



Energy from Waste, Combined Heat and
Power Facility
North Yard, Devonport
**Environmental Permit Application
(Application EPR/WP3833FT/A001)**

Management Arrangements
June 2011



Prepared for



Revision Schedule

Management Arrangements

June 2011

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1 Report Context

Scott Wilson Ltd has been commissioned by MVV Environment Devonport Ltd (MVV hereafter) to prepare an application for an environmental permit for an Energy from Waste, Combined Heat and Power Facility located at Devonport Dockyard, Plymouth (Devonport EfW/CHP hereafter).

Within the Site, as defined in planning terms, and the Installation, as defined in permitting terms, the proposed facility will principally comprise:

- Tipping Hall;
- Waste Bunker Hall with Waste Handling Cranes;
- Bale Store/Baling System;
- Turbine Hall with Steam Turbine Generator;
- Boiler House with Grate, Boiler and Ancillary Systems;
- Flue Gas Cleaning System and Chimney;
- Air Cooled Condensers;
- Water Treatment Plant;
- Bottom Ash Handling System.
- Administration Block; and
- Workshop and Stores

This report has been prepared to support an application for an environmental permit and details the management systems proposed for the site. The report should be read in conjunction with the other supporting application reports and risk assessments.

2 Introduction

The Environment Agency has adopted an approach to the Environmental Permitting Regulations 2010 (EPR hereafter) that couples regulatory requirements and a company's voluntary environmental management system. This approach is intended to enable more effective and efficient environmental protection with the management of a regulated installation.

This section of the application provides an overview of regulatory requirements and defines BAT with respect to the site's overall management systems. The information in the following sections outlines the systems proposed for the Devonport EfW/CHP Facility covering environmental, general operations, management, and health & safety.

The focus of the report is to provide an overview of management responsibility and management techniques to be employed at the site.

2.1 Regulatory Context

The Sector Guidance Note SGN 5.01 "*Guidance for the Incineration of Waste and Fuel Manufactured From or Including Waste*" (Section 2.3) identifies that the implementation of an environmental management system (EMS), which is externally certified, to ISO14001 or EMAS, demonstrates a system which provides satisfactory evidence of a BAT-compliant management system.

The proposed facility at Devonport will be developed, and operated, by MVV Environment Devonport Ltd. The corporate approach to effective management of a facility is that quality, environmental, and health & safety management are all essential, and linked, elements of effective business management. As such, the proposed approach is to integrate all three elements into an exclusive Integrated Management System (IMS) that will be designed to meet the requirements of:

- BS EN ISO 9001:2000 Quality Management Systems;
- BS EN ISO 14001:2004 Environmental Management Systems; and
- BS OHSAS 18001:2007 Occupational Health and Safety Management Systems.

It is proposed that the management of the facility will implement and apply for assessment under the above schemes during the first year of service delivery.

2.2 Assessment of Best Available Technique

The Environment Agency EPR sector guidance (SGN 5.01, Section 2.3) provides Best Available Technique (BAT) guidance for management systems.

This report provides an outline of operations in relation to the proposed Devonport EfW/CHP Facility, and provides evidence that MVV will introduce and operate an EMS that will be externally certified to ISO 14001 standards, and has sufficient management capacity to allow the effective environmental management of the new facility. As such the proposed management system provides sufficient evidence to demonstrate that BAT considerations have been adequately addressed in the management of the installation.

3 Management Structure

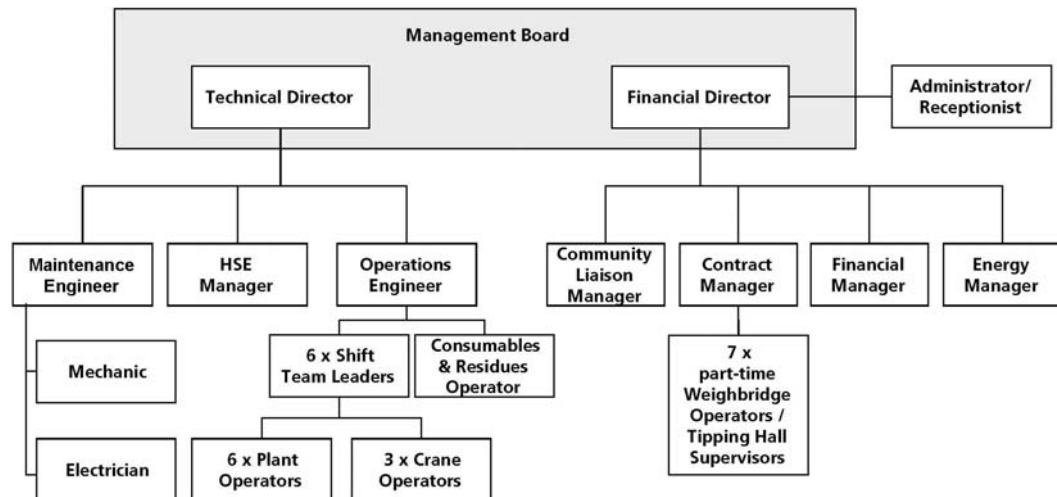
3.1 Overall Organisational Structure

The Devonport EfW/CHP facility is being developed as part of South West Devon Waste Partnership’s (SWDWP) residual waste treatment contract.

MVV operates with a number of shared centralised functions including Finance, Safety, Health and Environmental, Human Resources and Engineering, and these will provide support as appropriate to the combined SPV project team, as well as to individual facilities.

The overall organisational structure is shown below.

Organisational Chart Operational Team



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3.2 Site Management Arrangements

For the management and operation of the Devonport EfW/CHP facility, environmental responsibility for individual operations will be assigned within the site management structure and will be defined throughout the management system.

The Technical Director will have overall responsibility for the IMS. MVV will appoint a Health, Safety and Environment Manager as the designated management representative with overall control of the IMS management system at the facility, including the ability to ensure that specific programmes are realised and translated into activities across the plant.

3.3 Roles and Responsibilities

Senior management will hold responsibility for the overall delivery of the waste management service in line with all client, contractual, business and legal requirements.

Specific responsibilities for site-based activities will be delegated to operations managers, and support will be provided by a dedicated team of quality, environmental and health and safety specialists and advisors, drawn from MVV and its partners.

The total personnel required for operations will be 35, made up as follows:

Table 3.1: Staffing Requirements

Role	No. of posts
Financial Director	1
Technical Director	1
Administrator/Receptionist	1
Community Liaison Manager	1
Contract Manager	1
Financial Manager	1
Energy Manager	1
Health, Safety and Environmental Manager	1
Operations Engineer	1
Maintenance Engineer	1
Tipping Hall Supervisor/Weighbridge Operator	7
Shift Team Leaders (control room)	6
Plant Operators	6
Crane Operators	3
Consumables & Residues Operator	1
Mechanic	1
Electrician	1

There are no plans to subcontract the operation of any part of the facility, although a Technical Services Agreement will be put in place with the technology providers for them to support its operation, particularly through the early years of operation.

Some brief descriptions of the responsibilities of those staff involved in operating the treatment facility are outlined in Table 3.2.

Table 3.2: Staff Roles

Job Title	Summary of role	Cover by
Financial Director	Overall responsibility for: <ul style="list-style-type: none"> ▪ Finance/Accounting/Payroll ▪ Liaison with the Authority ▪ IT/Reporting/MIS ▪ Energy Management ▪ C&I waste ▪ Personnel ▪ Community liaison 	Technical Director
Technical Director	Overall responsibility for: <ul style="list-style-type: none"> ▪ Construction of the plant ▪ Operation and maintenance of the plant ▪ Compliance with relevant legislation and Consents ▪ Environmental compliance, Health & Safety ▪ IMS 	Financial Director
Administrator/ Receptionist	Day-to-day management of data, production of some automated reports and reception duties.	Community Liaison Manager

Job Title	Summary of role	Cover by
Community Liaison Manager	Responsible for the Community Area, liaison with the Authority on PR and waste promotions, facilitating the local liaison group, organising open days and tours.	Contract Manager
Contract Manager	Day-to-day contact with the Authority regarding deliveries of Contract Waste, reporting of waste data, attending all regular Contract meetings, production of weekly tonnage reports, Monthly and Annual Service Reports.	Financial Director
Financial Manager	Management of the operational budget, business reporting, procurement, accounting, payroll, tax, business IT systems, MIS.	Financial Director
Energy Manager	Management of the supply of power and steam, liaison with Babcock/MOD, reporting on energy/steam units sold. Management of C&I waste contracts and spot C&I waste purchases. Will be supported day-to-day by the Energy team in Germany.	Financial Director
Health, Safety and Environmental Manager	<p>Responsible for all H&S issues, Permit and Permission compliance, Environmental compliance and related reporting. Responsible for IMS.</p> <p>The management of the IMS will be included within the role of the Health, Safety and Environmental Manager.</p> <p>The management of the IMS will include the following:</p> <ul style="list-style-type: none"> ▪ Ensuring the effective operation and implementation of the IMS; ▪ Completing an audit of the IMS system at least every twelve months and reporting the findings of the audit to MVV and the Authority; ▪ Completing an audit of relevant Sub-Contractor's Quality and Environmental Management System, at least every 12 months and reporting the findings of the audit to MVV and the Authority; and ▪ Reviewing the IMS annually to ensure continued suitability and effectiveness. 	Technical Director/ External expert if needed
Operations Engineer	Planning and management of plant operations. Management of operational staff.	Maintenance Engineer/ German staff if needed
Maintenance Engineer	Planning and management of maintenance of specific items of plant. Management of maintenance staff.	Operations Engineer/ German staff if needed
Tipping Hall Supervisor/ Weighbridge operator	Cleanliness of tipping hall area and general site cleanliness including litter picking. Providing assistance to drivers depositing waste if required. Weighing vehicles in and out, directing delivery vehicles, visually checking loads if possible, confirming waste deliveries on the computerised system, management of the weighbridge area.	Cover each other
Shift Team Leaders (control room)	Day-to-day operation of the plant. Supervision of operational staff.	Cover each other

Job Title	Summary of role	Cover by
Plant Operators	Day-to-day operation of specific elements of plant within the facility.	Cover each other
Crane Operators	Loading the combustion chamber, mixing the input waste, visually inspecting the waste in the bunker, loading the shredder (for baling or shredding of bulky items).	Plant Operators
Consumables & Residues Operator	Procurement, handling and storage of consumables required for plant operation. Management of plant residues.	Plant Operators
Mechanic	Supervision of maintenance and repair of the mechanical parts of individual items of plant within the facility.	Maintenance Engineer
Electrician	Supervision of maintenance and repair of the mechanical parts of individual items of plant within the facility.	Maintenance Engineer

4 Integrated Management System

This section provides information in relation to the provision of a management system which has sufficient capacity to allow the effective environmental management of the installation to the standard indicated by the Environment Agency guidance for the Incineration of Waste or Fuel Manufactured from, or including, Waste (Ref EPR SGN 5.01).

4.1 Assessment of Best Available Techniques (BAT)

The operation of an EMS, externally certified to ISO 14001 standards, is intended, in conjunction with:

- Related Management Systems (outlined in subsections 4.2 to 4.6);
- External Corporate environmental reporting; and
- Management of the facility controlled by appropriately qualified and experienced personnel.

This will provide sufficient evidence to demonstrate that BAT considerations, as defined in the Sector Guidance, have been met. BAT for the Devonport EfW/CHP facility can be demonstrated by:

Table 4.1: BAT Assessment for Management Systems

Indicative BAT Requirement	Site Justification
WID Requirements	Article 6 (8) – the facility will be managed by an individual with an appropriate level of experience and knowledge who holds a CoTC.
Operations and Maintenance	The facility will employ across all aspects of the process: <ul style="list-style-type: none"> • Defined procedures for the control of operations, emissions monitoring and plant maintenance to mitigate/control any potential adverse impact on the environment. • Established planned preventative maintenance regimes on plant items, whose failure could lead to impact on the environment. Planned audits of the system, to ensure ongoing effectiveness against defined performance measures.
Accidents/ Incidents/Non-conformances	Site risk assessments and control measures will be reviewed for ongoing relevance and effectiveness in order to minimise the potential impact as the result of accidents/incidents/non-conformances and complaints. The system contains: <ul style="list-style-type: none"> • Detailed hazard identification and risk assessment • Defined procedures for reporting and dealing with such issues.
Organisation	The company will operate a formal, robust IMS system, which incorporates: <ul style="list-style-type: none"> • An environmental policy and programme; • Definition of roles and responsibilities; • Specified objectives and targets; • Operational/maintenance procedures; • Independent internal and external audits; and • Annual external reporting on environmental performance.

Sub-sections 4.2 to 4.6 provide an overview of the relevant details of the management system.

4.2 Integrated Management System (IMS)

MVV recognises that quality, environmental, and health & safety management are all essential and linked elements of effective business management, and as such will integrate all of these three elements into an exclusive Integrated Management System (IMS).

The IMS proposed for the facility will incorporate Quality, Environment and Health and Safety arrangements for the project, including organisation and responsibilities, targets, planning, design, risk management, process control, measuring, audit and customer care.

The IMS will incorporate, connect to and will be underpinned by the quality, environment and health and safety systems employed by MVV and its partners in the delivery of their services. The IMS would be introduced to the Devonport EfW/CHP facility during commissioning.

4.2.1 IMS – Design and Accreditation

The IMS system will be developed in detail during the construction phase and will be designed to meet the requirements of:-

- BS EN ISO 9001:2000 – Quality Management Systems;
- BS EN ISO 14001:2004 – Environmental Management Systems; and
- BS OHSAS 18001:2007 – Occupational Health and Safety Management Systems.

MVV, as operator, is used to operating within the context of an ISO 14001 certified management system, and a copy of its current registration is attached in Appendix A as evidence of this.

It is intended that the existing certified system will be extended to include the Devonport facility, and, once introduced in the UK, will be assessed by an appropriate certifying body, accredited by the National Accreditation Council for Certifying Bodies. A plan for accreditation of the system will be prepared during mobilisation and will be achieved during the first 18 months of service commencement.

Formal audits will be carried out throughout the life of the contract to ensure continued accreditation to these ISO standards.

4.2.2 Extent of the IMS

The IMS will apply to all activities being undertaken by MVV, its delivery partners and its supply chain in respect of the South West Devon Waste Partnership contract service output deliveries. This includes the design and building of a new waste facility at Devonport, as well as the subsequent operation of the facility.

The system will ensure that:

- All client, stakeholder, contractual and legal requirements are identified and delivered;
- The policies and practices necessary to deliver these requirements are well understood by all employees, and are effectively and clearly communicated;
- Each individual involved in delivering the service clearly understands their role and responsibilities, and is both competent and adequately equipped to carry out their tasks;
- Activities are planned to maximise the 'right first time' principle, with the emphasis placed on problem prevention rather than cure; and

- The requirements of BS EN ISO 9001:2000, BS EN ISO 14001:2004 and BS OHSAS 18001:2007 are addressed.

The IMS will be applicable at the Devonport EfW/CHP Facility, and an overview of the structure is shown in the IMS contents extract in Appendix B.

4.2.3 Policy Statements

MVV Corporate Policies are contained in Appendix C. In relation to the Devonport EfW/CHP facility, MVV will issue an overall project policy statement incorporating relevant aspects of environment, quality and safety.

The policy will reflect the principles set out by the main board and will be reviewed annually. The policy statement will include a commitment to:

- Comply with applicable environmental legislation, as a minimum;
- Pursue continuous improvement in its environmental performance and management system; and
- Contribute to long-term economic, environmental and social sustainability through the sourcing of materials and services locally to minimise transport impacts and support the local economy.

4.2.4 Identification, Assessment and Management of Environmental Impacts

MVV will employ a management procedure requiring continuous planning for the identification and control of quality, and environmental and health & safety risks and impacts. This will ensure that a strong culture of risk management and continuous improvement is maintained throughout the contact period, and will form the basis of on-going objective and target setting.

In general, the formal planning and execution of project management activities will be carried out through reference to the documented business management arrangements, operating procedures, and site operating plans and schedules. These procedures consider the most suitable method of executing an activity, taking full account of:

- The aims of the facility in respect of service delivery;
- The significance of the risk involved in carrying out the activity, and the associated health and safety requirements;
- Any associated risks or impacts to the environment;
- The standard of workmanship required;
- The suitability and competence of those persons nominated to carry out the tasks, and any possible training which may be considered necessary;
- The materials or equipment available, or required;
- Any applicable regulatory requirements;
- The detail and degree of verification and/or monitoring required; and
- The records that are required to be made available.

The identification and assessment of the environmental aspects associated with the plant will be carried out in accordance with the IMS environmental aspects procedure. However, a

preliminary assessment has shown the most significant issues to be managed for the installation will include:

- Fugitive emissions to air, land or water;
- Point source releases to air;
- Resource management – focusing on electricity, fuel and water;
- Visual impact;
- Minimising the impact associated with traffic; and
- Management of ‘nuisance’ issues such as light, odour, noise and vibration.

Issues will be prioritised at site level and systems/procedures will be put in place to control these potential risks and avoid/mitigate any potential pollution. These are identified through managerial and other inspection reports.

4.2.5 Regulatory Compliance

Legal, contractual, and regulatory requirements will be identified and addressed within the business management system, and legislation relevant to the operation of the installation will be held in a controlled register. It will be the responsibility of MVV’s Health, Safety and Environment Manager to ensure that this register is updated.

Compliance with Regulatory requirements will be monitored as part of the IMS environmental audits, undertaken at least annually. The Technical Director and senior management team will review the results of the audits, and ensure that action plans are agreed, as necessary.

4.2.6 Environmental Management Programme

Installation objectives and targets for quality, environmental management and health & safety will be set annually for every aspect of the service delivery, according to identified significant risks, including environmental aspects and the needs of the business. These will be subject to verification through the performance monitoring arrangements and reviewed both at site and Board level. Reviews will include all key performance indicators and targets specified in the project documentation.

Performance against the objectives, targets and overall environmental management programme will be reviewed at quarterly QEHS management meetings.

4.2.7 Communications – Stakeholder Engagement

Key stakeholders have been identified and the methods of communication documented to demonstrate how MVV engages at all levels of society. Responsibility for ensuring that stakeholder engagement is maintained lies with the Community Liaison Manager.

Some of the day-to-day engagement is regulatory, for example planning and environmental, but Table 4.2 below demonstrates how the Company goes beyond its statutory minimum requirements.

Table 4.2: Key Stakeholders

Stakeholder	Description	Methods of Communication
Shareholder	MVV principal share-holders	Two way communication <ul style="list-style-type: none"> • Board Meetings • Executive Meetings
Customer	WDA and WCA	Two way communication <ul style="list-style-type: none"> • duty of care visits to the site • local manager contact • website • magazine
Employees	All staff, hourly paid and part time workers, including those on temporary contracts	Two way communication <ul style="list-style-type: none"> • training programmes • appraisal process • site meetings • site notices • safety committees • monthly briefing
Local Communities	Representatives of local communities. Liaison committees include other stakeholders such as the EA, planning authorities and NGOs.	Two way communication <ul style="list-style-type: none"> • open door policy • local manager contact • liaison meetings • website • individual/group site visits • exhibitions • newsletters • public meetings • complaints monitored • media statements & company announcements
Environment Agency	Main environmental regulator	Two way communication <ul style="list-style-type: none"> • site inspections • site meetings • regional meetings • correspondence • seminars and training
HSE	Main health and safety regulator	Two way communication <ul style="list-style-type: none"> • site inspections • site meetings • regional meetings • correspondence • seminars
Planning Authority	Local authority planning department	Two way communication <ul style="list-style-type: none"> • new sites • existing site modifications local liaison committees (where appropriate and desired by neighbours)

Stakeholder	Description	Methods of Communication
Environmental Health	Local authority environmental health and health and safety regulator	Ad hoc communication <ul style="list-style-type: none"> As and when needed

4.2.8 Monitoring, Measuring Performance and Management Review

The ISO 14001 certified system will include written procedures to facilitate the regular monitoring and measurement of those elements of its operations that may have a significant environmental impact.

The procedures implemented will form part of the MVV's environmental management arrangements. They will be designed to allow the monitoring of compliance with legal obligations, the requirements of the Contract, published guidance, best practice and MVV's own Environmental Policy, and will reflect the facility specific operations and activities. Specific aspects are outlined to follow.

Environmental Monitoring

The environmental monitoring requirements for the installation are anticipated to include:

- Continuous emission monitoring of releases to air; and
- Extractive (periodic) monitoring of releases to air.

The monitoring results will be reviewed and reported in accordance with the facility's Environmental Permit.

Compliance Monitoring

This will primarily comprise:

- Site inspections and checks to confirm the operation is achieving the desired standards;
- Compliance audits to assess operations in relation to ISO 14001, to the facility's Environmental Permit and with any contract arrangements for delivery of the service to the Councils; and
- Regulator inspections by the Environment Agency in accordance with the Operator Management Audits (OMA).

Performance Measurement

Performance measurement will be undertaken against key contract targets and key performance indicators, as defined within the management system. Measures that are expected to be used include:

- Recycling rates achieved;
- Performance against emission standards;
- Contract landfill diversion standards;
- Achievement of recognised standards (e.g. ISO 14001, ISO 9001 and OHSAS 18001);
- Vehicle turn-around times; and
- Energy utilisation and generation.

Management Review

MVV will report on its health and safety, environmental and social performance each year as part of the contract requirements. This reporting will take into account all of the Group's activities, including waste treatment. The report will provide feedback on a comprehensive range of key performance indicators (KPIs) that provide information on performance against set objectives and targets.

4.2.9 Monitoring and Control

Various techniques for monitoring and control across all process operations will be operated across the facility, to ensure ongoing environmental performance. Anticipated monitoring and control arrangements are outlined below, and are also reviewed in detail in relevant sections of the Technical Report and the Emissions Management Report.

Monitoring of Process Variables

The following parameters are monitored in the course of the general process control strategy:

- Material feed rates;
- In-process temperature, pressure and air volumes;
- Final treatment products – treatment residue analysis; and
- Emissions monitoring.

Routine Monitoring and Spot Checks

These include inspections and audits, and are used to:

- Ensure that the installation functions as intended;
- Detect faults and unintended operations; and
- Detect slow changes in plant performance to trigger preventative maintenance.

4.2.10 Auditing

System implementation and development will be verified through annual environmental audits, completed by trained internal auditors.

MVV has designed an Environmental Protection Audit for the Group and its subsidiaries to use, and this is provided in Appendix D. The audit comprises approximately 240 questions on the issues of waste, hazardous goods, water and air pollution control, as well as questions about the organisation and procedural elements of the EMS.

The results of the audit are documented in a summary report, which is submitted to the Group's board of directors and the auditee(s). The report includes details on the audit location and date, the auditees involved, the audit findings and copies of any non-conformances raised during the audit.

Non-conformances will be actioned by the auditee as soon as possible, and the auditee will be requested to assign a close-out date for each of the non-conformances identified. The close-out of these will then be verified by the auditor.

In addition to the internal audit process, regular audits/surveillance visits will be completed by an independent certification organisation during the 1st year of operation to verify the system against ISO 14001, and then on an ongoing basis to ensure continued compliance.

4.3 Operational Control

MVV will rely on trained staff to operate the plant, bringing to the job a considerable body of expertise to ensure that correct and proper procedures for operating equipment are followed. To enhance the experience that will be provided by individual operators, the following will be put in place.

4.3.1 Operating Procedures

MVV has prepared a series of environmental manuals and checklists, which will be made available to all employees via its intranet. Employees will be encouraged to integrate the instructions from the Environmental Protection Guidelines, the Waste Management Guidelines and the Dangerous Goods Guidelines into their daily work procedures.

These documents will consider and specify which current practices, primary controls, verifications, equipment and records are necessary for the effective execution of the requirement, and confirmation that the specified client or project requirement has been attained.

4.3.2 Housekeeping

The need to pay continuous attention to housekeeping in order to minimise fugitive emissions is recognised, and as such a high priority is therefore given to housekeeping instructions and supervision.

The general operating philosophy will be to prevent releases and spillages from happening rather than to provide for their rapid removal – prevention being better than cure. To this end, with respect to the proposed processes, consideration has been given to the following in order to maintain good standards of housekeeping:

- Prevention of recurring spillages by effective sealing around the plant;
- Design-out potential spillages at the new installation;
- Maintenance of local exhaust ventilation (LEV) plant to a high efficiency; and
- Removing all 'one-off' spillages as soon as possible.

In addition, individual plant operating practices and inspections will be designed to help to minimise fugitive releases. External areas and the boundary of the facility will be kept clean and free from litter in accordance with the guidance laid down in "*Litter and Refuse - Guidance on Part 4 of the Environmental Protection Act 1990* as amended by the Clean Neighbourhoods and Environment Act 2005", published by Defra (PB number PB11577d).

MVV will keep all hard landscaped areas maintained to a high standard of repair and cleanliness, substantially free from hazard obstruction, weeds, litter and waste (irrespective of source), animal waste, leaf debris and will be safe and fit for purpose. Litter and detritus will be cleared up on an as-needed basis, with particular emphasis on public areas.

Tipping Hall supervisors will be deployed on each shift and will carry out proactive site 'sweeps' on a daily basis, including perimeter walks in order to minimise litter, discourage anti-social behaviour and identify other maintenance issues or environmental hazards which require attention. The proactive site 'sweeps' will be made within and around the site to include the collection of litter that may have escaped during the waste reception and storage process. These checks will form part of the site requirements and will be recorded as part of reporting

procedures. When required, a comprehensive litter pick will be carried out. Should any litter or detritus be noted on the facility's roads, road sweeping will be undertaken where necessary.

MVV will remove or clean up any litter and detritus on a daily basis, with particular emphasis on public areas. Any litter escaping the site or deposited by site users will be cleared up to a 10m distance from the site boundaries.

Emergency spill kits will be provided and maintained in strategic locations where the loading and unloading of materials may be subject to spills to ensure a rapid response to any spillage.

4.3.3 Reduction of Fugitive Releases

The following design features will assist in the management of those environmental risks associated with the processes proposed for the Devonport EfW/CHP facility:

- Ensuring that all waste deliveries to, and loads being removed from, the site are covered;
- Enclosing material transport systems, where possible;
- Ensuring that the LEV, as installed, is of sufficient capacity/throughput;
- Fast-acting roller shutter doors on waste reception hall and all other doors are kept closed when access not required; and
- Maintaining a slightly negative pressure within the waste reception building.

4.3.4 Environmental Monitoring

Provision will be made for the monitoring of site activities to ensure no detriment to the environment, and for Devonport EfW/CHP facility, these include:

- a) Monitoring of emissions to air using both continuous and extractive means;
- b) Periodic analysis of treatment process residue prior to removal for off-site disposal or reuse; and
- c) Visual assessments and general site inspection to identify potential sources of odours and dust on a daily basis.

Additional monitoring will also be undertaken as and when necessary.

4.4 Maintenance Management

A maintenance system will be developed and will be implemented at the site. It will incorporate the following elements:

- A series of maintenance procedures will be developed for the main items of plant within the facility;
- Planned preventative maintenance will be used to ensure high standards of performance;
- Maintenance scheduling will be undertaken, making reference to statutory requirements, manufacturer's recommendations and, as time progresses, from the facility's history. Following maintenance, details of work undertaken will be recorded on operational/plant logs as well through formal records provided to demonstrate compliance with statutory requirements;

- Remedial work will be undertaken as necessary to ensure the integrity of storage and handling equipment. In practice site staff will be required to be vigilant in their daily work routine, and to identify areas for repair or further investigation; and
- The effectiveness of the maintenance management aspect of the operation will be assessed during the formal internal audit process. Details of the audit findings will be recorded, along with any issues of non-conformance or areas requiring improvement and the information will be reviewed with the Site Manager and a corrective action plan agreed.

Specific maintenance requirements for the Installation's processes are provided in more detail in the Operating Techniques Report.

4.5 Incidents and Non-Conformances

4.5.1 Incidents and Non-Conformances

MVV will implement a near miss/ incident/ non-conformance reporting system to encourage the reporting of all accidents and incidents with health and safety or environmental implications. The system will also be used to report any unusual occurrences. Examples of what may be recorded include:

- Office or site accidents, minor or otherwise;
- Near misses;
- Unsafe loads delivered to site;
- Non-conforming waste;
- Regulatory non-compliances;
- Spillages;
- Problems with contractors, drivers and visitors; and
- Complaints and feedback.

Site management will review the reports as appropriate, and identified corrective or other actions will be recorded.

4.5.2 Management of Incidents and Non-Conformances

As part of the IMS, a procedure will be developed for the management of incidents and non-conformances, and will define the requirements for:

- Reporting the incident/ accident;
- The mitigation measures to be taken while dealing with the incident/ accident;
- The recording of the incident/ accident and subsequent investigation requirements; and
- The identification, implementation and recording of relevant corrective action required to prevent a recurrence.

4.5.3 Complaints

MVV regard justified complaints as valuable sources of business intelligence to be used to support continuous improvement in its service delivery. Staff will be trained on how to manage

enquiries, complaints, compliments and suggestions relative to their role within the team. All complaints will be dealt with promptly and in an efficient and courteous manner.

Provision will be made for enquiries, complaints or other feedback to be received at the installation by a variety of means to include:

- Direct face-to-face reporting to a member of staff;
- By telephone; and
- In writing via letters, email or via web-site.

Management at the facility will maintain a procedure for detailing the requirements in relation to recording complaints and the actions to be taken as a result of these, in order to:

- Investigate the issues raised;
- Record the details of any corrective action required; and
- Provide feedback to the individual making the complaint.

The outline complaint procedure for the installation is provided in Appendix E.

The Community Liaison Manager will be responsible for the management of the communications database. Details of all communications including complaints, however received, will be recorded on the communications database. All complaints will be assigned a unique reference number to enable the course of the complaint to be tracked until it has been successfully resolved. A weekly management report showing the status of each communication will be produced to ensure that complaints are being managed in accordance with the Company's Enquiries and Complaints standards. The database will be analysed monthly and the results used to inform improvements to Service delivery. Details of complaints, compliments, suggestion and enquiries received will also be reported to the Authority as part of the Monthly Service Report.

For complaints the communications database will record, as a minimum:

- The date and time the complaint was received;
- The nature of the complaint;
- How the complaint was received;
- Complainants contact details;
- Details of action taken to resolve the complaint;
- The final outcome; and
- Any other supporting notes.

4.6 Management of Documents and Records

Documented Systems

MVV will maintain a project website/ intranet site which will be accessible by all members of the operational team. The following key documents will be included on the site:

- Company Policies, Standards, Procedures & Forms;
- Guidance/ advice notes;

- Training documents;
- Reference documents;
- Reports; and
- Certificates and licences.

Document Control

Administration procedures and document control will include procedures for the control of e-mail transmissions, incoming/ outgoing correspondence, fax messages, drawings, sketches and programmes. Document control processes will be developed, implemented and managed by the Financial Manager, in consultation with the Health, Safety and Environmental Manager, as part of the overall Management Information System (MIS) of which the IMS will form one part. All members of staff receiving, changing, issuing or registering documents will be expected to comply with the appropriate document control procedures. The control of all information requests, queries and instructions will also be described in procedures.

Document Issue

IMS-related documents such as Company Policies, Standards and Procedures will be issued by the Health, Safety and Environmental Manager, who will maintain a record of who has been issued with each document to senior managers, who will each then cascade these documents down to their staff. Senior managers will be responsible for controlling the issue of their own department-specific documents, with the exception of legal documents such as Permits, Licences, Consents and Permissions. All site documents, for example, operating procedures and risk assessments, will be given a unique reference number, issue status and/or date to identify the most up to date version.

Document Review

MVV will implement a series of quality reviews internally with its delivery partners to monitor the quality of IMS and other relevant documentation.

Maintaining Records

Records of all training and inductions at the site will be maintained. This evidence will be kept for the period of the Contract in the event that it may be required as proof of an employee's awareness of the IMS. Where documents are updated or altered, staff and employees will be made aware of these amendments in order that they are clear about any changes to processes or procedures which will affect how they undertake the activities for which they have responsibility.

Policies, Standards and Procedures which become obsolete will be kept alongside the induction evidence. They will be stored in such a way that prevents deterioration and can be readily retrieved if required.

Electronic records will be stored on drives that are automatically backed up.

Data Contingency

MVV will operate two independent servers at the facility, which will run in parallel. Both servers will be backed up on a daily basis. Should one server fail, the other will automatically take over and provide continuity of data capture with no loss of effectiveness. To provide an additional level of back up, MIS data will also be downloaded each day onto MVV's off-site central server,

located in Mannheim, via MVV's existing VPN. The Mannheim server will also be backed up on a daily basis, in accordance with MVV's current operational practices.

For weighbridge data, in the unlikely event that both independent servers at Devonport fail and the data cannot be reinstated from Mannheim, data will be entered manually from weighbridge tickets onto the UK server system once one of the servers is returned to normal operation. To enable this, hard copies of all weighbridge tickets will be retained at the facility.

5 Training, Awareness and Competence

5.1 Assessment of Best Available Technique

BAT requirements in relation to training and competence are defined in the Sector Guidance Note SGN S5.01 Incineration of Waste or Fuel Manufactured From or Including Waste. BAT for the Devonport EfW/CHP facility is outlined in Table 5.1 below.

Table 5.1: BAT Assessment – Training and Competence

Indicative BAT Requirement	Site Justification
WID Requirement	<ul style="list-style-type: none"> Article 6 (8) – the facility will be managed by an individual with an appropriate level of experience, knowledge and who holds a CoTC.
Training System	Will incorporate training and awareness provision in relation to: <ul style="list-style-type: none"> Awareness of regulatory implication of the Permit on site activities Awareness of potential environmental effects under normal/abnormal operations Awareness of the need to report deviations from the Permit Prevention of accidental emissions and action to be taken when these occur.
Competence and Training	<ul style="list-style-type: none"> In relation to competence and training, the site will introduce a robust system that identifies specific training/competence requirements in relation to regulatory requirements, environmental effects of the operation and prevention of accidental releases/minimisation of the effect during an actual release.
Key Posts	Key posts for the site will be defined as including: <ul style="list-style-type: none"> Permanent managers and operators Contractors Personnel involved in purchasing equipment and materials
Industry Standards	<ul style="list-style-type: none"> Site operators and management personnel will undergo training and development in line with acknowledged industry standards (e.g. WAMITAB).
Contractor management	<ul style="list-style-type: none"> The potential environmental risk associated with contractor activities will be evaluated at the time of appointment and instructions will be provided in relation to protecting the environment.

Sub-sections 5.3 to 5.6 below provide an overview of the relevant details of the training and development system that will be put in place.

5.2 Overall Company Competence

5.2.1 MVV Umwelt

MVV Umwelt has unrivalled experience in building and operating waste management facilities in Germany and intends to bring this experience to the UK. The company has been operating for around 50 years and, within the MVV Energie Group, the company pools the core competencies in terms of decentralised energy generation from household and industrial waste, as well as from biomass.

MVV Umwelt has a clear strategic focus and is the third largest operator in Germany's EfW sector, currently working with 22 municipalities and districts in five federal states, to manage and dispose of the waste generated by more than 4.4 million people country-wide. The

company currently operate energy from waste plants and biomass power plants at four locations in Germany, with an annual capacity of around 1.6 million tonnes.

MVV Umwelt has experience of planning, designing and building and operating EfW plants of different sizes in Germany. In coming to the UK, MVV has a number of key characteristics that will be crucial in managing the UK's waste in a sustainable fashion:

- Ability to deliver;
- Working with local authorities and partners to produce the best solutions;
- Environmentally sustainable technology;
- High energy efficiency; and
- Expertise in CHP and district heating systems.

5.2.2 The Operator

The operator of the proposed Devonport EfW/CHP facility is MVV Environment Devonport Limited, which is a UK waste management company related to the German based energy company MVV Energie, a subsidiary of the German parent company MVV Umwelt.

Within its operating framework, MVV currently operates and maintains a range of infrastructure in line with statutory requirements including the Waste Incineration Directive and the Integrated Pollution Prevention and Control Directive. As such, the Company has the technical and regulatory knowledge required to operate a facility regulated under the Environmental Permitting Regulations which implement the IPPC and WID directives within the UK.

With specific reference to waste management facilities and power generation:

- Parent company MVV Umwelt has been operating for around 50 years;
- MVV Energie currently operates energy from waste and biomass power plants at four locations in Germany with an annual capacity of around 1.6 million tonnes. The operation of these facilities is undertaken under strict regulatory regimes (WID and IPPC), and provides a wealth of experience in respect of managing energy from waste facilities and their associated environmental impacts; and
- MVV Energie undertakes the management and operation of CHP and district heating schemes at three of its existing EfWs, and has the necessary technical expertise within the organisation to facilitate the generation and export of power and heat from the Devonport EfW/CHP Facility.

MVV has also made provision with individual technology providers to provide training and ongoing support through plant commissioning into the operational phases of the Devonport EfW/CHP facility. This will ensure that the requisite technological experience is on hand to ensure efficient plant operation in its initial phases.

5.3 Technical Competence

Each management position at the facility will be covered by a general job description, detailing key skills required, individual responsibilities and reporting structure within which the post sits.

In relation to the Devonport EfW/CHP facility, the relevant CoTC holders will hold CoTC NVQ Level 4 in Waste Management Operations – Managing Incineration. Prior to start of commissioning these personnel will obtain CWIM EPOC certification and will then obtain full 12 unit CoTC certification within 12 months of start of operations.

Copies of current WAMITAB certificates cannot be supplied at the time of application submission as MVV are still in the process of recruiting key operational personnel. Copies of the detailed job descriptions are provided in Appendix F to demonstrate the level of experience and qualification MVV are seeking and copies of WAMITAB certificates for appointed personnel will be provided to the Environment Agency prior to the facility becoming operational.

5.4 Skills and Competence Identification and Assessment

MVV aims to achieve a high success rate of individual and job compatibility at the recruitment stage. This selection will then be complemented by providing training to meet priority needs for each individual, dependant on the job requirements. The needs will be identified during the recruitment process and subsequently through an individual's appraisal, and can be defined as:

- Mandatory;
- Job based; and
- Skills based.

In respect of key areas of recruitment for the Devonport EfW/CHP facility, the following will be put in place by MVV.

Engineering Staff Recruitment

MVV will recruit the Maintenance Engineer and the Operations Engineer from within the UK to oversee the operational and maintenance activities. The posts will require a one year practical training programme which will include:

- Training at MVV's EfW facility in Mannheim;
- Potential additional internships at MVV's other facilities, such as MVV's EfW plant in Leuna; and
- Training at the Power Station College in Essen, Germany (Kraftwerksschule – KWS)

The aim of the training will be to:

- Learn and implement the operational responsibilities of the plant operators and the maintenance engineers;
- Learn and assimilate MVV's operational and maintenance ethos, strategy and methods and
- Establish contacts with experienced plant operators and engineers in Germany.

Operating Staff Recruitment

Suitably experienced staff will be recruited for the posts of the Lead Mechanical and Electrical Engineers, shift team leaders and plant operators at least six months before the start of commissioning.

Detailed training courses for key staff will be held in English through a collaboration with the Power Station College in Essen, Germany (Kraftwerksschule – KWS). In addition to basic power plant technology, other essential skills such as the handling of various operating conditions, of hazardous substances and waste legislation will also be taught. During the cold commissioning phase, the operations staff will be permanently located on the site to become familiarised with the equipment and systems and receive hands-on training by the technology suppliers' commissioning supervisors. At the commencement of the hot commissioning phase, experienced employees from MVV's established sites will be sent to Devonport to support the

locally based operations team. These employees will support the permanent team for approximately six months. In parallel to this formal class room training will be provided by the technology suppliers during hot commissioning.

Ongoing Training Needs

An individual's needs will be managed on an ongoing basis through a training needs database that MVV will develop and that will be maintained at the site. The database will serve a number of uses, namely it will be used to:

- Identify the skills and competence matrix required for each job function;
- Record all training undertaken and the competence level achieved – for which a summary sheet is available; and
- Provide a mechanism for identifying when renewals of training certificates are required.

5.5 Training Provision

MVV recognises the value of supporting its staff and the role that well trained and equipped employees will play in delivering a high quality of service. The waste management sector is undergoing constant change, and MVV will ensure that its staff training is monitored, planned and implemented to meet these changes. The MVV group has already established training programmes that combine theory and practice, and is implementing these successfully across a range of disciplines within the wider business.

MVV will produce a staff training and development manual, and will implement a training and development programme. The focus of the programme will be on the development of the skills, competency and capacity of staff to enable the delivery of good working practices and a high quality of service.

Wherever possible, training for the new treatment processes will be delivered in the workplace by internal training staff or by managers. Key target areas for the Devonport EfW/CHP facility will include, but are not limited to:

- Standard plant operating procedures;
- Plant maintenance;
- Site permit requirements, specifically conditions and emission limit values;
- Site emergency procedures; and
- Safety awareness/competence, (e.g. Permits-to-Work, confined space entry & method statements).

A typical training matrix and On-the-Job Training Checklist are provided in Appendix G.

New Employee Induction

Each position at the site will be covered by a general job description, detailing key skills, responsibilities and the reporting structure within which the post sits.

MVV will develop and maintain an appropriate and up-to-date induction programme for all staff based at the site, and will ensure all new staff involved in the delivery of the site operations attend the induction programme prior to their commencement of work at the Facility. MVV's induction programme is part of the wider and on-going training programme for each employee.

The induction programme will be designed so that new employees will become familiar with MVV, their department and their role. It will equip employees with the information that they need to work effectively within MVV and to make them feel welcomed into the organisation. Line managers will be responsible for ensuring that appropriate induction is carried out, and will be supported in this by staff within the SPV and from Germany. Records of all inductions and other training will be kept at the Facility.

There is an ongoing target to continue safety and health & environmental awareness training, with refresher training targeting poor performers as necessary.

Sub Contractor Management

A small number of 'independent' sub contractors may be utilised for some specialist maintenance work over the lifetime of the plant. Contractors used will be selected on the basis of their experience and competence relating to a specified task. Each will submit relevant method statements that will be reviewed and retained by MVV.

5.6 Training Records

Records of all training and inductions undertaken will be maintained and kept at the facility throughout the Contract period. Training records will form part of the overall IMS and will include feedback from individuals on the value of the training undertaken and its relevance to their role. Training records will be used to identify individual progress and development, as well as being used more strategically in conjunction with the training matrix to inform future training plans. Staff records will be kept in accordance with the Data Protection Act.

5.7 Performance Assessment

Performance goals for individuals will be linked to the overall goals of MVV, as well as to those of the Project. MVV's aims for the Project will be cascaded down, and, together with role-specific objectives, used to form the basis of individual performance targets. Performance goals will be set to support MVV's culture of continuous improvement through focussing on:

- Achieving results;
- Linking with organisational quality management;
- Improving capacity and capability;
- Increasing motivation and engagement;
- Matching need with resources; and
- Facilitating change.

Performance targets will be agreed between the employee and their line manager at annual appraisals for the forthcoming year, to ensure that they are realistic and achievable. Individual performance plans will be given to the employee following the annual appraisal and progress towards targets will be monitored through general interaction between the employee and their line managers, as well as at six monthly one-to-one meetings and formally during the annual appraisal. The performance plan will complement individual training plans and will be used to identify and focus training needs as well as acting as a baseline against which to measure performance.

5.8 Training and Development Effectiveness

To ensure the ongoing effectiveness of the training and development system in meeting the organisation's objectives, formal monitoring of the system is completed through:

- The IMS audit arrangement, which will include routine monitoring to ensure that all personnel understand the procedures applicable to them and have the necessary competence to perform their tasks satisfactorily;
- An annual training review with the Group Training Manager; and
- The monitoring of training-specific KPIs on a monthly basis – these will include the proportion of employees with a training and development review, the average amount spent on training per employee per annum and the average number of days spent on training per employee per annum.

Appendix A ISO14001 Certificate

Appendix B IMS Manual Outline

Appendix C Corporate Policy Statements

Appendix D Environmental Protection Audit

Appendix E Outline Complaint Procedure

Appendix F Job Descriptions

Appendix G Typical Training Matrix and On-the-Job Training Checklist