

Sidmouth Recycling Centre

Construction Environmental Management Plan Prepared By SWH Ltd

Prepared By	Approved By	Accepted By
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Signature:	Signature:	Signature:
Date:	Date:	Date:

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1.0 Introduction and Scope of Works.

1.1 Introduction

This CEMP describes how construction activities shall be undertaken and managed in accordance with environmental commitments and requirements identified within the Sidmouth Recycling Centre (SRC) Environmental Statements (ESs), planning conditions, contractual and legislative requirements and construction industry best practice. It identifies the environmental procedures and checking regimes to be implemented during construction.

Included are:

- Details of environmental mitigation measures
- Planning conditions to be met/discharged
- Timings of mitigation works
- Pollution prevention measures
- List of contacts within statutory regulators
- Reference to the Construction Phase Health and Safety Plan
- The Traffic Management Plan
- The emergency spill response procedure
- Reference to previously submitted reports and surveys

The various sections also refer to how we will work with the DCC Project Manager/Supervisor in the discharge of his environmental responsibilities within the Contract.

All method statements and appropriate risk assessments will be briefed to all personnel working on the site and records of these briefings to be kept in the site office.

This project will be registered with the Considerate Constructors Scheme which promotes best practice in construction with regards to the environment, the workforce and the general public. Once registered, the project will be monitored against the new five point Site Code of Practice which includes the categories Enhancing the Appearance, Respecting the Community, Protecting the Environment, Securing Everyone's Safety and Caring for the Workforce.

This CEMP is intended to be a "live" document. Additions and alterations to the measures identified will be made as become apparent throughout the construction period. Any such amendments will be recorded in Table A within Section 11.

A full review of adherence to the measures and controls contained within this document will be undertaken on a three monthly basis and the findings recorded in Table B within Section 11.

1.2 Scope of Works

The scheme consists of the construction of a new recycling centre at Bowd, Near Sidmouth on the Devon Greenfield Site of the C808 between Sidmouth and Ottery St. Mary, Devon comprising:

- Approximately 10250m³ of cut
- 6100m³ of fill
- 0.9ha of surfacing
- 0.51ha of landscaping
- Precast concrete retaining walls
- Masonry retaining walls
- Gabion retaining walls
- Foul and storm drainage to cess pools and soakaways
- Steel framed building
- Service connections to electrics, BT and water

Limits of Work and Site Boundaries

See drawing:

4933/200 (Appendix B)

2.0 Environmental Issues Identified

2.1 How Have Environmental Issues Been Identified?

The environmental issues have been identified initially by reference to the Clients' design phase investigations and reports, the scheme drawings and pre-contract correspondences between various parties and the planning conditions.

2.2 Significant Environmental Issues

- Noise
- Dust
- Protection and mitigation of any risks to water features
- Construction vehicle movements in and around the site
- Construction waste disposal
- Management of materials on site
- Potential bat roosts
- Badger setts
- Nesting birds, particularly nightjars
- Reptiles
- Tree protection

3.0 Environmental Protection and Mitigation Arrangements

3.1 Noise Assessment, Noise Mitigation

To comply with the Noise at Work Regulations it is intended the following procedures and actions will be undertaken:

- An assessment of noise levels by a competent person where there is reason to believe that levels may be approaching the first action level will be made.
- Any assessment undertaken will be recorded, on form SAFE 20, and kept available along with any review that is deemed necessary.
- If reasonably practical the level of noise to which employees are exposed will be reduced by engineering methods. SWH has a low noise and low vibration purchasing policy and will, where reasonably practicable, only purchase or hire vehicles, plant and equipment that are clearly compliant with the best standards available.
- Wherever noise level exposures remain, after engineering controls, above the Lower Action Value (currently 80dB) then personal Hearing Protection will be issued and must be worn in the affected 'zone'; a generic assessment of affected zones relating to typical plant and equipment will be included in the Construction Phase Health and Safety Plan.
- Noise will be minimised by turning off plant and equipment when not in use and locating plant away from properties wherever possible.

The use of low noise and low vibration equipment will minimise the impact of construction works on members of the public and on nearby fauna. All plant and vehicles working on site will be fitted with white noise reversing alarms.

3.2 Dust, Smoke, Vapour

It is anticipated that there will be relatively few activities likely to create dust, smoke or vapours. Activities that do lead to creation of dust will be kept to a minimum by enforcing a site speed limit of 5mph and damping down dusty materials in dry conditions using a towed water bowser with a spray bar. Cutting works that create dust will utilise dust suppression water pumps attached to cut-off saws.

Water for the bowser and dust suppression bottles will be sourced from a metered Hydrant.

3.3 De-Watering Arrangements and Disposal of Water

A desktop water feature survey has been undertaken to determine the extent of risk of contamination due to site activities and to identify those who could potentially be affected by any such contamination. This survey discovered that there is only one property within a 1 mile radius of the site. This is situated in Bowd which is upstream of the works and,

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consequently, could not be adversely affected by the construction activities. An email confirming this and a map indicating all local watercourses is included as Appendix H.

Management of water on site will be undertaken in accordance with the recommendations and requirements of the Environmental Statement Main Report March 2012 prepared for Devon County Council. Specifically, the following measures will be adopted:

The proposed works involves the installation of storm and foul drains. Once the surface water drainage system has been installed, surface water will be channelled into the storm drainage facilities. It is not anticipated that there will be a need for any de-watering. However, should it become necessary the operation will be carefully monitored, and current legislation will be adhered to, to ensure there is no pollution risk, any ground water will be discharged into a settlement lagoons constructed adjacent to the area of de-watering with a 300mm twinwall discharge pipe surrounded by bales of straw to prevent the discharge of suspended solids or other contaminants. Water will not be discharged directly into watercourses but will be allowed to disperse over grassy areas as recommended by Environment Agency guidelines. The arising silt from such lagoons will then be removed and allowed to drain before being removed to a licenced tip.

There will be no abstraction of water from streams or rivers for construction purposes. Water required for construction activities will be from mains supplies or be brought to site in bowsers.

Environment Agency Pollution Prevention Guidances PPG1, PPG5, PPG7, PPG13, PPG21, PPG22 and PPG26 will be complied with throughout the construction period.

Adherence to these procedures and guidelines will ensure that there is no risk to local water features from construction activities.

3.4 Construction Vehicle Movements In and Around Site

The Construction Traffic Management Plan is appended as Appendix C. The primary elements of this plan are as follows:

Access to the site from the highway will be from the C808. During Phases 1 and 2 of construction this will be at the location indicated on the phasing plan (drawing 4933/220, Appendix D). Upon construction of the permanent site entrance, a one way system (as identified in the Construction Traffic Management Plan) will be operated on site until such time as the temporary access road is removed upon completion of the phase 2 works. Accesses will be clearly signed using SWH finger boards. Suppliers will be advised of access and egress details when orders are placed. Prior to works commencing, a photographic conditions survey will be undertaken to include the public highway either side of the new recycling centre entrance.

The adjoining roads will be kept clean using a road sweeper on a regular basis.

All delivery drivers attending the site must report to the site office at the first point of the compound. Goods tickets will be checked to ensure they are the correct material for our site. They will then be directed to the correct drop off point and will be unloaded appropriately. Any hazardous deliveries to site will be supervised by a competent person to ensure safe delivery and implement the contingency plan should the need arise. Suppliers will be advised of the site working hours and instructed to make deliveries only

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within these hours. Where practical, suppliers will be instructed to make deliveries during off peak periods between 0900 and 1500 Hrs.

It is anticipated that there would be a maximum of 25 deliveries to site in any one day with an average of 10. Delivery vehicles will range in size from small, car derived vans to articulated lorries, depending upon the materials being delivered. The majority of vehicles are anticipated to be within the 10T to 20T range.

Site visitors will be required to report to the site office in the same way and will be directed to the car parking area.

Normal site hours will be 07:30 to 17:30 Monday to Friday and, on occasion, 07:30 to 16:00 Saturdays. It is not anticipated that there will be a need for night working. When carrying out works on the public highway, the working hours will be subject to any restrictions required by the highway authority e.g. off peak working.

Approximately 10 on site car parking spaces will be provided within the site compound area.

SWH has a commitment to continually improving environmental performance, ensuring employees at all levels of the business are aware of and actively involved in meeting the company's environmental aims and objectives. At site level we can help by reducing energy and resource consumption, switching off plant, generators and equipment when not in use.

Site staff and contractors are encouraged to use alternative methods of transport to get to work, use public transport or share lifts to work when possible. SWH now offer a cycle-to-work scheme. It is anticipated that there will be 10 – 20 construction operatives working on the new recycling centre at any one time. SWH aims to keep the number of vehicles transporting men to and from site to the minimum number that may be required during the working day. To this end, we operate crew cab type vehicles to avoid a one man one vehicle approach.

As part of the induction briefing, all members of staff will be encouraged to minimise vehicle movements by walking or cycling to work or by using public transport or share lifts to work when possible. A poster (Appendix F) will be displayed on the office and welfare notice boards encouraging staff to consider their transport to work arrangements to reduce the number of vehicle movements on the public highway and minimise the environmental impact they have. It is anticipated that the average number of vehicles used to transport SWH employees to and from site each day will be 5.

Wherever possible, SWH will endeavour to use suppliers and subcontractors from within a five mile radius of the site in order that vehicle movements are kept as short as possible.

3.5 Disposal of Waste Methodology, Waste Disposal Licence

The Site Waste Management plan is attached as Appendix E.

General office and canteen waste will be disposed of in a covered skip located within the site compound, The site will operate a waste segregation system i.e. separate skips clearly labelled for timber, plastics, hazardous waste, etc. and then disposed of by a Licensed

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Waste Carrier and all waste transfer notes will be kept with the site waste management plan. All Skips will be closely monitored to ensure no over filling or cross contamination. There will be no burning of waste on site. There is no foul sewer available on site so all foul water will be removed from site by a licensed contractor on a weekly basis. This contractor will provide a waste transfer/duty of care ticket a copy of which will be kept in the site waste management plan available in the site office.

It is not anticipated that the project will produce in excess of 500kg of hazardous waste during the expected timescale.

Suitable excavated material will be deposited within designated areas as structural fill. Any surplus excavated material from site will be transported from the point of excavation in dumpers to designated stockpile. Material will be heaped up until sufficient material is present to make haulage away a viable operation. This will be loaded into 4 or 6 wheel tipper Lorries using a 13T tracked excavator. The Lorries will be operated by a licensed waste carrier and will transport the material to a licensed off-site tip. SWH are also Registered Waste Carriers. All loads or multiple consignments will have a waste transfer note completed and the site waste management plan to be maintained.

3.6 Storage and Containment of Potential Contaminants.

3.6.1 Fuel and Oil

Refuelling will only take place in the site compound. Gas oil fuel for plant will be stored in a bunded locked fuel bowser in the site compound. Plant will be tracked to the fuel bowser for re-fuelling. Drip trays or nappy sacks will be used during the refuelling process. Petrol will be stored in 5ltr plastic proprietary marked fuel containers and stored in locked steel containers within the site compound, funnels or re-fuelling hoses will be used for re-fuelling plant.

A spill kit will be kept at the site compound within easy access to the fuel storage. Care to be taken during deliveries to ensure that no over filling occurs.

- Environment Agency pollution control Prevention Guidance will be adhered to.
- SWH site-specific emergency response plan will be prepared and implemented as required. All staff to be inducted regarding this plan.

3.6.2 Concrete Washout Facilities.

A dumpy bag will be suspended in the water tight skip which will be sited in the compound and clearly labelled as the concrete wash out. The concrete lorry will discharge into the dumpy bag. When the bag is half full the cured concrete will be added to the muck away stockpile. As and when required the water will be drawn off and taken off site by a licenced carrier for disposal. When the skip is half filled with concrete wash it will be collected by the licenced carrier for disposal. All duty of care/waste transfer tickets will be available on site and can be viewed in the site waste plan held in the site office.

3.6.3 Delivery and Storage of Hazardous Materials.

All visitors and delivery drivers must report to the site office at the first point of the compound. All materials will be checked to ensure they are clearly marked. Cement will be kept in the lock up.

All hazardous deliveries to site will be supervised by a competent person to ensure safe delivery and to implement the contingency plan should the need arise. The site induction will include our site emergency plans. Chemicals will be stored in a locked secure store and all other materials will be stored in accordance with the manufacturer's recommendations.

Fuel bowser will be locked when not in use. The delivery hose will be locked inside the bowser when not in use.

4.0 Wildlife Flora and Fauna

4.1 Potential Bat Roosts, And Reptiles

All works will be undertaken with in accordance with the requirements and recommendations of the Environmental Statement Main Report March 2012, the Reptile & Bat Survey and the Landscape and Ecological Management Plan included within the planning submission (Appendix G). In this case, no bats or reptiles have been located within the site. However, should evidence of the presence of these creatures be found during construction, work must stop in that area, the site manager should be informed and the Employer's Project Manager/Supervisor contacted for guidance.

4.2 Badger Setts

All works will be undertaken in accordance with the requirements and the recommendations of the Environmental Statement Main Report March 2012, the Reptile & Bat Survey and the Landscape and Ecological Management Plan included within the planning submission (Appendix G).

The location of a badger sett was originally identified and 20m exclusion zones were to be established in accordance with drawing B2300069 to prevent any construction personnel or equipment having an impact upon the badgers. A subsequent survey has identified a revised sett position and a 10m exclusion zone identified. Details of this zone are indicated on drawing 4933/28. This drawing and the ecologists report relating to this alteration are included as Appendix J.

Before any significant vegetation clearance or storage of materials is undertaken the Employers' ecologist will be afforded the opportunity to carry out a further investigation of the main sett to determine the current level of use.

4.3 Nesting Birds

All works will be undertaken in accordance with the requirements and recommendations of the Environmental Statement Main Report March 2012, the Nightjar Report included within the planning submission and the Landscape and Ecological Management Plan (Appendix G).

There are no specific species of birds identified as being present on site within the pre-construction surveys that require particular actions. However, all tree felling, hedge removal and scrub clearance required should, wherever possible, be carried out outside of the normal bird nesting season (from October to February inclusive). Should it be necessary to carry out any clearance of likely nesting sites during the nesting season, the Employers' Project Manager/Supervisor must be contacted and arrangements made for his ecologist to carry out inspections. If any occupied nests are found, construction works in at least a 5m buffer zone around the nest site should cease until any juvenile birds have fledged. No works shall start until written instructions have been issued by the Project Manager/Supervisor.

4.4 Tree Protection

All works will be undertaken in accordance with the requirements and the recommendations of the Environmental Statement Main Report March 2012 and the Arboricultural Survey included within the planning submission (Appendix G).

Prior to construction works commencing, suitable fencing shall be erected in accordance with the drawings contained with the recommendations contained within the arboricultural survey document. Prior to construction works and periodically throughout the scheme, the Site Manager will liaise with the Employers' Project Manager/Supervisor to arrange for his arboricultural supervisor to inspect the works and advise upon arboricultural matters.

4.5 General

In the event that any protected species/plants are discovered during the duration of the contract, the Project Manager/Supervisor will be informed along with the Environment Agency. All works will stop and the Employer's ecologist will be afforded access to carry out an assessment. Works will recommence only after receipt of written instructions from the Project Manager/Supervisor. There will be no lighting on site outside of the working hours of 0730 – 1730 hrs in order that the conservation interests of the local fauna are protected.

4.6 Mitigation

Prior to commencing any site clearance works, the Contractor shall erect bird, bat and dormouse boxes along the vegetated boundaries of the site in accordance with Section 3 of the Ecological Management Plan. The boxes shall be erected as per the manufacturer's instructions and located according to the Project Supervisor's instructions.

The number of boxes will be as follows:

- Bird boxes: 5 no. to be erected within the areas of retained trees as directed by DCC's ecologist.
- Bat boxes: 3 no. of type Schwegler 1FF or similar approved to be erected within retained trees.
- Dormouse boxes: 5 no. to be erected within retained hedgerows.

The new planting of a Native Tree and Shrub Mix in the hillock area (first phase of landscaping) is programmed to be undertaken early in the contract to provide a replacement habitat for the trees that need to be felled and early visual screening of the works. This area will be protected for the duration of the works with a suitable protective fencing. This area of planting and the tree protection fencing line will be as shown on drawing number 4933/207 (Appendix I)

5.0 Plant and Equipment

The planned works will require the use of;

- 32ft Steel Security Office/Welfare/Stores
- 20kva Generator
- Self-contained Toilet Unit
- Flat Bed Delivery Lorry with Hi-ab Crane
- 360° Excavators of varying sizes
- Mobile cranes of varying sizes
- MEWPs
- 3t, 6t and 9t Forward Tipping Dumpers
- 4 Wheel and 6 Wheel Tipper Lorries
- Asphalt Paver
- Transit Van
- 'Bomag' 120/135 Ride on Roller
- Towable diesel lighting tower
- Forward/Reverse Diesel Plate Compactor
- Cut-off Saw
- Chainsaw
- Petrol operated brush cutter/strimmer.
- Small Hand Tools
- Fuel bowser
- Two tool compressor
- Hand held pneumatic pokers and breakers

5.1 Reduction of Carbon Footprint

SWH has a commitment to continually improving environmental performance, ensuring employees at all levels of the business are aware of and actively involved in meeting the company's environmental aims and objectives. At site level we can help by reducing energy and resource consumption, switching off plant, generators and equipment when not in use.

5.2 Competence Requirements to Operate Plant and Equipment

Only trained, certificated, competent operatives will be allowed to operate cranes, diggers, dumpers and ride-on rollers. A record of all operatives' certificates will be kept in the Construction Phase Health and Safety Plan, in the site office.

5.3 Plant Maintenance.

All plant will come to site with a current and up to date record of service and an annual inspection certificate. An on site weekly inspection will be carried out by the Site Agent of all operated plant and recorded in the PUWER Plant Weekly Inspection Book. All routine

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plant maintenance to take place in the site compound only. Re fuelling of all plant to take place in the compound only, drip trays to be employed during the fuelling process.

5.4 Storage of Plant.

All plant to be returned to the secure compound at the end of the shift. It will be locked and isolated.

5.5 Highway Cleanliness

Outside of working hours, all site plant will remain within the site and compound. Delivery lorries will gain access via a metalled road or a long stone track so it is not envisaged that mud will be taken onto the public highway. In the event that mud does get onto the highway the appropriate warning signs will be erected and a road sweeper will be employed to clean the road. All arisings will be taken to a licenced tip.

6.0 Personnel Involved

6.1 Number of Contractors and Sub-Contractors

Estimated number of contractors and sub-contractors on site at a peak is 25

6.2 Supervision Arrangements Including Names of Person in Charge

Works to be supervised by Site Manager: Jim Wright

The Contracts Manager: Jerry Bricknell.

The Contracts Director: Peter Davies.

6.3 Access Requirements, Special Conditions

Visitors will be required to sign a site attendance register. A Notice board will be erected at the site entrance informing visitors and deliveries to contact the site manager/report to the site office where a banksman will be assigned as necessary.

All access roads will be kept clean using a road sweeper on a regular basis.

7.0 Order of Works

7.1 Order of Work

- Site Establishment/Security fencing
- Temporary access track construction
- Establish Contractor Exclusion Zones
- Environmental mitigation works (nest boxes etc.)
- Site Clearance & Topsoil Strip
- Tree planting
- Bulk Earthworks
- Construct gabion retaining walls
- Construct permanent access road
- Stats services into site
- Drainage
- Precast concrete walls
- Building construction
- In situ concrete slabs
- Street lighting
- Surfacing works
- Security fencing
- Final commissioning
- Demobilisation.

7.2 Method of Authorising start of work

No item of work will commence until those involved have received a briefing outlining the safety and ecological hazards. A Permit to Dig will be issued prior to excavations commencing.

8.0 Briefing Arrangements

8.1 Person Responsible For Briefing Environmental Method Statements

The Project Manager, Jim Wright, is responsible for briefing the method statement.

8.2 How Is Understanding Confirmed?

Understanding will be confirmed by an invitation to ask any questions with regard to the work that the operatives may be unsure about and also asking questions of the operatives during the briefing to ensure understanding. Work on site will also be monitored to ensure understanding and compliance with the method statement.

8.3 Method Of Recording Briefing

The briefing will be recorded in SWH Construction Phase Health, Safety and Environment Plan Appendix 2 'Register Of Tool Box Talks And Specific Training' form.

Identification Of Personnel To Be Given Full Or Part Briefing

All operatives will be given a part briefing with all salient environmental and safety points being included. As work progresses and operatives are required to carry out a new task they will be re-briefed on that element of the method statement relative to the work they are about to carry out. Any supervising staff or staff employed on site to cover during holiday periods will be given a briefing and required to read the method statement in its complete form.

9.0 Communication and Liaison

9.1 Identity Of Specific Contacts Additional To Those In H&S Plan

TBA

9.2 Communication And Liaison Arrangements

Communications and liaisons with SWH should be with the Site Manager.

10.0 Emergency Plans

10.1 Contact Phone Numbers

Environment agency:	Environment Agency: 0800 807060 For office and management queries 01392 316116 Richard Tugwell is the contact
SWH 24 hr Emergency Numbers:	Jim Wright (Site Manager) 07816 136320
	Jerry Bricknell (Contracts Manager) 07814 507477
	Peter Davies (Construction Manager) 07767 328472
Emergency Services:	Fire, Ambulance, Police 999 or 122
BT:	0800 9173993
WPD:	0800 365900
South West Water:	0800 1691144
Wales and West Utilities:	0800 111999
Hospital:	Victoria Hospital, Sidmouth, EX10 8EW, 01395 512482

10.2 Contingency Plans

In the event of an environmental emergency:

- Report immediately to the Site Manager, Jim Wright to implement immediate action.
- Site Manager to inform SWH Environmental advisor who will contact...
- The Environment Agency on the **Emergency hotline number 0800 80 70 60.**
- The Site Manager will inform the Project Manager/Supervisor and record the incident within this Plan

In the event of spillage:

- The spill shall be contained using absorbent material such as the booms in the spill kit or soil.
- Report immediately to SWH Site Manager, (Jim Wright).
- The Site Manager will inform the Project Manager/Supervisor.
- The Site Manager will record the incident, report to the SWH SHEQ team, complete a SAFE01 form and record the incident within this Plan.
- If the spill is the result of a leak from an item of plant, the Site Manager will call out a fitter to repair the machine on site without moving the machine from the point of the leak.
- Any Contaminated material will be removed from site by an appropriate waste carrier. Waste transfer/duty of care tickets will be held in the waste management plan. The spill kit can be found in the site office.

10.3 Accident Reporting and Investigation

All accidents and incidents must be reported to the SWH Site Manager. Accidents and incidents will then be reported in accordance with SWH Incident and Accident Guide Form SAFE 10 Appendix A which complies with current legislation.

Table B – Periodic CEMP Review

Sidmouth Recycling Centre					Reviewed By:		
PROPOSED REVIEW PERIOD	DUE DATE OF REVIEW	ACTUAL DATE OF REVIEW	SECTIONS AMENDED	CEMP ISSUE No.	Contractor's Project Manager/Site Agent	DCC Project Manager/Supervisor	Environmental Manager/Consultant
3 Weeks before first access date			All	A			
3 months after start of the works							
6 months after start of the works							
9 Months after start of the works							
At completion							