

chalcroft

construction built on teamwork

Environmental Presentation

Contents

1. Environmental Policy and Arrangements
2. Aspects and Impacts Register
3. Legal Register
4. Environmental Management Plan
5. Clean-up Notice
6. Waste Transfer and Consignment Notes
7. Nuisance
8. Energy
9. Waste Management
10. Flora/Fauna
11. Permits/Consents
12. Pollution Control
13. Emergency Response
14. Communication
15. Key information links

Environmental Policy and Arrangements

- Chalcroft's Environmental Policy and all associated information is located in Sharepoint within CIMS/Departments/EHS/Company Policies.
- The policy provides information on the legal duties and requirements of the business as well as detailed information on the procedures and arrangements for managing all aspects of the environment through our operations and activities.
- The policy statement outlines the commitment and values the business shall strive to achieve and maintain to protect the environment and its stakeholders ie clients, employees, members of the public, suppliers, subcontractors.
- The policy is updated by the EHS Director and reviewed by the Safety Committee and the Board of Directors on an annual basis or after any significant event or change. Details of any amendments made will be emailed companywide and are listed on Page 2 of the policy.
- Site Manager roles and responsibilities are located in Section 2.3 on Page 18.
- The company sets annual KPI's to state the targets and objectives to achieve and assess our performance criteria against. The KPI's are available in CIMS/Dept/EHS/KPI's.
- [Link to Chalcroft's Environmental Policy](#)
- [Link to the Environmental KPI's](#)

Environmental Policy and Arrangements

- All Chalcroft projects regardless of size, value, number of contractors on site or duration must have a Chalcroft representative on site with suitable knowledge, experience and capability to manage the works taking place and ensure all safety and environmental requirements are being met. Where the representative on site changes during a project a Handover Form must be completed on every occasion.
- Monthly reports are provided to the Board of Directors on any environmental incidents, changes in legislation, policy or procedures.
- Internal audits are undertaken as part of the ISO14001 process assessed against standard requirements. A template of the audit report and questions can be viewed in CIMS/Audits/ Internal Audits.
- Site inspections and audits are undertaken by the EHS Department to ensure compliance to the policy and associated procedures and processes and any other arrangements ie Environmental Management Plan.
- Noncompliance to statutory and/or company policy and procedures that have, or may result in an environmental incident and potential prosecution may result in the issuing of a Disciplinary Yellow or Red Card and/or a Non-conformity through the ISO9001 process.
- [Link to Chalcroft's Internal Audit Report](#)

Aspects and Impacts Register

- An Aspect and Impact Register provides, in a clear and concise format, the type of aspects that the businesses operations and activities may undertake and the potential impacts, implications or effects on the environment as a result of the aspect.
- It is a requirement of the ISO14001 international standard in environmental management systems to have an aspects register and determine which of those aspects will have a *significant* impact on the environment.
- A significant impact is defined as; 'those that in the event of an accident or incident/or under emergency conditions (despite or in breach of controls) may have major legal, environmental and commercial implications. These impacts have been assessed as potentially causing long term or serious affects on the environment and can have catastrophic consequences in the event of an incident. Items that are noted as having the potential for causing significant impacts must be reviewed and assessed and additional controls or mitigation methods implemented wherever possible. In the first instance the avoidance of operations or activities that may cause the significant impact are to be considered.
- The significant impacts listed in Chalcrofts Aspect and Impacts Register are:
 - Site dewatering/discharge
 - Site water/material run-off, disposal
 - Chemical, oil storage
 - Onsite refuelling
 - Controlled waste
 - Hazardous waste
 - Fossil fuel use
 - Contaminated land
 - Work near/on water
 - Fire (smoke/water run-off)
- [Link to Chalcroft's Aspects and Impacts Register](#)

Legal Register

- The Legal Register is a collection of legislation that is relevant to Chalcroft's operations and activities and details how it is applied within the business.
- The register works in conjunction with the Aspects and Impacts Register, the company policy and documentation to form a continual link of the environmental management system.
- The Legal Register is reviewed on an annual basis by the EHS Director or is updated when any legislation or relevant process against it changes.
- The register undergoes a 'legal compliance' audit on an annual basis by an external specialist to ensure it is up to date and our processes meet statutory requirements.
- [Link to the Legal Register](#)

Environmental Management Plan

- The Environmental Management Plan (EMP) is created for each notifiable construction project and details how each environmental impact will be addressed specifically for that job.
- The EMP is established by the EHS Department in conjunction with the Construction Phase Plan.
- Projects teams will have an input into the EMP taking into account legal, contractual and site specific information.
- The EMP forms part of the Handover from the EHS Department to site management at the start of a project.
- Checks on compliance to the EMP will be undertaken during EHS Department site inspections and audits as well as ISO14001 internal and external audits.
- Site management are required to ensure the EMP is complied to and any changes are to be updated accordingly.
- The EMP covers:
 - Planning requirements
 - Contaminated Land
 - Noise
 - Vibration
 - Dust
 - Light
 - Air Pollution
 - Waste
 - Hazardous Waste
 - Water Pollution
 - Delivery and storage of fuel and chemicals
 - Dewatering/Discharge
 - Water extraction
 - Flood Protection
 - Control of Zoonosis
 - Control of Invasive/Toxic plants
 - Protected species
 - Protection of Ecology
 - Energy use
 - Permits/Consents
 - Inspections and Audits
 - Carbon emissions
 - Communication
 - Management and training
 - Emergency response
 - Drill/test
- [Link to the EMP](#)

Clean-up Notice

- The Clean-up Notice is a formal process to be utilised to inform a subcontractor that they have failed to suitably manage or control their waste or housekeeping.
- The notice details who is involved, the area or areas requiring action, the timeframe from within action must be taken (12, 24 or 72 hrs), the date and time from which the action required commences.
- The Clean-up Notice is not only critical to ensure good waste management and housekeeping practices are maintained and sites are kept tidy and safe, but ensures that where any costs occurred by Chalcroft for inaction to the notice can be applied back to the subcontractor.
- When issuing a Clean-up Notice ensure copies are sent to all in the project team so they are aware of the action required.
- [Link to the Clean-up Notice](#)

Waste Transfer and Consignment Notes

- Waste Transfer Notes (WTN) and Consignment Notes are documents that detail the transfer of waste from one person to another and provides a clear audit trail from when the waste is produced to when it is disposed of.
- Notes are required for *all* waste leaving a site or office regardless of amount, type or how it is contained.
- All waste producers (Chalcroft sites and offices) have a legal duty of care therefore WTN's or Consignment Notes are legally required documents. Failure to produce these and ensure they are correct can result in prosecution.
- Waste Transfer Notes must be obtained for all inert or non-hazardous waste. Consignment Notes must be obtained for all hazardous waste.
- Copies of Notes are to be kept for a minimum period of two years for auditing purposes which may be undertaken internally or through the Environment Agency, SEPA or the local authority for a project or office.
- Checks must be made on the person the waste is being transferred to to ensure they have the relevant registration, permit or exemption. Waste must not be given to anyone or any company that does not have the appropriate licence.
- Chalcroft holds a valid Waste Carriers Licence. This enables the company to transfer waste for disposal, excluding hazardous waste. A WTN must still be issued and a Chalcroft WTN template can be obtained from CIMS.
- A WTN or Consignment Note must include the following:
 - A description of the waste
 - How the waste is contained or packaged
 - The quantity of the waste
 - The place, date and time of transfer
 - The name and address of both parties
 - Details of the permit, licence or exemption of the person receiving the waste
 - The appropriate European Waste Catalogue (EWC) code for the waste (list is on second tab of Chalcroft WTN)
 - Chalcroft's Standard Industry Code (SIC) which is the code allocated for the type of project (list on WTN tab)
- [Link to Chalcroft WTN](#)

Nuisance

- Nuisance is defined as that which can cause a disturbance, ill health, damage or serious or unreasonable interference.
- Within the construction industry nuisance generally refers to:
 - Noise
 - Dust
 - Vibration
 - Light
 - Odours/fumes
- Considerable efforts must be made in all circumstances to prevent and maintain the cause or effect of nuisance. This may be through the use alternate plant and equipment, ensuring dampening down methods are utilised, reducing, limiting or alternating hours of operation, positioning of equipment or use of barriers or sound acoustic fencing.
- The Environmental Management Plan developed with the project team should address any key nuisance activities however subcontractor RAMS must be reviewed considering the effect and mitigation of nuisance.
- A Section 61 Notice may be applied for to a local authority of a project outlining the construction activities taking place and how the nuisance, specifically noise, shall be managed. Section 61 Notices may be a requirement of planning conditions especially for developments within residential areas.
- A Section 60 Notice may be issued by the local authority onto a project where there have been complaints of nuisance. This will enforce the cessation of activities and may have a significant impact on a program and costs.
- Proactive action is imperative to limit the amount of nuisance from construction activities, minimise the effect on the environment, maintain positive community and client relations and prevent a notice being served.

Energy

- Nearly every aspect of construction uses energy, through the manufacturing process of equipment and materials, to the transportation of materials to site, the operation of plant and equipment, the use of workers vehicles to and from site to the welfare facilities lighting and heating.
- The use of energy, specifically that of fossil fuel (gas and oil) is of key consideration for construction projects and all efforts to reduce the use or need of fossil fuel is critical. Not only does the use of fossil fuel speed up its depletion but the impact on the environment in its use is significant:
 - Energy from fossil fuels consumed in the construction and operation of buildings accounts for approximately half of the UK's emissions of carbon dioxide.
 - Construction materials account for 20% of the UK's ecological footprint.
 - 19% of the UK's total greenhouse gas emissions are as a result of construction activities.
 - 30% of all UK freight transport is used for construction purposes.
- Methods to reduce the use and effect of fossil fuel and limit energy waste:
 - Using energy efficient welfare facilities with PIR lighting, thermostats, insulated walls and double glazing
 - Promoting car sharing for site workers
 - Utilising local trades and subcontractors wherever possible
 - Co-ordinating deliveries and ensuring the use of heavy goods vehicles are maximised
 - Metering water, gas and electricity use to monitor and control
 - Ensuring only modern and well maintained equipment and plant is used on site
 - Use and promotion of LED lighting in construction
 - Minimise use of generators and ensure where used are of adequate capacity and are efficient
 - Ensure temporary electrics are sited in close proximity to use to prevent power loss and improve efficiency

Waste Management

- The construction industry is responsible for producing over 100 million tonnes of construction, demolition and excavation waste every year – around one third of all waste in the UK. In England alone almost 13 million tonnes of this waste ends up in landfill.
- The benefits of good waste management include:
 - Lower disposal costs ie reduced skip hire, landfill tax
 - Avoidance of waste transportation costs
 - Greater reuse/recycling of materials on site, saving on raw materials purchased
 - Lower levels of material wastage and; reduced impact on landfill space and long term environmental impacts
- Examples of good waste management practice on site:

Buying and storing materials

- Order the amount of materials you need as accurately as possible
- Arrange for 'just in time' deliveries to reduce storage and material losses
- Consider the source of materials (Is the company certified with environmental standards? Quality materials and recycled materials may prove cheaper)
- Consider the packaging used for materials delivered to the site - can this be reduced or recycled.
- Ensure that deliveries are rejected if damaged/incomplete (and contact the Group Buyer to provide feedback)
- Make sure storage areas are safe, secure and weatherproof (where required)
- Store liquids away from drains, burns and in bunded areas to prevent pollution

Site Activities

- Ensure options for the use of reclaimed and recycled construction materials, that meet the materials specification are considered
- Recycle suitable spoil, demolition materials and surplus construction material arising from the works on site to avoid the need to transport materials
- Keep the site tidy to reduce material losses and waste

Training and awareness

- Promote good practice awareness as part of the site induction / training for workers onsite

Waste Segregation

- Segregate different types of waste as they are generated using different skips where possible

Staying on the right side of the law

- Complete waste transfer notes before any waste leaves the site
- Ensure waste carriers have a valid waste carriers certificate and all wastes are disposed of at a correctly licensed site

Flora/Fauna

- Flora is the plant life within a particular region and time and Fauna is the animal life (birds, fish, reptiles etc) within a particular region and time.
- Construction activities and operations can often have an effect on the flora and fauna even on brownfield or within well established existing live environments.
- Environmental Impact Assessments (EIA) are often undertaken to assess an area pre-construction for existing habitats and species, collect and analyse ecological data, determine impacts of the construction and end use and its significance and, design and implement required mitigation or monitoring measures or, what restrictions may apply.
- Where environmental impact assessments or ecology surveys have been undertaken the requirements for mitigation or restrictions must be adhered to. This may refer to Tree Preservation Orders, maintaining distances from habitat areas, delaying works in areas during breeding periods or the erection of amphibian or reptile fencing.
- Where assessments or surveys have not been completed consideration must still be made at all times as to the effect works will have on the immediate environment. Where significant aspects of flora or fauna is or may be disturbed contact must be made with other members of the project team and/or the EHS Department to investigate.
- Where potential protected species are discovered or suspected then works in the immediate vicinity must cease until an investigation is complete. Disruption to breeding fauna or destroying of flora habitats could result in prosecution.
- Protected areas such as National Parks, areas of outstanding natural beauty or sites of special scientific interest or wetlands may have considerable restrictions and no construction works should proceed until consultation with the appropriate authorities has been made and requirements for controls established.

Permits/Consents

- There are a number of permits and consents required under environmental law, local council or water/sewage authorities.
- Failure to ensure the correct permit of consent is obtained could result in significant fines or even prosecution. This is especially the case where dewatering or discharge results in pollution of local watercourses.
- The following is a list of permits and consents that may be applicable to a project:
 - Hazardous waste exemption
 - Trade effluent discharge to foul sewer
 - Water discharge/dewater to foul sewer
 - Water discharge/dewater to watercourse/river/stream
 - Section 61 noise consent
 - Crushing of waste on site
 - Reuse of crushed waste
- No dewatering or discharge of water, even if it is not contaminated, into a watercourse, drain or foul sewer must be undertaken without a permit. Regardless of how little amount there is.
- To see the full list of permits and consents, their requirements and where to apply click on the following link. Some consents may take a number of weeks for approval.
- [Link to Environmental Permits and Consents](#)

Pollution Control

- There are three main types of pollution that result from construction activities; Noise, Air and Water. Noise and Air are covered under Nuisance but the main risk to environmental damage and effect is through water pollution.
- The causes of water pollution include:
 - Surface run-off
 - Diesel, oil, chemical, paints, solvents spill
- When land is cleared it causes soil erosion that leads to silt-bearing run-off and sediment pollution. Silt and soil that runs into natural waterways turns them turbid, which restricts sunlight filtration and destroys aquatic life.
- Surface water run-off also carries other pollutants from the site, such as diesel and oil, toxic chemicals, and building materials like cement. When these substances get into waterways they poison water life and any animal that drinks from them. Pollutants on sites can also soak into the groundwater, a source of human drinking water. Once contaminated, groundwater is much more difficult to treat than surface water.
- Diesel, oil or other pollutants can have devastating effects on water life and quality and focus on the control of these contaminants to eliminate the risk should be high.
- Pollution control methods include:
 - Locate refuelling and storage areas on hardstanding, within bunds or on designated storage pallets
 - Keep hazardous/toxic liquids at least 10 meters away from all watercourses and drainage points
 - Ensure cement wash out areas are clear of watercourses and drainage points
 - Cover or protect drains that may be at risk
 - Prevent run-off or wash outs by maintaining vegetation wherever possible or create natural bunds
 - Ensure settling ponds or screening of water is carried out and discharge only uncontaminated water under permit
- [Link to Pollution Prevention Guidance](#)

Emergency Response

- A key aspect to dealing with the environment is ensuring that in the event of an incident a robust emergency response is implemented to prevent harm and ensure any pollution is controlled and removed quickly and effectively.
- The Environmental Policy details a number of emergency responses to be applied depending on the event.
- These include:
 - Air Pollution (dust control, dampening, wheel washes, emission control, ceasing operations)
 - Contaminated Land (Sampling to determine nature and requirements, run-off bunds)
 - Protection of Ecology (erection of barriers/fencing, contact with specialists/advisory bodies)
 - Noise and Vibration (cessation of activity, erection of acoustic barriers, use of alternate equipment)
 - Waste Management (liquid waste – stop flow, utilise spill kits, relocate/secure source)
 - Waste Management (solid waste – immediately retrieved, source secured)
 - Waste Management (odours – removal of source, use of covered/secured skips/bins)
 - Water Pollution (source secured, spill kits, bunding of material, create physical diversion)
- [Link to Environmental Policy](#)

Communication

- Various methods of communication can be utilised to ensure the requirements to control, eliminate or reduce environmental impacts are understood and maintained by all stakeholders (clients, subcontractors, suppliers, employees, visitors, members of the public):

- Pre-start meetings
- Subcontractor meetings
- Subcontract and supplier orders
- Chalcroft prequalification questionnaire
- Site Inductions
- Workshops
- Tool box talks
- Site Safety Committees
- Posters
- Alerts
- Site meetings
- Site audits and inspection reports
- Neighbour letters
- Handovers

- [Link to EHS Bulletin](#)

Key information links

- The following links provide access to Chalcroft information and external resources to assist in understanding and addressing key environmental topics:

- [Chalcroft Environmental Information](#)

- [Chalcroft Environmental Policy](#)

- [Pollution Prevention Guidance](#)

- [Environment Agency](#)

- [Scottish Environment Agency](#)

- [Netregs](#)

- [Waste](#)

- [Waste Carrier online check](#)

chalcroft

construction built on teamwork