ENVIRONMENTAL POLICY

Jim Redfern Associates (JRA) is a Mechanical and Electrical Construction company operating in the United Kingdom. We are committed to maintaining high standards throughout our operations, with particular regard to improving our significant environmental impacts, including the reduction and control of waste and prevention of pollution.

Specifically, we are committed to:

- *Establishing and maintaining an Environmental Management System compliant with all requirements.*

- *Complying with existing and future relevant environmental legislation, corporate and other requirements to which JRA subscribes.*

- *Providing a framework for setting and reviewing our environmental objectives, targets, management programmes and policy, to ensure continuous improvement in our environmental performance.*

- *Wherever possible influencing project design by offering solutions to reduce environmental impact.*

- *Considering environmental factors during material selection and procurement for a project wherever we have an influence.*

- *Carrying out an assessment at each site and developing specific environmental management plans to mitigate impacts such as noise, dust, odour, waste and emergency situations, and taking into consideration local community concerns and the control of hazardous substances.*

- *Developing and implementing a system to monitor performance of company vehicles, and the energy consumption of our buildings.*

- *Working with our suppliers and sub-contractors to improve both parties' environmental performance.*

Jim Redfern
Managing Director

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SECTION SUBJECT

INTRODUCTION

The construction industry is a major user of the earth's resources, and the scale of our operations often impinges on local communities, affecting their day-to-day lives and well-being. The roads, buildings and infrastructure projects we construct become part of the landscape, which is an everyday reminder of what we do. In a very real way se are affecting the environment in which everyone will live and work in the future.

Jim Redfern Associates (JRA) takes this responsibility very seriously. Caring for the environment has been part of our culture for many years and every working day we genuinely endeavour to work in line with the highest environmental principles.

JRA fully supports the aims and objectives of the Environmental Protection Act 1990, together with associated statutory provisions, and will co-operate fully with the requirements of the Environment Agency, Local Authorities and the Water Companies.

Everyone working in the construction industry has a special and shared responsibility for the environment. The Managing Director of JRA is committed to maintaining high environmental standards throughout the Company's operations. The Company Aims stated in this document are to secure, so far as is reasonably practicable, the environmental well being of employees and others, including the general public, who may be affected by our operations.

Formal amendment to this document is the responsibility of the Environmental Manager.

The purpose of this document is to define the Environmental Management System operated by JRA, which is based on the requirements of BS EN ISO 14001:1996, and is complementary to JRA's Quality Assurance and Health and Safety Management Systems.

This document serves as a cross-reference between the requirements of BS EN ISO 14001:1996, and other environmental documentation in use such as the Company Procedures and details contained within respective Site Management Plans.

This policy document shall be made available to all employees and any other interested parties. Staff appointed responsible for the management and implementation of JRA's environmental policy will ensure that a copy is displayed in a prominent position at all JRA temporary and permanent offices.

It is intended to assist every individual and organisation working with JRA in understanding the environmental considerations which should influence them in:

i) The procurement and use of materials and products, especially oils, glues, paints, preservatives and other materials, which may contain pollutants.

ii) The use of non-sustainable resources.

iii) Standards of handling and storage of construction materials, particularly those of a toxic nature or containing hazardous substances.

iv) Sound working practices, especially in preventing pollution and ensuring proper waste management.

v) Operating procedures designed to encourage efficiency and waste minimisation.

Construction activities shall be carefully planned to avoid unnecessary nuisance, disruption of natural and wildlife habitats, destruction of trees and other landscape features. Proper safeguards for the protection of features of particular historic or conservation significance are especially important.

Commissioning procedures for services shall be clearly defined to prevent any risk of pollutant emissions during handling and testing.

Decommissioning procedures shall be equally well defined.

PRIME CONCERNS

1.0

1.1 As Civil Engineering and Building Contractors, we deal every day with a number of environmental problems that relate specifically to our industry.

The Key areas of concern are:

1.2 NOISE POLLUTION
Particularly where it may affect people on the site, and the quality of life for people living and working in the vicinity.

1.3 VISUAL POLLUTION
Including site boards, site cleanliness and general site tidiness.

1.4 AIR POLLUTION
Where it poses a risk to people on site, in the vicinity or further afield.

1.5 WATER POLLUTION
As defined in the Water Resources Act 1991 covering controlled waters and all watercourses and water in underground strata. This is a major concern for our operations as surface water gullies and road drains usually discharge into controlled waters.

1.6 WASTE MATERIALS AND EFFLUENT
As defined in the Waste Management Licensing Regulations 1994 and the Special Waste Regulations 1996, which applies to the most hazardous wastes. These are substances which become waste when discard, such as:

a) Rubble, concrete and other solids which do not decompose
b) Waste which will rod and decompose such as food, paper and timber
c) Wastes which are dangerous to dispose of or store

1.7 CONTAMINATED LAND
Its increasing use for re-development poses special problems and requires particular consideration for its rehabilitation

1.8 WASTEFUL PRACTICES
Which make inefficient use of materials and consumables, both in the office and on-site, as part of the construction process.

PLANNING

2.0

2.1 Our main aim is to plan activities and implement control measures to ensure compliance with Client requirements and relevant statutory provisions associated with our works. We seek to do this in such a way that we avoid the need for complaint or issue of enforcement (improvement or prohibition) notice, or prosecution.

These requirements are detailed within a specific Site Management Plan for each project.

We shall

2.2 MITIGATE THE ENVIRONMENTAL IMPACT OF OUR OPERATIONS
by paying particular attention to the concerns of the local and wider community affected.

2.3 MINIMISE USE OF THE EARTH'S RESOURCES
by using appropriate recycling procedures and materials from renewable sources wherever practical.

2.4 APPLY BEST APPROPRIATE ENVIRONMENTAL STANDARDS
at all our sites and offices wherever we have influence.

2.5 ENCOURAGE ENVIRONMENTAL AWARENESS
among staff, suppliers and sub-contractors, by working with companies whose environmental attitude reflects our own, and increase awareness by appropriate training.

2.6 BE ENVIRONMENTALLY FORWARD THINKING
by reviewing our policy in line with the latest environmental concerns as they unfold in the everyday world.

2.7 SEEK ALTERNATIVE SOLUTIONS
where we have influence over the design elements of our projects, evaluating alternatives with reduced environmental impact where possible.

2.8 Detailed environmental aspects and impacts, together with objectives and targets are identified and recorded in accordance with:

Company Procedure

No 24 Environmental Aspects and Impacts
No 25 Environmental Objectives and Targets
No 26 Environmental Management Programme

2.9 Prior to carrying out any activities on site, specific environmental impacts are considered and discussed, including legal and other requirements.

2.10 The results of these discussions are recorded and actioned as part of the Risk Assessment and Health and Safety planning.

2.11 The considerations, applicable legislation and actions to be undertaken are detailed within each Site Management Plan.

2.12 Where it is our responsibility to obtain prior consent to certain activities being carried out, these shall be identified and actioned accordingly.

2.13 Principal environmental legislation application to JRA's activities shall be identified, with a register maintained and reviewed by Environmental Manager.

IMPLEMENTATION AND OPERATION

3.0

3.1 Everybody in the Company has a duty of care to carry out activities in a responsible manner with due concern for the environment. This care operates at an individual, managerial and Company level.

3.2 Our Management Systems are designed to meet the concerns already outlined. We take into account the necessary actions to be taken during planning, design and construction. Prime consideration is given to issues which are of immediate concern to the general public.

3.3 The Company is managed by the Managing Director, with the structure for environmental management as detailed below:

3.4 The Managing Director is ultimately responsible for environmental issues, and together with the Environmental Manager ensures that the Company objectives and system are implemented.

3.5 The system is implemented by preparation of Site Management Plans, incorporating specific requirements for the site concerned. These include requirements identified in documents produced by the Employer, together with documented Company management procedures which ensure compliance with legislation, regulations and codes of practice relevant to the environment

3.7 IMPACT ASSESSMENT Aspects of our activities which have an impact on the environment shall be identified, and we shall endeavour to mitigate their impact by considering issues such as land remediation, material usage and waste control.

3.8 SITE ESTABLISHMENT This will be implemented in such a way that likely causes of environmental nuisance are eliminated or minimised. In particular, boundary fencing and site screening will be of good appearance so that the passing public and local residents will have no cause to complain about the visual impact of our operation.

3.9 WORK METHODS Operations with environmental effect shall be carried out in accordance with detailed method statements. Company management procedures and details identified within specific Site Management Plans, together with any relevant codes of practice produced by statutory/regulatory bodies.

3.10 COMMUNITY RELATIONS We will inform appropriate parties of how and when our operations will affect them, through public meetings, notices, and signage or by verbal or written means. Where relevant we will make contact with residential associations, and implement a public relations programme to acquaint the local community with the essential nature of our operations.

3.11 COMPETENCE Senior Management assesses competence for specific tasks and reference is made to qualifications and details of experience maintained by the Personnel Department.

3.12 TRAINING Training requirements are identified by Senior Managers or requested by individuals responsible for an activity.

3.13 Training, display and issue of Company policy promote environmental awareness.

3.14 Documents relating to environmental issues shall be controlled in accordance with Company management procedures to ensure that their locations is known, that they are identifiable, of correct/current status and are stored correctly.

3.15 Emergency requirements shall be detailed within the Site Management Plan where identified as necessary or specified within contract documents. These shall include details of provisions and procedures for control of incidents, such as oil spillage, to prevent detrimental effects on the environment. Where necessary, these measures may be tested by carrying out an exercise such as a fire drill.

3.16 Arrangements for the disposal of redundant equipment and construction materials shall be controlled, especially those containing ozone depleting substances, hazardous substances and other pollutants.

3.17 Where demolition works are required, a high standard of environmental performance shall be enforced, and every opportunity taken to maximise recycling of waste materials.

3.18 Hand-over documentation, including relevant construction records, shall be prepared identifying, in particular, any materials and equipment dependent on substances which may cause pollution.

3.19 Company procedures and details, relating to Implementation and Operation:

Company Procedure

No 2 Contract Review
No 3 Document and Data Control
No 5 Purchasing
No 6 Control of Customer Supplied Product
No 7 Product Identification and Traceability
No 8 Inspection and Testing

No 9 Measure and Testing Equipment
No 12 Handling, Storage, Packaging, Preservation and Delivery
No 16 Design Control
No 20 Personnel and Training
No 24 Environmental Aspects and Impacts
No 25 Environmental Objectives and Targets
No 26 Environmental Management Programme

Quality Manual

Section 11 Process Control Section
23 Servicing

CHECKING AND CORRECTIVE ACTION

4.0

4.1 *A Health and Safety Environmental Planning Meeting is held at four weekly intervals on each contract, at which environmental issues identified within the Site Management Plan are discussed.*

4.2 *Regular inspections are undertaken during construction to ensure that work is being carried out in an environmentally sensitive manner until the project is complete.*

4.3 *System auditing shall also be carried out to ensure that the Company policy and objectives are being complied with.*

4.4 *All monitoring/measure and test equipment shall be of known status in relation to recognised standards, with records of location and findings maintained accordingly.*

4.5 *Any non-conformance or incident regarding an environmental issue shall be recorded with appropriate correct and preventative action identified and implemented.*

4.6 Upon completion of a site, environmental records shall be retained for the contract-specified period, usually a minimum of 12 months, and shall only be destroyed after checking the legal requirements for retention.

4.7 Where a complaint is raised, prompt action will be taken to resolve the situation to avoid further upset. In every case we will aim to provide a satisfactory solution so that there should be no reason for local enforcing authority involvement.

4.8 Company procedures and details relating to 'Checking and Corrective Action':

Company Procedure

No 1 Management Review
No 8 Inspection and Testing
No 9 Measuring and Testing Equipment
No 10Control of Non-Conforming Product
No 11Corrective and Preventative Action
No 13Internal Auditing
No 14Control of Quality Records
No 15Customer Complaints

Quality Manual Section

14 Inspection and Test Status Section
21 Statistical Techniques

PREVENTATIVE MEASURES

5.0

5.1 NOISE POLLUTION

JRA recognises that noise is a very sensitive issue. For this reason our operations will be controlled to comply with the Control of Pollution Action 1974.

5.2 To help meet this objective we will carry out a noise survey in areas of concern before commencing operations. This will be especially important when operating near hospitals, schools, residential areas and places of work.

We shall:

a) *Keep noise levels to a minimum, and within the ambient level which exists in the site vicinity.*

b) *Consider all alternative construction methods which offer the minimum noise levels.*

c) *Maintain plant to ensure optimum performance and to eliminate avoidable noise.*

d) *Use noise reduction screens where necessary.*

e) *Restrict working hours to avoid particularly noise-sensitive items, such as evenings, wherever possible.*

5.3 VISUAL POLLUTION

Perception of correct environmental behaviour is often influenced by a variety of visual signals. We will do everything we can not only to behave in an environmentally sensitive way, but also t be seen to be doing so.

The following actions will therefore be taken in and around our operational sites.

a) *Site boards and publicity information signs will be kept clean and will comply with local requirements.*

b) *Access routes will be properly marked.*

c) *Good site tidiness will be an ongoing objective with materials properly stored, rubbish regularly cleared and vehicles sensibly parked.*

5.4 AIRBORNE POLLUTION

The effects of airborne pollution shall be considered by site personnel. Fundamental factors they will need to consider include:

a) *The ease with which particles contained in dust and smoke can spread, especially in strong or prevailing winds.*

b) *The consequent danger to people in the immediate area and further afield.*

c) *How gases and dust can contaminate crops, enter the food chain and ultimately pose a real threat to the general population.*

d) *How airborne acids and gases can attack the fabric of buildings and other structures.*

5.5 *Where operations will create a large amount of dust, appropriate actions will be taken to keep it to a minimum. Operations to be controlled in this way include:*

a) *Rubbish dumping in skips. Sheeting shall be used to prevent the escape of dust, particularly during transportation.*

b) *Mechanical raking-out of mortar joints and similar operations. To mitigate the effect, a water suppressant or vacuum device will be used.*

c) *Earthworks/Haulage routes on site Dust will be controlled at source using vehicle speed restrictions and/or damping down procedures. Precautions will be taken to ensure that water used in the damping down process, which may have become contaminated, does not run into a watercourse or sewer.*

5.6 *The use of plant and machinery close to residential dwellings will be closely controlled so that the effects of exhaust emissions are restricted. Similar consideration will be given to the routing of vehicles.*

5.7 *WATER POLLUTION*
We will take every reasonable precaution to ensure the protection of rivers, streams and other watercourses.

a) *Discharge consents will be obtained from the Local Authority or Environmental Agency before discharge into a watercourse takes place, and provisions made to ensure such discharge is safe.*

b) *Where there is a risk of contamination to a watercourse, control measures shall be identified and agreed with the Environment Agency, which may include monitoring and testing discharge.*

c) *Settlement tanks or lagoons shall be used where there is a risk of silt contamination.*

d) *Where work is being carried out near a foul tank or trunk sewer, we will give the required notice to the Water Authority prior to commencement of any works.*

e) *Cleaning of concrete and mortar batching/delivery plant and equipment shall only be carried out at agreed locations where resulting effluent cannot flow in watercourses and drains.*

5.8 Company procedures and details relating to 'Preventative measures':

5.9 Company Procedure

	No 22 Waste Management
	No 23 Pollution Prevention
Environment Agency	*Pollution Prevention Guidelines and Leaflets*

WASTE CONTROL AND DISPOSAL

6.0

6.1 STRATEGY

Whilst everyone on site will be called upon to do everything they can to minimise waste, it is the appointed Site Agent/Manager's responsibility to ensure that the following actions are addressed.

a) *Minimise waste and ensure its correct storage and removal.*

b) *Where possible, segregate individual waste types so that materials can be re-processed for use on site or sold on. Wherever practical the preferred option is for recyclable material to be reused on site or on another suitable project.*

c) *Ensure that special or hazardous wastes are not mixed with general site waste.*

d) *Take care that stored liquid waste does not permeate into the ground.*

e) *Under no circumstances allow waste to be burned on site.*

f) *Store liquid waste in a suitable manner for eventual removal to a specialist disposal site.*

g) *Prevent unsupervised or unauthorised discharge of liquid waste to a drainage or sewer system. Where discharge is allowable, obtain discharge consent from the appropriate authority, and monitor at all times.*

6.2 WASTE DISPOSAL PROCEDURES

a) *All waste from the site will be taken to an appropriate Environment Agency licensed location.*

b) *Special Waste and Controlled Waste will be separated and handles as appropriate.*

c) *Transport of waste materials to the appropriate location will only be undertaken by an Environment Agency licensed carrier registered for the type of waste being disposed of.*

6.3 WASTE CONTROL DOCUMENTATION

To ensure correct disposal of waste, documented procedures will be implemented and fully complied with,

a) *CONTROLLED WASTE*
A waste transfer note will be completed which will specify the originator of the waste, its description, the carrier and disposal arrangements.

b) *SPECIAL WASTE*
The 'Five Copy' consignment note procedure detailed within the Special Waste Regulations 1996 will be strictly adhered to.

6.4 The person on site in charge of waste disposal will obtain the name and address of the disposal location before the consignment leaves. That person will ensure that the location has an appropriate licence and if in doubt shall contact the Environment Agency. Documentation shall also be obtained from the carrier validating correct disposal.

6.5 Company procedures and details relating to 'Waste Control and Disposal':

Company Procedure

No 22 Waste Management
No 23 Pollution Prevention

Department of the Environment, Transport and the Regions Leaflets.

CONTAMINATED LAND

7.0

7.1 We shall only remove contaminants where instructed to do so. Wherever possible, we shall carry out remediation as an alternative to eliminate or minimise the environmental risk.

Note: A separate document is available which details our remediation capabilities.

7.2 ASSESSING THE HAZARD
An assessment will be made prior to appropriate remedial action being taken. The areas(s) of hazardous waste shall be identified on site and cordoned off accordingly.

7.3 EMPLOYEE/PUBLIC SAFETY All work will be carried out in accordance with appropriate HSE publications, and specific method statements, with dirty/clean areas being established and identified as appropriate.

7.4 PERSONAL PROTECTIVE EQUIPMENT All visitors and persons working on a contaminated site shall wear suitable protective clothing. Further precautions will depend upon the activities being carried out on site as well as the type of work being undertaken by the person(s) in question.

7.5 DEALING WITH CONTAMINATED MATERIAL Special waste will be removed and taken to a licensed location, or wherever possible, materials that can remain on site will be isolated by an appropriate encapsulation method, or be suitably remediated. Before leaving the site, all vehicles shall be checked to prevent contaminants being spilt or deposited on the public highway

7.6 BUNDED STORAGE AREAS These will be used to avoid the spillage and spread of contaminated materials around the site.

7.7 STORAGE TANKS FOR CONTAMINATED LIQUIDS These will be located on firm foundations above the ground so that they can be regularly inspected for corrosion or leaks. They will be bunded and lined with an appropriate impermeable material, with clear markings to show capacity and contents. Where existing tanks are in place, these shall be used and removed if required upon completion of the works.

RESOURCE MANAGEMENT

8.0

8.1 In recognition of the fact that the earth's resources are finite, every step possible will be taken to minimise waste through recycling or other techniques.

8.2 CONSTRUCTION MATERIALS

Whenever possible, we will upgrade low quality materials by blending with others, or modify with additives. We will crush, pulverise and stabilise materials that would be otherwise classified as unsuitable or deemed to be waste. Where possible, these alternative 'environmentally friendly' materials shall be proposed for incorporation into the works. Where we have influence, the use of materials other than those derived from natural resources shall be encouraged, or be obtained from sustainable resources.

8.3 VEHICLES

Company owned and operated vehicles shall generally be diesel powered, as this has been considered to be more energy efficient than equivalent petrol driven vehicles, resulting in less fuel consumed by our fleet generally. Vehicles operated by the Company shall also be serviced in accordance with the manufacturer's details, to maintain efficiency and minimise pollution.

8.4 OFFICE MATERIALS

All staff shall be encouraged to take sensible measures to use products, such as stationery, produced from recycled materials. Waste paper shall be kept to a minimum, and where possible a recycling system implemented.

8.5 FUEL ECONOMY

Staff shall be encouraged to switch off lights, heaters, office equipment and machinery when not in use. Rooms will be kept at a comfortable level and not allowed to overheat.

8.6 MATERIALS ECONOMY

Over-ordering of materials will be discouraged.