan timing of construction works during minimal runoff periods to minimise erosion Use guidance in SEPA's Construction of River Crossings when planning works Compile a method statement/work plan for each separate operation to be undertaken in or near a water course Discuss and agree all works with SEPA Seek necessary CAR licences Take care when undertaking dewatering form excavations-use the pump appropriately to reduce the risk of silt Take care to avoid unnecessary damage to the banks of watercourses Preferably silt fence work area to prevent unnecessary passage over adjacent areas Restore any areas which are disturbed with advice form the site environmental manager 	 GEMPs 1, 10 and 12 SEPA Pollution Prevention Guidelines: General Guide to the Prevention of Water Pollution (PPG 1), Above Ground Oil Storage Tanks (PPG2); Works in, near or liable to affect watercourses (PPG 5) and Maintenance of Structures Over Water (PPG23) in identifying protection measures Appendix 3
Identify all waterbodies likely to be affected by the final design of the works and discuss pollution and siltation prevention measures, strategy and emergency procedures for all	All areas of the works where protection measures could be required	 Plan all drainage measures carefully including the run-off from construction sites, spoil heaps, access tracks and water crossing places Discuss and agree protection measures with SEPA Implement and monitor 	GEMPs 1, 10 and 12Appendix 14

Requirement	Check	Action	Reference Documents
construction stages		 the success of all measures-adapt if required in agreement with SEPA Utilise water bars and other erosion control structures so as to disperse concentrated flows and filter out suspended sediments in settling basin prior to entry to stream course 	
Plan reinstatement works following completion of construction	 All areas of works shall be returned to graded and protected state as required 	 Identify and design reinstatement of banks either re-vegetating or utilising mechanical means such as wattles, mats or blankets. 	Appendix 17

Further information is available in:

DETR (2000) Environmental handbook for building and civil engineering projects CIRIA (2005) Environmental Good Practice – site guide

SEPA provides a number of Pollution Prevention Guideline Notes (PPGs) that provide direction with regard to good practice principles when working near watercourses. These include, but are not limited to the following:

- PPG1: General Guide to the Prevention of Water Pollution
- PPG2: Above Ground Oil Storage Tanks
- PPG4: Disposal of sewage where no mains exist
- PPG5: Works in, Near or Liable to Affect Watercourses
- PPG6: Working at Construction and Demolition Sites
- PPG8: Safe Storage and Disposal of Used Oils

GENERIC ENVIRONMENTAL MANAGEMENT PLAN 9: PRIVATE WATER SUPPLIES

Introduction

The construction and use of access tracks together with the installation of transmission towers could disturb drainage patterns (horizontally or vertically) and/or the quality of water that would otherwise sustain a private water supply. Where development does take place in the near vicinity of private water supplies it is essential to have contingency plans in place in the event of an emergency such as an accidental spill of fuel or a wash out of sediment and/or cement residues from construction works in the area from where the supply is drawn.

Management Plan

For each private water supply identified as being at significant risk:

Planning

- At the earliest stage consult the environmental manager(s) about monitoring and communicating the implementation of mitigation measures to protect private water supplies.
- Comply with the specific requirements of the each private water supply plan.
- Advise the relevant Planning Authority in accordance with Planning Condition 61.
- Undertake tap water quality testing of the private supply where required in question before any possible activity takes place that could affect the water supply, to establish a baseline of current water quality to act as a benchmark (at least two occasions).
- Make sure that ongoing sampling and analysis is carried out before, during and after any issues that may arise during the construction works, and compare with the established baseline measurements.
- Prepare a contingency plan to deliver an alternative water supply (on a temporary or permanent basis) within 24 hours of an unforeseen problem with the existing supply being reported.
- Liaise in advance with the private water supply users regarding details of the proposed works, the contingency measures put in place to protect the supply and any diversion works that may be needed in relation to the distribution main.

Operations

- Fence off the private water supply intake (to avoid accidental damage and to deter animals).
- Survey and peg out the route of the distribution main in the vicinity of the overhead line works and avoid/minimise activity within this area.
- Put in place measures to protect the distribution main where it crosses beneath an access track (having discussed these in advance during the planning stages). This might include:
 - o setting the existing pipework within mass concrete;
 - o upgrading the existing pipework.
- Ensure there are adequate pollution control and emergency response measures in place to deal with any accidents that could affect a water supply (e.g. spill response, leak or discharge of oily waste, sediment control etc).
- Undertake regular health and safety briefings to construction staff. Include information on:
 - o presence and importance of water supply intake and distribution main nearby;
 - o need to protect these from accidental damage;

o need to act promptly if an accidental spill or pollution incident poses a threat.

What to do if Unknown Water Supplies are identified

- It is possible that private water supplies may be found which have not as yet been identified.
- If this happens stop work in that location and inform the site manager and the SHETL Environmental Management Team who will try to identify the owner of the supply.
- Necessary protection measures will be identified and implemented before work can resume again in that location.

- Appendix 14 Example Emergency Response Procedures
- Appendix 20 Private Water Supplies Risk Assessment Methodology

GENERIC ENVIRONMENTAL MANAGEMENT PLAN 10: SOIL REMOVAL AND STORAGE

Introduction

Soil is a precious resource, supporting diverse ecological systems and providing the growing medium for crops and timber. It also absorbs rainfall, delaying its movement into watercourses, and filters or transforms chemicals that pass through it, preventing them from ending up in water or air. Any damage to soil quality affects the long-term functioning of the soils and has an impact not only on ecological diversity and the performance and visual quality of the vegetated areas but can have impacts off-site such as on flooding, aquifer recharge and water quality. It is therefore essential that impacts to the resource are reduced to the minimum necessary for the works and that all work is undertaken in accordance with best practice.

Management Plan

Soil Storage

- Plan soil stripping carefully in advance.
- Check all necessary pre-construction surveys have been completed.
- Follow all identified mitigation requirements for the location to be stripped.
- Check whether the Archaeological Clerk of Works should be on site during the soil stripping.
- Topsoils should be stripped and stored within identified areas within the site for re-use. Storage bunds should be at least 30m for the nearest watercou.
- If space does not allow storage and the surplus is to be stored elsewhere on the site consult the Technical Specialists in advance on whether this is permitted and discuss with landowner/occupier.
- Keep records of where all removed soils are stored including the different layers.
- Separate bunds must be created for the different layers and topsoil must not be mixed with subsoil layers.
- Soil storage bunds should be located away from watercourses and in drier areas and protected from run-off from adjacent areas. If the storage area is wet it will need to de drained in consultation with the Technical Specialists.
- Storage bunds should be located to prevent damage from other site operations and traffic.
- Top soil bunds should be covered in periods of heavy rain to avoid soil being washed away and polluting watercourses etc.
- Construction traffic must not track over stored soils.
- If any soil is contaminated it should be disposed of in accordance with the Waste Management Plan.
- Bunds should be formed by raising the soil mound to maximum height (preferably no more than 1.5 metres and maximum of 2 metres) progressively along its axis and shaping it as it is being built to shed water (side slopes of either 1:1½ on inside slopes or 1:3 on the outer).
- Where necessary mounds should be protected from run-off/ponding by a cut-off ditch which is linked to appropriate water discharge facilities or by using a bund to attenuate run-off such as straw bales.
- Measures may be required to protect the face of the soil layer from ponding of water and maintain the basal layer in a condition capable of supporting the earth scrapers (eg covering the surface with turfs or using geotextiles in the design of the bund).
- In periods of dry weather check the need for bowsing to reduce dust and potential nuisance.
- Dust can affect habitats and crops as well as people.

Reference Documents

• GEMPs 1, 6, 7, 8, 9, 12 and 19

GENERIC ENVIRONMENTAL MANAGEMENT PLAN 11: UNEXPECTED CONTAMINATED LAND

Introduction

Prior to construction works, an assessment must be made by the contractor as to the potential for contamination, based on the site-specific information. Where such investigations identify contaminated land, strategies for mitigation or remediation must be developed and agreed with the regulatory authorities (the relevant local authority) and these will be implemented prior to construction operations in these locations. Any special construction management procedures for working in these zones of identified contamination must be included in all relevant method statements. In addition contamination may be encountered in areas where it has not been expected and site staff need to be on the look out for such areas to ensure that risks to the environment are controlled.

Management Plan

Planning the Works:

• Plan works taking account of recognised best practice and all relevant waste regulations.

Be on the look out for:

• Signs of contamination during boring, excavating, digging and similar operations.

[These could include discoloured soil, unexpected odours, a fibrous texture to the soils (e.g. asbestos), presence of foreign objects (e.g. chemical/oil containers/waste), evidence of previous soil workings, underground structures or waste pits, evidence of made ground, old drain runs and contamination within buildings].

If contamination is suspected:

- Stop work immediately.
- Report the discovery to the Site Manager who must seek expert advice.
- Contact the Technical Specialists for immediate advice on testing and mitigation.
- Seal off the area to contain spread of contaminants.
- Clear site to ensure there is nothing that could cause fire or explosion.
- Contact the local authority once it is confirmed that contamination has been found.¹
- Any unexpected contaminated land that has been disturbed by construction activities may need to be dealt with as waste (following results and characterisation from chemical analysis) and disposed of to a suitably licensed site in line with all relevant waste management regulations.
- Ensure that the suspected contamination is tested and characterised and agree changes to the existing site proposals and method statements.
- Inform landowner/occupier.

¹SEPA is the regulator for waste management associated with contaminated land, and provides advice to LAs on impacts of contaminated land on the water environment, however, first contact with an authority in relation to unexpected or expected contaminated land should be with the local authority unless there are emergency pollution issues

Avoid causing or spreading contamination:

- Do not stockpile contaminated soil unless it cannot be avoided. If it is necessary stockpile do this only on an impervious base (eg hardstanding or plastic sheeting) to prevent contamination of the underlying area.
- Cover the stockpile with plastic sheeting to prevent infiltration of precipitation and spread of soluble contaminants and to prevent potentially contaminated wind-blown dust.
- Control surface drainage from stockpiled area. Remember water draining from a stockpile may be contaminated and require controlled off-site disposal.
- Be careful when handling, storing and using oils and chemicals.

- Appendix 3 for best practice guidelines which contain further specific advice
- GEMPs 1, 8, 10, 12 and 13

GENERIC ENVIRONMENTAL MANAGEMENT PLAN 12: OIL STORAGE AND REFUELLING

Introduction

Petrol, diesel and oils inappropriately used, stored or disposed of can give rise to pollution of the environment. Oil is the most common pollutant in the UK. Oil and fuel can be released into the environment through:

- spillages during delivery or use;
- spillages during refuelling operations;
- spillages from hose bursts;
- excessive use of release oil on shuttering;
- inadequate storage facilities;
- spillages during attempted theft or vandalism; and
- waste materials being poured directly to drains or gullies, or being burned.

Petrol, diesel and oil are all highly harmful to plant, animals and humans. If pollution is caused, prosecution may follow. The cost of clean up and legal proceedings following a spillage/pollution incident may far exceed the cost of putting proper control measures in place.

Relevant Legislation

The Water Environment (Oil Storage) (Scotland) Regulations 2006 apply to any kind of oil including petrol, diesel, mineral oil, heating oil, lubricating oil, waste oil, vegetable and plant oil (except uncut bitumen) stored above ground at premises such as construction sites. The relevant provisions of Waste Management Licensing Regulations 1994 and the Special Waste Amendment (Scotland) Regulations 2004, also apply to handling and storage of waste oil.

Management Plan

General

- On-site storage of oil and fuels should be avoided if possible.
- Where on-site storage of oil and fuels is required, the volumes to be stored should be minimised as far as practical.
- Potential oil and fuel storage areas should be identified and screened for the following before selection:
 - suitability of ground conditions e.g. can the area be protected against flood damage/inundation/subsidence;
 - proximity to sensitive environmental receptors such as water courses/surface water drainage system;
 - o ease of access to proposed storage area for oil deliveries/refuelling; and
 - o ability to secure proposed oil storage areas (to prevent theft/vandalism).
- Storage areas should:
 - o be identified on site plans;
 - o have an impermeable base in areas of groundwater risk (to be agreed with SEPA).
 - o have control measures are in place and/or spill kits are located to be easily accessible; and
 - o be secured against damage, theft and vandalism.

- o be at least 100m from watercourses and waterbodies.
- Storage containers should:
 - comply with the requirements of the Water Environment (Oil Storage) (Scotland) Regulations 2006;
 - comply with the Pollution Prevention Guidelines (PPG) 2 above ground oil storage tanks (see checklist);
 - be of appropriate type and capacity for the contents (no 45 gallon drums to be allowed on site);
 - o be appropriately labelled;
 - o have fittings appropriate for those containers and of appropriate quality;
 - o valves and trigger guns should have automatic shut-offs and be vandal / tamper proof.

Checks and Actions

Requirement	Check	Action	Reference documents
Compliance with relevant oil storage regulations	How the Water Environment (Oil Storage) (Scotland) Regulations 2006 apply to the site	 Comply with the Water Environment (Oil Storage) (Scotland) Regulations 2006 If in any doubt consult with SEPA and the SPT Environmental Management Team 	Appendix 2
Comply with all contract conditions	Check restrictions relating to oil storage	 Do not site fuel stores within 100m of a waterbody or watercourse 	Appendix 1
All fuel storage facilities are to be provided within bunded areas in storage construction in accordance with the oil storage regulation and SEPA PPG2.	 Ground conditions at proposed oil storage areas e.g. can the area be protected against flood damage/inundation/subsid ence? Proximity of proposed oil storage areas to sensitive environmental receptors such as watercourses/surface water drainage systems Ease of access to proposed storage area for oil deliveries/refuelling What standard of oil storage containers are required for the type and volume of oil to be stored How oil storage areas can be secured (to prevent theft/vandalism) Whether the area is sufficiently well identified/marked to not cause a hazard or be a risk to the environment Whether the area is sufficiently bunded Whether an impermeable base is required (in areas 	 Consult with SEPA as to whether an impermeable base is required Refer to Pollution Prevention Guidelines (PPG) 2 – above ground oil storage tanks for further guidance on design of oil storage areas Designate appropriate areas of the site for oil storage Ensure that oil storage containers comply with the requirements of the Water Environment (Oil Storage) (Scotland) Regulations 2006 Compile a protocol for oil storage operations on site, including emergency response procedures Ensure all static fuel and oil storage containers are suitably bunded and mobile fuel tanks (including those for generators) double skinned Ensure no fuel stores are sited where they could be hit by moving vehicles and plant Ensure all site staff are aware of designated fuelling areas and also those areas where fuelling is not 	 SEPA PGG2 GEMPs 1, 5 and 8 Appendices 2, 13 and 14

Requirement	Check	Action	Reference documents
	 of groundwater risk as identified by the Technical Specialists) Whether control measures are in place and/or spill kits are located to be easily accessible Whether spill kits are fully stocked That all fittings for oil storage containers are appropriate for those containers, of appropriate quality and that valves and trigger guns are vandal and tamper proof That oils are securely stored in suitable containers that are labelled appropriately and in good condition, in accordance with oil storage regulations That oil storage containers, hoses and taps are regularly checked for leakage/vandalism (don't store containers so close together that they cannot easily be checked for leakage) That the contents of the tank are clearly marked That there is a notice displayed that demands that valves and trigger guns are locked when not in use That personnel carrying out refuelling are aware of the protocol and know what actions to take in an 	permitted	
Restrict quantities of fuels taken to site, to the minimum amount required for the plant and equipment on site	 What types and volumes of oils are likely to be required for use on site How frequently it is practical for deliveries of oil to take place What capacity of oil storage containers are likely to be required 	 Determine minimum practical volume of oil that needs to be stored on site Plan deliveries of oils to the site so that the minimum practical volume of oil is stored on site Compile a protocol for ordering and delivery of oil to site 	
To avoid unnecessary risks of pollution to water	 Site staff are aware of risks and penalties 	 Park all mobile fuel and lubricant servicing units in a secure area Vehicles and plant should not be refuelled within 30m of 	 SEPA PGG2 GEMPs 1, 5 and 8 Appendices 3, 13 and 14

Requirement	Check	Action	Reference documents
Appropriate protective measures to be used to contain leakages from stationary plant equipment on site including generators, winches,	Check what plant will be stored on site and what protective measures are required	 drains, waterbodies or watercourses Oil powered pumps, generators etc. to be positioned on impervious drip trays or other appropriate protective measures and located at least 30m from any waterbody and 10m from any watercourse (greater restrictions in SSAP areas and near appropriate watercourses / waterbodies) Oil storage tanks to be surrounded by an impervious bund with no surface water outlet. The bund to be capable of retaining at least 110% of the volume of the tanks Valves and couplings connected to oil storage tanks to be located within the bund and delivery hoses to be fitted with trigger-type handles suspended back within the bund after use Valves and trigger filler handles to be kept padlocked when not in use Reasonable measures (e.g. temporary security fencing) to be implemented to ensure the security of oil storage facilities from acts of wilful damage or vandalism in all areas of risk Ensure that all stationary plant equipment on site is fitted with an appropriate drip tray or other appropriate	Appendix 14
All drip trays to be checked and emptied regularly	 All staff are aware of requirement and procedures 	 Compile a protocol for the inspection and emptying of drip trays 	Appendix 14
All contract vehicles (excluding private cars) and plant to carry a suitable sized spill kit and operatives to be trained on their	 What type of spill kit would be most appropriate to the site and what sort of training is required 	 Ensure that appropriate spill kits (and spares) are available for all contract vehicles (excluding private cars) Ensure that all operatives are trained in the use of spill kits Deliver tool box talks 	 Section 3 in the CPH Appendix 14

Requirement	Check	Action	Reference documents
use. Training to be updated as required		regularly to all site staff on the importance of managing risks from oils and fuels proactively	

Further information available from:

CIRIA (2005) Environmental Good Practice – site guide

SEPA Pollution Prevention Guidelines – Above Ground Oil Storage Tanks: PPG2 The Water Environment (Oil Storage) (Scotland) Regulations 2006

GENERIC ENVIRONMENTAL MANAGEMENT PLAN 13: DUST MANAGEMENT

Introduction

Dust arising from a site may annoy neighbours and can cause air pollution. At very high concentrations, dust may cause health problems. There is also the potential for legal action, which will have cost, programme and reputation implications.

Potential issues for construction projects:

- Annoyance to neighbours and bad publicity for the site.
- Claims from farmers for dust damage to crops (especially cement dust).
- Impact on project programme and budget (e.g. compliance with strict dust levels/abatement notices).
- Impacts on ecology (e.g. plant growth, watercourses).

Relevant Legislation

Under the Clean Air Act 1993 and Part 3 of the Environmental Protection Act 1990, local authorities can impose limits on dust generated from a site (see Appendix 21).

Management Plan

General

- Compile a dust management plan for the site that includes procedures for:
 - identifying activities and weather conditions that are likely to give rise to dust emissions from the site;
 - o identifying activity specific and weather condition specific dust mitigation measures;
 - planning activities to ensure that, as far as practical, particularly dusty activities are not carried out in unsuitable weather conditions;
 - communicating dust management procedures to all relevant personnel and training if required;
 - o identifying any nearby dust sensitive receptors;
 - informing neighbours in advance particularly dusty activities of any nuisance that is likely to occur despite mitigation measures;
 - o keeping a record of dust related complaints and any remedial action taken.
- Ensure that a suitable monitoring regime is in place to keep a record of dust conditions, mitigation measures, complaints, weather conditions etc.
- Monitor locations which could give rise to dust such as:
 - bunds of soil which are not vegetated;
 - o access tracks in dusty locations or where the stone used has a high dust content;
 - o locations where access tracks meet public roads.
- Identify mitigation measures for such locations and review their success.
- Inspect areas at risk daily, especially during dry weather.
- Vehicles carrying bulk materials to be sheeted if could give rise to dust.

- Keep all public roads well swept and bowse if required.
- Follow-up any complaints immediately and take action to avoid a repeat complaint.

Checks and Actions

Requirement	Check	Action	Reference
Compliance with the Clean Air Act 1993	How the Clean Air Act 1993 and Part 3 of the Environmental Protection Act 1990 applies to the site	 Ensure necessary measures to reduce the risk of nuisance from dust are identified and implemented Re-evaluate protection measures in periods of prolonged dry weather 	GEMPs 1, 8, 10 and 14
To contain dust and materials with the potential to lead to wind-blown pollution	 Whether nearby dust sensitive properties and habitats have been identified What control measures have been put in place to mitigate any negative impacts That a suitable monitoring regime is in place to keep a record of dust conditions, mitigation measures, complaints, weather conditions etc Whether any formal reporting on dust conditions is required Whether there have been any complaints 	 Compile a policy for dust management for the site Review this plan regularly and particularly if there are any complaints form residents and /or businesses in proximity to the works Ensure that the plan for the site could not lead to sediment rich run-off polluting water 	 GEMPs 1, 8, 10 and 14 BRE (2003) Control of dust from construction and demolition activities Appendix 6 - Community Liaison Scheme
Dust suppression during periods of dry weather, at locations where access tracks meet the public roads	 That all locations where access tracks meet public roads have been identified That facilities for dust suppression at these locations (e.g. sprayers) are available and can access all locations when necessary 	 Ensure site staff are aware of how dust should be mitigated Have bowsers on site and keep roads swept and clean 	• GEMPs 1, 8 and 10
To identify all areas where dust could become a nuisance	 Areas where soil is being stripped Bunds which are not vegetated Stone used for access tracks for dust content Dust created at concrete mixing sites and batching plants 	 Implement appropriate measures from the site dust management plan in individual locations Keep brashings and turfs when soils stripped and use on earthworks to reduce the risk of dust Check with the Landscape Architect for any areas which should be seeded Check all areas of the site regularly and review dust management plan for 	• GEMPs 1 and 10

Requirement	Check	Action	Reference Documents
		 effectiveness-update as required with input from the Technical Specialists Use tent etc to prevent concrete dust spreading if risk identified 	

Further information available in:

BRE (2003) Control of dust from construction and demolition activities. DETR (2000) Environmental handbook for building and civil engineering projects CIRIA (2005) Environmental Good Practice – site guide

GENERIC ENVIRONMENTAL MANAGEMENT PLAN 14: CONTROL OF IMPACTS FROM CONSTRUCTION TRAFFIC

Introduction

Construction traffic has potential to cause significant environmental effects if not managed carefully throughout the construction period. It is particularly important that activities are planned taking account of the potential to disrupt local communities and traffic on trunk roads and that measures are put in place to reduce these impacts. Traffic and Access Management Plans have been developed to assist in the planning and these are included in Appendix 22. Chapter 12 of the ES also includes relevant information to use in planning works.

Management Plan

General

- Traffic Management Plans should be developed in advance of beginning any construction activity with potential to cause disruption.
- All management plans should be discussed and agreed with the relevant local authority.
- Only roads listed in Appendix 22 may be used for construction.
- Traffic Management Plans in Appendix 22 should be implemented.
- Local communities will be informed by SPT of any activities likely to cause disruption and of the measures to be put in place to control these.
- The effects of construction traffic in combination with increased traffic from other events/activities should be taken into account when planning works (eg specific tourist events; forestry or development activities etc).
- SPT will update local radio stations etc about potential construction activities which could cause delays on the network.
- Ensure roads are inspected daily where construction activities could have created mud and clear this regularly.
- Dust should be suppressed too where construction traffic could induce dust effects at properties or on habitats.
- Ensure visibility mirrors are installed at all private accesses used for construction where safety issues have been identified in relation to turning movements form the track onto the public road.
- Check that any necessary improvement works at bellmouths of junctions etc have been implemented in advance of construction.
- If these have not been implemented discuss works with the relevant local authority; carry out all necessary environmental surveys and implement in advance of construction beginning in that location.
- Ensure all required photographic road conditions surveys have been undertaken in advance of, and during, construction with relevant Baseline Engineering Surveys provided to the local authorities for approval prior to works commencing.
- Follow up any complaint relating to construction traffic as quickly as possible. If necessary review traffic management plan and amend in liaison with the relevant local authority.

- Appendix 22
- GEMPs 1, 10, 12 and 13

GENERIC ENVIRONMENTAL MANAGEMENT PLAN 15: HELICOPTER PADS AND USE OF HELICOPTERS

Introduction

Helicopters will be used for stringing the line and certain elements of the construction work. Their use has the potential to result in increased temporary disturbance to birds and other wildlife during construction due to the general increase in activity in many areas that are otherwise subject to generally low human disturbance levels. The temporary construction of helicopter pads and soil storage areas has the potential to cause environmental impact (e.g. on ecology, hydrology or unknown archaeology). Planning applications may need to be made for each helicopter pad. The following advice should be taken into account in choosing locations.

Management Plan

Location of Pads

- Temporary helicopter pads should be sited in locations where major environmental constraints (for example important habitats and archaeological sites) can be avoided.
- They will not be located within sensitive ecological areas defined as Natura Sites (SACs or SPAs) or other statutory designated nature conservation sites, or other areas supporting important habitats of protected species where impacts could be significant.
- All potential pads will be assessed for their hydrological effects by the Technical Specialists.
- Where pads are located in areas of some hydrological sensitivity and/or close to watercourses, appropriate mitigation measures will be installed prior to using the sites.
- SEPA must be consulted on potential locations and guidance sought on appropriate protection of all surface and ground waters.
- Any fuels or oils kept at helicopter pads must be stored in accordance with legal requirements and best practice and SEPA consulted on the proposals as part of the locational pre-application meeting

Operational Plan

- In advance of any use of helicopters for construction, risk assessments should be undertaken to identify constraints including:
 - safety issues including overhead lines;
 - possible annoyance to people;
 - possible bird strikes;
 - disturbance to sensitive wildlife and livestock;
 - danger to motorists from distraction;
 - presence of flight obstacles;
 - proximity of prohibited and restricted danger areas;
 - proximity of hazardous areas and proximity to occupied dwellings;
 - congested and sensitive areas.
- All necessary mitigation measures will be identified in advance of helicopter use and implemented.
- All affected landowners will be contacted in advance and notified of flying dates and times by SPT. General notices will be displayed and advertised in local newspapers by the SPT Project Management Team.

- Disturbance by helicopters, although likely to be temporary, will be assessed on an area by area basis taking account of Schedule 1 / Annex 1 species, should it be necessary to use them within the breeding bird season by the Ecological Clerk of Works.
- Similarly any dismantling work undertaken using helicopters will not be undertaken in IBAs (see ES) identified as important for breeding birds during April to July inclusive and those identified as important for wintering birds in October to April inclusive, unless agreed in advance with SNH and the Ecological Clerk of Works.
- Construction work using helicopters carried out during the bird breeding season must also ensure that Schedule 1 and Annex 1 species (ie those with enhanced statutory protection) and black grouse are appropriately considered. As a guide, 500m will be used as the limit of likely disturbance and this will be implemented according to the specifics of the particular topography and site conditions encountered. The Contractor should check this guide distance with SNH in advance of using helicopter use.

- Zoned Maps (Appendix 10)
- HSPPs (Appendix 10)
- SAPPs (Appendix 11)
- GEMPs 1, 6, 8 and 12

GENERIC ENVIRONMENTAL MANAGEMENT PLAN 16: REMOVAL OF RHODODENDRON

Introduction

Rhododendron (*Rhododendron ponticum*) is an invasive species that was introduced into Britain in Victorian times and which can out-compete many native species. It thrives in mild wet climatic conditions. Toxins in rhododendron also make it unpalatable to many animals which feed on plants and may also inhibit germination of other seeds. It has thus been very successful in many parts of Scotland.

It is essential that all rhododendron removal is undertaken in a responsible manner which protects against further spread. Rhododendron is spread by seed and also vegetatively. Small fragments of material will root and thus it is important that all material which is disturbed is removed from site or totally destroyed. Be particularly careful not to allow fragments to be left in soils which are to be used on site at restoration.

Management Plan

General

- Check CPH plans for any areas where rhododendron has been identified as a potential problem.
- If in any doubt contact the forestry or ecological advisor.
- Inform landowner / occupier of presence of rhododendron and agree proposals for cutting/removal.
- Plan works to ensure that you will not inadvertently cause spread of rhododendron in advance of clearing.
- Ensure all site staff are aware of the risks of spreading rhododendron-include in relevant tool box talks and advise how to avoid.
- The plan to control rhododendron in different locations may vary- take advice from the Technical Specialists to identify the most appropriate method in any location (eg spraying or digging out) and ensure the work is carried out by a suitably qualified person.
- Remember that pieces of intact root (healthy pieces, not just an entire root-ball) will re-grow-so small fragments left on site can cause a problem.
- Cut top-growth can regenerate if left lying on site.
- Decide whether material will be removed off-site or dealt with on-site.
- When you remove plants ensure that the whole plant is uprooted together with any lateral growth.
- Either remove all material to a licensed tip or treat material on-site.
- If you want to mulch mixed soil / roots, you need to chip rhododendron first.
- It is unlikely that significant pieces will escape if you are careful with chipping.
- Burning is fine, but you need to make sure that all material is burnt that there aren't chunks of untouched root left where the fire burns out also check that burning is permissible.
- Remember to check an up-to-date exemption licence is in place from SEPA before any burning is undertaken on-site and comply with all conditions of waste management exemption licence.
- Live rhododendron plants exude a substance that inhibits other plants from growing under or by them. Dead ones don't and so chipped and mulched or burnt material is not a concern in the longer term.
- Mulch of any sort on the surface will inhibit re-seeding. It should be well spread and/or mixed, not left as a carpet anywhere.

- Be careful if using a mulcher to ensure that it is effective and that large chunks of material are not left which could re-grow.
- In sensitive areas (as advised by the environmental manager(s)) cut and spray stump with a glyphosate herbicide.
- Spraying must be undertaken within 7 hours for maximum efficiency.
- Cut material should then be treated as above.

- Zoned Maps (Appendix 10)
- GEMPs 1 and 10
- Appendices 3 and 13

GENERIC ENVIRONMENTAL MANAGEMENT PLAN 17: CONTROL AND REMOVAL OF INVASIVE PLANTS

Introduction

Giant Hogweed (*Heracleum mantegazzianum*) and Japanese Knotweed (*Polygonum cuspidatum*) are invasive species scheduled under Section 14, Schedule 9 of the Wildlife and Countryside Act (1981) as an offence to 'plant or otherwise cause to grow in the wild'.

Once established these plants are difficult to control. Both plants can be spread very easily if sufficient care is not taken. The SEPA Technical Guidance Note: On-site Management of Japanese Knotweed and associated Contaminated Soils 2008² provides useful information on control and legal requirements.

Giant Hogweed

Introduced as an ornamental plant in 1893 and is now widespread throughout the UK. It thrives in any habitat but particularly where soil has been disturbed such as riverbanks and derelict land. It forms dense colonies that suppress the growth of native plants and grasses, leaving the banks bare of vegetation in winter and increasing the risk of erosion and re-colonisation from seeds washed downstream. It can also cause significant harm to humans and grazing animals.

It is illegal to plant or otherwise encourage the growth of Giant Hogweed. This could include moving surrounding soil which may contain seeds or plant material unless as part of an eradication process. Each flowerhead produces up to 50,000 seeds which are viable for up to 15 years and are dispersed rapidly by water. Therefore, it is essential that all Giant Hogweed removal is undertaken in a responsible manner which protects against its further spread.

Japanese Knotweed

This was also introduced as an ornamental plant to the UK and has spread extensively in the wild causing serious problems by displacing native flora and causing structural damage. It will grow in any type of soil no matter how poor and is often found along railways, riverbanks, roads and derelict sites.

It is illegal to plant or otherwise encourage the growth of Japanese Knotweed. This could include cutting the plant or roots and disturbing or moving surrounding soil which may contain root material unless as part of an eradication process.

Management Plan

General

- Check CPH plans for any areas where Giant Hogweed, Japanese Knotweed or other invasive species has been identified as a potential problem.
- If in any doubt contact the environmental manager(s).
- Keep landowner / occupier advised of proposals at all stages.

² <u>http://www.sepa.org.uk/pdf/guidance/waste/Japanese Knotweed1.4.pdf</u>.

- In advance of clearing invasive species plan works to ensure that you will not inadvertently cause spread of the plant.
- Ensure all site staff are aware of the risks of spreading invasive species include in relevant tool box talks (Giant Hogweed, Japanese Knotweed and also Himalayan Balsam which is invasive but not listed in Schedule 9).
- The plan in different locations may vary take advice to identify the most appropriate method in any location.
- Chemical control of Giant Hogweed is most effective spraying can start on plants above 1m high from March and throughout summer. More than one application is needed and follow up spraying will be required to kill seedlings in subsequent years.
- Near water chemical control of Japanese Knotweed can be achieved with herbicides containing glyphosate spraying both the top and underside of leaves improves control.
- The most effective time to apply a non-persistent herbicide such as glyphosate is between July and September when the plant is in leaf.
- Consultation and consent from SEPA is required under the Control of Pesticides Regulations 1986 (as amended) where aerial application of herbicides is adjacent or within 250m of water or where water could be affected.
- Non chemical control of giant hogweed includes cutting down stems before flowering, flail mowing (but with extreme caution due to spraying sap).
- Non chemical control of Japanese knotweed include;
 - Cutting this should be done carefully with a hand scythe to avoid spreading stem fragments. Flail mowing must not be carried out and cutting must continue every 2-4 weeks to reduce both above and below ground biomass.
 - Pulling uproot stems by pulling from the base best done from June.
 - o Grazing of shoots keeps the plants in check, provided dead growth is removed.
 - Digging out rhizomes and disposing of the spoil is an expensive option and often impracticable. Spoil can be removed from a site as special waste, disposed on-site at least 10m deep, or the material can be sieved through a 20mm mesh and the spoil reused on site.
- The crown of giant hogweed must be dug out below ground to prevent re-growth and it is essential to establish vegetation quickly after control measures have been applied, as dense grass sward tends to discourage seed germination.
- Care must be taken and protective clothing worn during removal as giant hogweed poses a health risk.
- Decide whether material will be removed off-site or dealt with on-site (in the case of giant hogweed it should either be taken to landfill site or piled on site and composted).
- Disposal of Japanese Knotweed crowns should neither be composted nor removed from site without a waste licence.
- Burning will not eradicate Japanese Knotweed completely but will reduce the amount of material for disposal.
- Any controlled burning must be carried out in accordance with a registered exemption under the Waste Management Licensing Regulations 1994.
- SEPA will advise on all specific licence requirements (a Mobile Plant Licence may be required under the Environmental Protection Act 1990) and should be consulted in advance of removal of invasive weeds.
- Never store any removed plant materials within 10m of a watercourse.
- Also be aware of other invasive species such as Himalayan Balsam.
- Avoid tracking vehicles across soils up to 7m from identified species to reduce the risk of spreading where appropriate.

- Zoned Maps (Appendix 10)
- GEMPs 1 and 10
- Appendices 3 and 13

GENERIC ENVIRONMENTAL MANAGEMENT PLAN 18: BAD WEATHER CONTINGENCY

Requirement	Check	Action	Reference Documents
To consider the implications of poor weather conditions and associated environmental risks	 Contract conditions and required mitigation measures 	 Identify an action plan before construction starts with a protocol of measures to implement in times of bad weather 	Appendix 1
To protect watercourses and other surface water bodies from the polluting effects of sediment rich run- off	 The weather forecast regularly Be aware of when the weather is likely to change suddenly For any materials stored close to watercourses during construction activities which could be washed into the water in times of storm 	 Plan for high run-off in advance Identify protection measures (silt traps, straw bales and booms etc) Ensure all site staff are aware of checking regularly for polluted run-off and of the measures which should be implemented Ensure all protection measures are monitored for success- re-evaluated and re-designed as necessary with help from the Technical Specialists Maintain all protective measures (eg change bales once sediment laden etc) Consult SEPA on protective measures if in doubt Keep site tidy and do not store materials too close to watercourses or surface water features 	• GEMPs 1, 8, 11 and 12
To protect peat bodies and associated habitats during extreme weather events	 Ground conditions regularly and whether they are suitable for the proposed site activities Consider whether plant could be at risk if used in areas which are too wet Check whether floating roads are holding up or at risk of severe ponding Check whether plant is 	 Stop work if peatlands and habitats found to be at risk of irreversible damage Follow advice from the Technical Specialists Do not ignore advice 	 GEMPs 1 and 6 Denny Substation Peat Management Plan Denny Substation CPH

Requirement	Check	Action	Reference Documents
	causing unacceptably high damage on site because of poor ground conditions (involve the environmental manager(s))		
To protect properties and habitats during times of fire risk	 Any areas at risk and make all site staff aware Consider the need to designate working areas as no smoking in times of high risk 	 Deliver tool box talks to all site staff on the risks of fire in dry weather from careless behaviour Heighten site staff awareness of risks during periods of prolonged dry weather 	Appendix 14

GENERIC ENVIRONMENTAL MANAGEMENT PLAN 19: ARCHAEOLOGY AND CULTURAL HERITAGE

Introduction

Sites protected by law for their archaeological and cultural heritage interest will have specific protection measures included in their designations and these must be complied with during construction activities. It is important to ensure that all site staff know when they are working in or close to a site designated for its archaeological or cultural heritage interest and made aware of the protection measures which must be implemented. It will also be important to keep a look out for possible archaeological remains even in areas not designated, and in particular during soil stripping activities or excavating foundations.

Archaeological and Cultural Heritage Resources

Archaeological and Cultural Heritage resources found along the route of the new line were identified during the Planning Process and are detailed in the Environmental Statement (ES).

Resource	Туреѕ
Statutorily Designated Areas	 Scheduled Ancient Monuments (SAM's). Listed Buildings and Conservation Areas.
Non-Statutorily Designated Areas	 Sites and areas. Historic Gardens and Designed Landscapes. Historic battlefields. Other cultural heritage or archaeological sites. Properties in Care.
Archaeological and Cultural Heritage Features	 Dry stone dykes or sheepfolds. Grassy humps and lumps in the ground. Concentrations of stones. Changes in vegetation (eg concentrations of poppies or nettles).

Mitigation Plan

Known Archaeological and Cultural Heritage Resources

- All features identified during the planning process are included in the Project's GIS geo-database, for use by the Contractors, and are detailed in the Archaeology and Cultural Heritage Site Gazatteer in the Environmental Statement (Technical Annex 26.2).
- The Contractor should take into account archaeological features when micro-siting access track and tower compounds to ensure they are not impacted upon.
- Features within the LOD's should be fenced off with an appropriate buffer zone in agreement with the Archaeological Clerk of Works prior to works commencing in the area.
- Where bifurcation (breaking) of a linear feature (wall or dyke) is unavoidable, the feature should be recorded to ensure preservation by record and reinstated to its original condition under the guidance of the Archaeological Clerk of Works.
- Archaeological monitoring (controlled stripping under the supervision of the Archaeological Clerk of Works) will be carried out for significant ground breaking works in sensitive locations. Where archaeological features are identified and preservation in-situ is not feasible, preservation through record should be undertaken.

- Evaluations and detector surveys will be undertaken at key sites identified in the Environmental Statement.
- All works likely to impact on Scheduled Ancient Monuments must be done under a Scheduled Monument Consent (SMC) and in compliance with any conditions specified in the Consent.
- Where works could affect access to Properties in Care (historic environment properties for which Scottish ministers are responsible) SPT and Contractors will notify stakeholders in advance of works through the ELG / TCHCLG.

Unexpected Features

- **STOP** work if you find (or suspect you have found) any archaeological features or remains and immediately contact your Environmental Resource.
- Archaeological features include:
 - Dry stone dykes or sheepfolds.
 - Grassy humps and lumps in the ground.
 - Concentrations of stones.
 - Changes in vegetation (concentrations of poppies or nettles).
- Finds can include:
 - Burned or blackened material.
 - Brick or tile fragments.
 - Coins or pottery.
 - Bone fragments or skeletons.
 - Timber joists or post holes.
 - Brick or stone foundations.
 - In-filled ditches.
- Protect any suspected finds by fencing off the area.
- Seek expert advice from the Archaeological Clerk of Works on how to proceed.
- Be prepared for unexpected finds whether or not known archaeological or historical features have been identified on your particular site.
- If any coins, pottery or bones are found do not remove them it is illegal.
- If there is uncertainty about a find stop works and contact the Archaeological Clerk of Works for an assessment.
- If addressed at the right time and in the right way, finds may not necessarily affect the progress of the works.
- Do not assume that any artefacts or features discovered are unimportant.
- Do not undertake work adjacent to areas of archaeological importance without considering if damage could be caused by:
 - vibration (which could cause cracking).
 - dewatering (which could cause a preserved feature to settle or crack).
- Do not drive vehicles through protected sites.
- Work to method statements and be aware of the potential archaeological risks and protection measures which have been identified.

- Zoned Maps (Appendix 10)
- GEMPs 10 and 11
- Appendix 1

GENERIC ENVIRONMENTAL MANAGEMENT PLAN 20: TREE FELLING

1. SITE SPECIFIC REQ	1. SITE SPECIFIC REQUIREMENTS	
Welfare Facilities:	Site compounds and storage areas are to be kept to the minimum necessary for safe implementation of the works. Refer to Site Layout Plan for location. For location details see Contractors Method Statement and Procedures Manual.	
Storage of plant, materials and fuel:	Follow requirements of GEMP 12 - Oil Storage and Refuelling and as per Contractor's Procedures Manual	
Felling and clearance waste:	Storage, handling and destination for all felling and clearance waste will be identified by the Contractor and details kept on site. Duty of Care documentation should be available for inspection. Refer to Site Waste Management Plan and guidance in Appendix 14.	
Welfare and operating waste:	Site compounds and working areas should be kept clear of all litter and waste stored securely and disposed of through a licensed waste carrier. Any contaminated waste (e.g. from a fuel / oil spill) should be tested and disposed of separately using a suitably licensed waste contractor. Duty of Care documentation should be available for inspection.	

2. ENVIRONMENTAL AND OTHER CONSTRAINTS

Туре	Details	Actions / Mitigation Required	CPH Reference
Ecological	Be aware of possible presence of red squirrels (Sheriff Muir Woods) and badgers (Yellow Craig Woods)	 Pre-felling surveys during breeding season for bird species followed by any appropriate mitigation. ECoW to identify locations and erect buffer zones for mammals impacting on felling area. Licences to be obtained by ECoW if disturbance is required for otters or badgers. Avoid disturbing sensitive habitats (see Figures 1and 2 in Appendix 10). 	HSPP 6 SPP 2 - Red squirrels SPP 4 - Badgers SPP5 - Birds
Watercourses and Waterbodies	Site may be crossed by small ditches feeding into	 Adhere to planned crossing points which are to be constructed according to 	GEMP 7 - Watercourse Crossings

Туре	Details	Actions / Mitigation Required	CPH Reference
	the Wharry Burn	 Forestry Commission Guidance. No refuelling within 10m of a watercourse. Adhere to requirements of GEMP 8. Anti-pollution and siltation management measures must be in place before work commences in the vicinity of the watercourse. 	GEMP 8 - Working in or near watercourses
Archaeology	No known archaeological features on or in any areas likely to be affected by the works.	 If any are found during works, work must be stopped and the SPT Environmental Management Team informed. 	GEMP 19 Archaeology
Noise, Dust and Nuisance	The site has no properties or access in the surrounding area, and no indications of amenity use.	Working hour agreements should be adhered to, and access maintained to the properties. Dust management measures should be put in place.	Appendix 23 - Noise GEMP14 - Control of Impacts from Construction Traffic
Topographical	OHL to follow local ridges and landform.	Covered under Section 37 consent.	
Utilities	33kV OHL crosses through worksite.		
Private Water Supplies (PWS)	 No private water supplies present in Sheriff Muir Wood location Line crosses a PWS in Yellow Craig Woods 	If any are found during works, work must be stopped and the SPT Environmental Management Team informed.	Appendix 20 – Private Water Supply Risk Assessment GEMP 9 - Private Water Supplies

- Zoned Maps (Appendix 10)
- HSPP 6
- SPPs 2, 4, 5
- GEMPs 7, 8, 9, 14, 19
- Appendices 1, 20 and 23

GEMP 21

MICRO-SITING CHECKLISTS

LIST OF CHECKLISTS

- Checklist 1: Tower Locations
- Checklist 2: Access Tracks
- Checklist 3: Helicopter Pads
- Checklist 4: Public Road Improvements

MICRO-SITING CHECKLIST 1: TOWER LOCATIONS

General

Documents which should be used to assist in the detailed micro-siting of towers include:

- Collated mitigation in the ES (Appendix C) and the Addenda to the ES and Appendix 1 of the CPH.
- The SEMP in Appendix 4.
- The appendix on Limits of Deviation (Appendix B in the ES).
- Conditions of consent relating to tower location (Conditions 11 (1), 16 (1), 15 (b), 18, 19, 20, 22 (e), 42.

The Access Track Construction Methodology sets out a process for micro-siting access tracks taking account of the requirements of the two appendices from the ES and all mitigation requirements and the same principles are relevant to micro-siting towers (see Appendix 18).

Key constraints to be taken into account in the detailed micro-siting of towers are listed below.

Constraints

- 1. Important habitat areas.
- 2. Ancient woodlands.
- 3. Areas of peat.
- 4. Watercourses and water bodies (the edge of tower bases must be at least 30m away from watercourses and water bodies).
- 5. Proximity to mature trees, hedgerows of other vegetation which could provide screening.
- 6. Known breeding bird areas-take account of buffer zones.
- 7. Other important bird areas.
- 8. Areas which have known records of protected species (otter, bats, badger, water vole etc) to be confirmed by pre-construction surveys where relevant.
- 9. New records of protected species since the ES, identified in pre-construction surveys.
- 10. Sites of archaeological interest.
- 11. Potential for works to create silt which could be polluting to watercourses.
- 12. Proximity to residential properties.
- 13. Proximity to roads.
- 14. Proximity to access tracks.
- 15. Proximity to rights of way, other paths or public areas.
- 16. Landowner/occupier commitments.
- 17. Private water supplies.
- 18. Peat slide high risk areas.
- 19. Areas of potential contamination.

- Zoned Maps (Appendix 10)
- GEMPs 7, 8, 9, 14, 19
- Appendices 1, 20 and 23

MICRO-SITING CHECKLIST 2: ACCESS TRACKS

General

Various documents are available which will help in the detailed micro-siting of access tracks. These include:

- The Access Strategy in the ES (Appendix D).
- The appendix on Limits of Deviation (Appendix B in the ES).
- An Access Track Constraints Protocol.
- The Temporary Access Track Construction Methodology (see Appendix 18).
- Conditions of consent relating to access tracks (Condition 29).

The Access Track Protocol Construction Methodology sets out the process for taking account of the requirements of the two appendices from the ES and all mitigation requirements.

Key constraints to be taken into account in the detailed micro-siting of access tracks are shown below.

Constraints

- 1. Topographic constraints.
- 2. Proximity to residential properties.
- 3. Important habitat areas.
- 4. Ancient woodlands.
- 5. Proximity to mature trees (avoid removal and also potential to undermine roots).
- 6. Areas of peat.
- 7. Watercourses and water bodies (seek to avoid new crossings; use/upgrade existing crossings in preference to new build).
- 8. Important plant records.
- 9. Known breeding bird areas-take account of buffer zones.
- 10. Other important bird areas.
- 11. Areas which have known records of protected species (otter, bats, badger, water vole etc) to be confirmed by pre-construction surveys where relevant.
- 12. New records of protected species since the ES, identified in pre-construction surveys.
- 13. Sites of archaeological interest.
- 14. Potential for works to create silt which could be polluting to watercourses.
- 15. Any potential restrictions from the existing uses of existing tracks.
- 16. Rights of way, paths and bridleways.
- 17. Landowner / occupier commitments.
- 18. Private water supplies.
- 19. Peat slide high risk areas.
- 20. Areas of potential contamination.

MICRO-SITING CHECKLIST 3: HELICOPTER PADS

General

Information which should be taken into account when choosing potential sites for helicopter pads includes:

- Proximity to the line and the required works.
- Availability of unconstrained flat ground.
- The conditions of consent (Conditions 22 (g) and 34(l)).
- The committed mitigation set out in Appendix 1.
- Proximity to local communities, scattered properties including farms.
- The environmental interests of the area around the potential site including European sites; other important features.
- Known important bird areas.
- The proximity of watercourses and other surface water bodies.

Planning permission may be required. Before an application is made the landowner/occupier, the relevant local authority, SEPA, SNH, Historic Scotland and other parties as relevant (e.g. Forestry Commission or RSPB) should be consulted to ensure you are not pursuing a site which is constrained or could be restricted in its use.

Once permission is given to use any site it is important to plan the site taking account of the guidance in the relevant plans in the CPH especially GEMP 15 (Appendix 8), and other relevant information.

MICRO-SITING CHECKLIST 4: PUBLIC ROAD IMPROVEMENTS

General

Information which should be considered when planning public road improvements includes:

- The conditions of the consent (Conditions 31, 32, 33, and 36) (see Appendix 1).
- Collated mitigation in the ES (Appendix C) and the addenda to the ES and Appendix 4 of the CPH.

Key constraints to be taken into account in the detailed planning of improvements are listed below.

Constraints

- 1. Wildlife interests- important trees and hedgerows; protected species; important plant records.
- 2. Areas of peat.
- 3. Proximity to fences and stone walls.
- 4. Known breeding bird areas-take account of buffer zones.
- 5. Sites of archaeological interest.
- 6. Potential for works to create silt which could be polluting to watercourses.
- 7. Proximity to residential properties.
- 8. Proximity to rights of way, other paths or public areas.
- 9. Landowner/occupier needs and commitments.
- 10. Private water supplies.
- 11. Areas of potential contamination.
- 12. Use of the public roads-busy periods; special events etc.
- 13. Features at the road side signs, lay-bys, catering facilities etc.
- 14. Utilities and communications infrastructure.
- 15. Existing bridges and/or culverts etc.
- 16. Road lanes and speed restrictions etc.
- 17. Peat slide high risk areas.

- Zoned Maps (Appendix 10)
- HSPP 6
- SPPs 2, 4, 5
- GEMPs 7, 8, 9, 14, 19
- Appendices 1, 20 and 23

GEMP 22:

GEOLOGICAL CONSERVATION PROTECTION PLAN

Introduction

Scotland is renowned around the world for its unique landscape. Much of this is due to its rich geological history. Consequently, care should be taken to preserve examples of nationally important geological sites. In addition to existing measures in the other GEMPs, this plan outlines specific actions designed to protect Geological Conservation Areas. It is important to ensure that all site staff know when they are working in or close to a site designated for its geological interest and made aware of the protection measures which must be implemented.

Management Plan

- The site works should be planned to ensure that the impact upon any existing rock outcrop/exposure within the GCR site is minimised.
- This should include appropriate micro-siting of the proposed construction to route tracks etc away from any existing rock outcrop/exposure.
- Care should be taken to avoid damage to any existing rock exposure including preventing the covering of any outcrop/exposure by arising materials.
- Where works are considered likely to expose any new rock materials within the GCR (e.g. within the excavations for foundations for Tower TD200B) these should be discussed and agreed with Scottish Natural Heritage in order to allow them to view and record the exposure as appropriate.
- Any such new exposure should be recorded, logged and photographed by an appropriately qualified geologist. In addition any such exposure of rock material within the GCR site should also be notified to Scottish Natural Heritage in order to allow them to view and record the exposure as appropriate.
- Restoration of the area following construction works and the removal of the access track should be designed to avoid any impact on existing rock exposures/outcrops.
- Where new rock exposures are created consideration should be given to maintaining and preserving these as this may offer an opportunity to enhance the Earth Science value of the GCR site.

- Zoned Maps Zone 1 and Zone 2 (Appendix 10)
- GEMPs 2, 3, 4, 6 (peat dependent), 7, 8, 9 (contaminated land), 10, 14, 15 and 17
- Appendices 1, 15 and 17