EDF Energy Nuclear Generation Limited

Integrated Company Practice

Environmental Management and Compliance

Originated by:	[redacted] Senior Environment Officer	Date: December 2023
Reviewed by:	Environment Safety Group Head Peer Group Company Process Owners	Date: January 2024
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Contents

1 Purpose

1.1 Purpose of Document

Nuclear Operations Management System Manual (Reference 1) describes the Integrated Management System (IMS) and defines the Nuclear Operations processes, of which environment is one. All Nuclear Operations processes, not just the environment process, are integral to deliver effective environmental management. This document describes the Environmental Management arrangements within the context of the IMS for Nuclear Operations, hereafter referred to as the IMS Environmental Arrangements.

This ICP describes the IMS Environmental Arrangements by:

- Defining the environment process specific arrangements; and
- Providing an overview of the other Nuclear Operations processes which are integral to effective environmental management. Appendix A summarises the key elements in the other processes that support effective environmental management.

Compliance with the IMS Environmental Arrangements will ensure implementation of the Company Environmental Policy (Reference 2), provide a framework to support delivery of the EDF Energy purpose of 'Helping Britain Achieve Net Zero' and align with BS EN ISO14001:2015 (Reference 3).

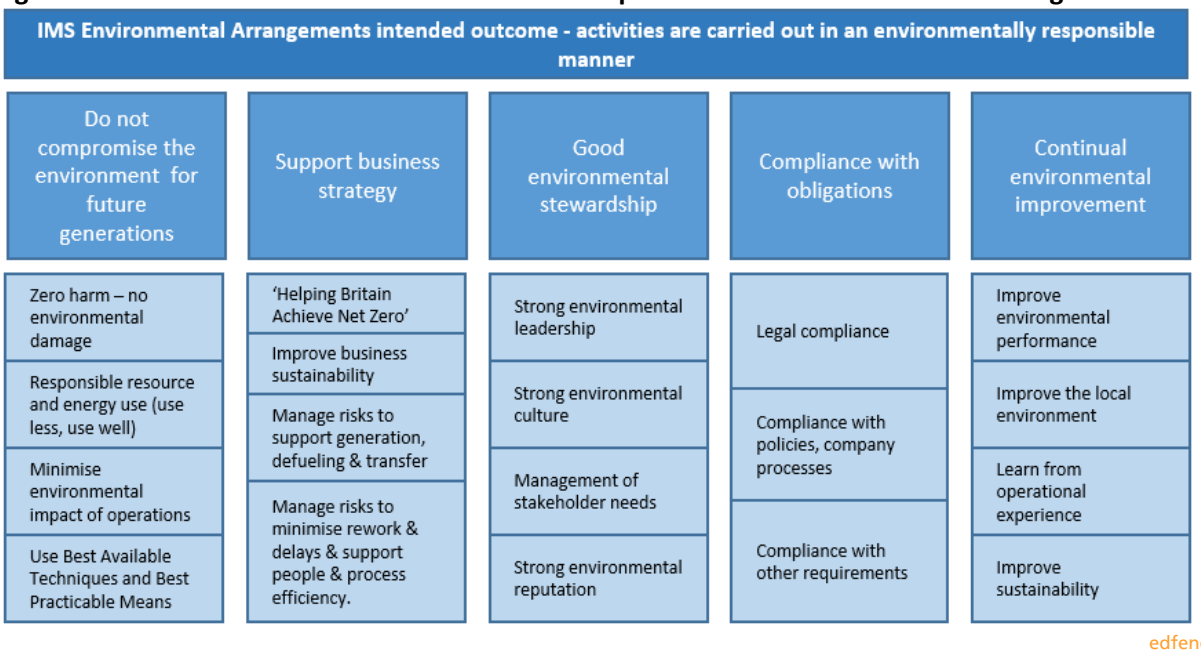
Company Specification 'Cross References Between the Management System Manual and External Standards' (Reference 4) identifies how the IMS delivers the requirements of BS EN ISO14001:2015 (Reference 3).

This document is one of the primary implementing documents for (a) environmental permits required under a number of different regulatory requirements (Reference 5); and (b) Nuclear Site Licence Condition 25 (2) (Reference 6) which relates to records of radioactive material. Company specifications within the Environment Process (sitting under this ICP) are the primary implementing documents for Nuclear Site Licence Conditions 32, 33 and 34 (References 7, 8 and 9). This document shall not be changed without consultation with Independent Nuclear Assurance (INA).

1.2 Purpose of the Nuclear Operations Environment Management Arrangements

The purpose of the IMS Environmental Arrangements is to ensure activities which deliver generation of 'low carbon electricity', defueling of our end of life stations and preparation for site transfer are carried out in an environmentally responsible manner.

Figure 1: Intended outcome of the Nuclear Operations IMS Environmental Arrangements



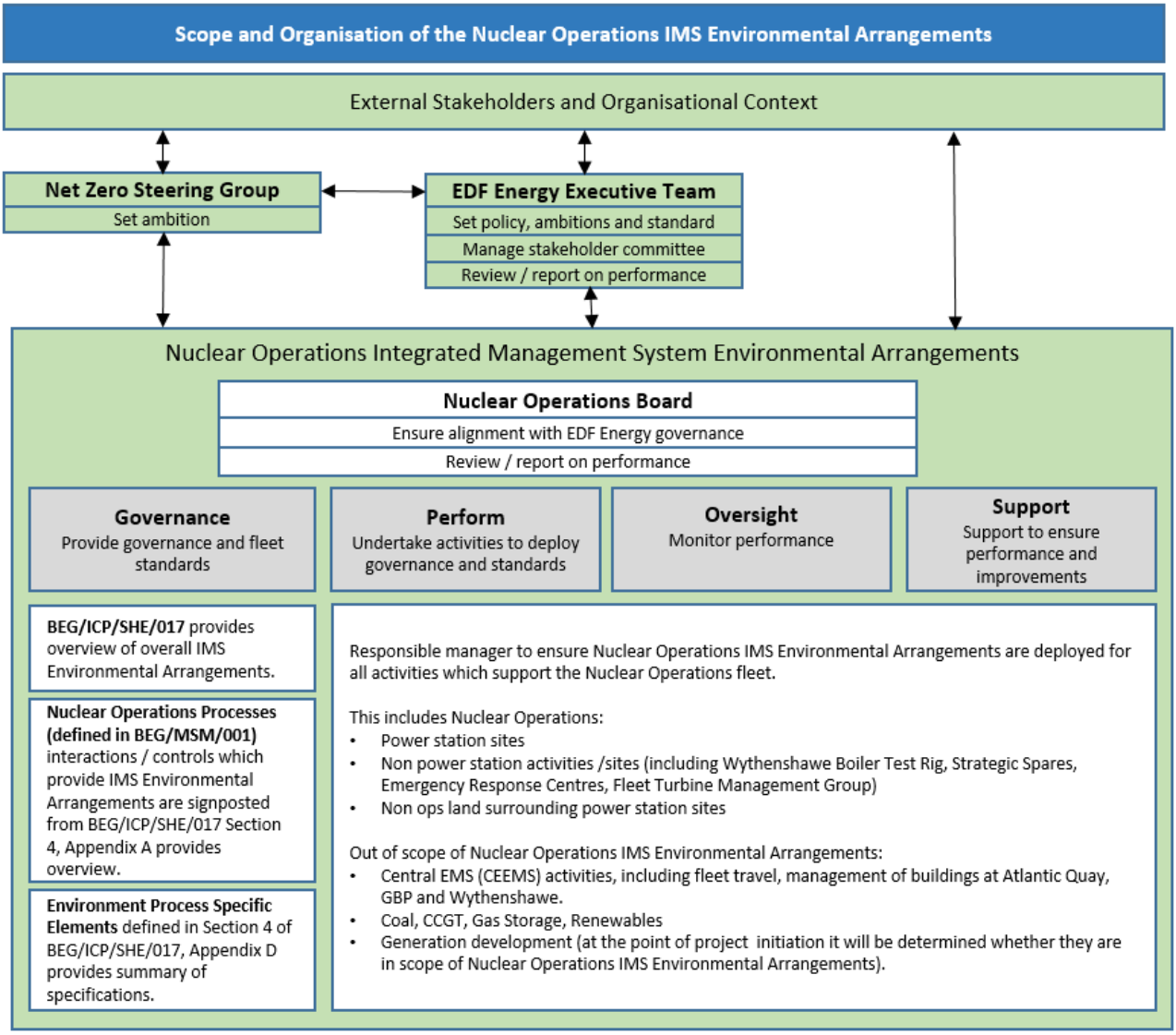
2 Scope

2.1 Scope of the IMS Environmental Arrangements

The IMS Environmental Arrangements apply to:

- Conventional and radiological environmental risks and opportunities;
- The full lifecycle of our stations (i.e. from design, construction, through to operation, defueling, preparation for decommissioning and transfer);
- All activities, plant, land and buildings on Nuclear Operations' sites (i.e. Power Stations), the surrounding Nuclear Operations landholdings and activities which directly support them at other locations; and
- All employees and contractors working on Nuclear Operations' behalf.

Figure 2: Scope and organisation of the Nuclear Operations IMS Environmental Arrangements



The Management Review of this Integrated Company Practice (ICP) and the associated process is done via the Governance Process (BE/ICP/GOV/001). This forms part of the wider Management review and reporting of the whole Management System. The Governance reporting structure explains how all the relevant inputs escalate and are actioned at the appropriate level up to and including the Executive team as required.

2.2 Internal controls

Internal Controls for the environment process are identified in Appendix B.

3 Responsibilities

Responsibilities defined in other Nuclear Operations Processes are not restated in this section, however are summarised within Section 4. This section provides the Environment Process specific responsibilities that are defined within this ICP.

3.1 Environmental Safety and Sustainability Branch Manager

The Environmental Safety and Sustainability Branch Manager is the Environment Process Owner for Nuclear Operations and is responsible for defining, establishing and maintaining the Environment Process Specific Arrangements (Section 4.1.2), this includes:

- Provision of resource to establish fleet governance, provide oversight, support and ensure high performance across Nuclear Operations (Section 4.2.3)
- Provision of resource to champion and drive the Nuclear Operations commitment to Help Britain Achieve Net Zero (Section 4.2.3)
- Appointing an ESGH peer group sponsor and chair (Section 4.2.4)
- Maintaining an assessment of organisational context and stakeholders relevant to the IMS environmental arrangements and ensure any issues/risks are addressed (Section 4.1.1 and 4.3.2)
- Establishing and maintaining environmental risk processes for aspects, compliance obligations and BAT / BPM (Section 4.3.2)
- Providing arrangements to establish governance and controls for environmental management and ensure responsibilities within these are communicated (Section 4.6.1)
- Identifying environmental controls required to be embedded in other processes (Section 4.6.1)
- Establishing ESS activities as appropriate to support delivery of environmental improvement plans in business/work plans and monitor delivery (Sections 4.4.2 and 4.4.3)
- Supports effective relationships with external regulatory stakeholders (Section 4.5)
- Maintaining an overview of environmental performance and ensuring functional oversight of environmental performance to monitor the effectiveness of the IMS Environmental Arrangements (Section 4.8).

3.2 All Process Owners

Process owners are responsible for:

- Nominating an environmental lead for the process where appropriate (Section 4.2.3)
- Ensuring the processes support the IMS Environmental Arrangements by embedding the controls required within Section 4 and in Appendix A and by ensuring these are communicated to those with responsibilities (Sections 4.3.1 and 4.6.1).
- Where appropriate ensure inclusion of monitoring to ensure effectiveness of environmental controls within their process (Section 4.8.2)
- Embed activities required to support delivery of environmental improvement plans in business/work plans and monitor delivery (Sections 4.4.2 and 4.4.3)

3.3 EDF Energy Land and Biodiversity Manager

EDF Energy Land and Biodiversity Management Specialist reports directly to EDF Energy and not Nuclear Operations, however Biodiversity is managed within scope of the Nuclear Operations IMS Environmental Arrangements, therefore this role holder has the following responsibilities:

- Ensuring provision of resource to establish governance, oversight, support and ensure management of Nuclear Operations 'non-operational' land and biodiversity activities (Section 4.2.3)
- Establishing governance and monitoring of biodiversity management (Section 4.6.1 and 4.8.2) and ensuring responsibilities within governance are communicated (Section 4.6.1)
- Ensuring engagement with environmental peer groups as appropriate (Section 4.2.4 – 4.2.7)
- Compliance with the Nuclear Operations Environment Process specific arrangements for the remit of management of Nuclear Operations 'non-operational' land and reporting any non-compliances and events to the appropriate Nuclear Power Station, senior management and ESS as appropriate (Sections 4.8 and 4.9)

3.4 Technical Safety and Support Manager (at Stations)

The TSSM is the Station Environment Process Owner and is responsible for ensuring provision of resources to establish local compliance arrangements, provide oversight, support and ensure required environmental performance (Sections 4.2.3). They are also responsible for:

- Ensuring development of local arrangements where required to manage risks and communication of responsibilities (Section 4.6.1)
- Embedding activities where appropriate to assist in delivering fleet and station improvement plans and monitoring delivery (Sections 4.4.2 and 4.4.3)
- Maintaining an overview of environmental performance at their site.
- Ensuring effective Environmental Management Review and that an Environmental Strategy Review Group (or equivalent) is formed at their site (Section 4.8.8 and Section 4.8.9).

3.5 Environmental Safety Group Head (at Stations)

The station Environmental Safety Group Head is a member of the ESGH peer group (Section 4.2.3) and is responsible for:

- Ensuring ESG engagement with environmental peer groups (Section 4.2.4 – 4.2.7)
- Ensuring compliance with IMS Environmental Arrangements in line with responsibilities as per signposted specifications.

3.6 Managers of Nuclear Operations 'Non Power Station Activities'

The Managers of Non Power Station Activities, i.e. those under direct control of Nuclear Operations, however not under the direct line management of the power station organisation[1], are responsible for ensuring provision of resources to establish local compliance arrangements, provide oversight, support and ensure required environmental performance (Sections 4.2.3). They are also responsible for:

- Ensuring risks are identified and assessed (Section 4.3 and 4.3.9)
- Ensuring development of local arrangements where required to manage risks and communication of responsibilities (Section 4.6.1)
- Ensuring compliance with IMS Environmental Arrangements in line with responsibilities as per signposted specifications.

[1] For example this includes, but is not limited to Strategic Spares, Wythenshawe Boiler Rig, Emergency Response Centres, Fleet Turbine and Maintenance.

3.7 Station Environmental Strategy Review Group (or equivalent)

The ESRG (or equivalent) is responsible for delivering the Terms of Reference set out in Appendix F, establishing and monitoring delivery of local environmental improvement objectives/targets and where appropriate delivering requirements that support management review (Sections 4.4.2, 4.4.3, 4.8.8 and 4.8.9).

3.8 Environmental Safety Group Head Peer Group Chair

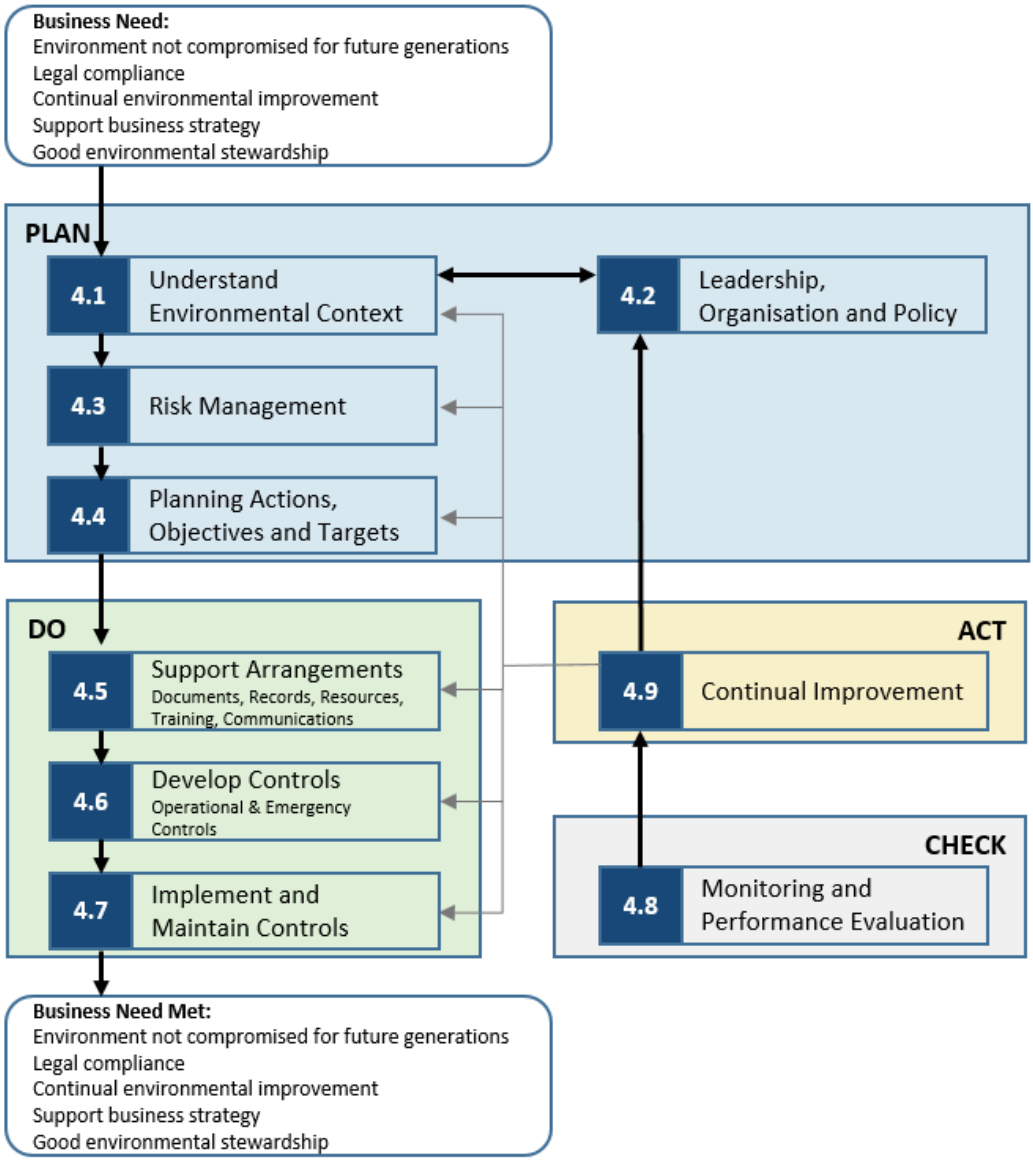
The ESGH Peer Group Chair is responsible for ensuring that the Peer Group delivers its purpose; develops and tracks delivery of an environmental improvement plan; and sponsors and nominates a chair for supporting environmental peer groups. (Sections 4.2.5, 4.2.6 and 4.2.7).

3.9 Environmental Peer Group Chairs (ECC, ORWG and DADS)

The chairs of these peer groups are responsible for ensuring the peer group is effective, delivers its purpose and develops and tracks delivery of improvement actions to support the ESGH improvement plan (Sections 4.2.5, 4.2.6 and 4.2.7, 4.4.2 and 4.4.3).

4 Practice

Figure 3 Process Flow Chart



	Action	Responsibility[2]
4.1	**Context of the Organisation**	
4.1.1	**Organisational Context and Stakeholders** Nuclear Operations determines the organisational context, key stakeholders, their needs and expectations and how they are addressed within the Management System Manual (Reference 1).	Management System Manual (Reference 1)
	An assessment of the organisational context and stakeholders specifically relevant to environmental management will be undertaken and maintained (Reference 10). This identifies any specific issues with potential to impact on environmental management needs. Any remaining risks arising will be addressed as per Section 4.3.	**Environmental Safety and Sustainability Branch Manager**
4.1.2	**Define Environmental Management Controls** The Environmental Safety and Sustainability Branch Manager shall identify, establish and maintain the environmental process specific arrangements and tools required for effective environmental management, within the context of the Nuclear Operations integrated management system as defined in the Management System Manual (Reference 1).	**Environmental Safety and Sustainability Branch Manager**
4.2	**Leadership, Organisation and Policy**	
4.2.1	**Leadership** The EDF Energy Nuclear Generation Limited Board – referred to as Nuclear Operations Board has collective responsibility for directing the affairs of Nuclear Operations consistent with the relevant EDF Energy policies and strategies. They are responsible for setting the Nuclear Operations strategic direction and have ultimate accountability for legal compliance. Full responsibilities for the board are within the Management System Manual (Reference 1). The Safety, Security and Assurance (SS&A) Director holds the position of management representative responsible for co-ordinating development and implementation of the management system, its assessment and improvement. The Head of Health, Safety and Environment reports to the SS&A Director and has specific functional leadership responsibility on environmental matters, driving fleet environmental performance management and leading and embedding sustainability into Nuclear Operations.	Management System Manual (Reference 1)
4.2.2	**Environmental Policy** The EDF Energy Executive sets the EDF Energy Environment Policy which establishes the Company's vision, values, standards and expectations. The applicable requirements are adopted within Nuclear Operations (Reference 2).	Information

[2] Role holder with responsibility or reference to process/specification where responsibility is defined

	Action	Responsibility[2]
4.2.3	**Organisation, Roles, Responsibilities and Authorities** ***Senior Management:*** The environment process and policy owners are identified in References 11 and 12 as follows: • Responsible Director – SS&A Director • Process Owner – Environmental Safety and Sustainability Branch Manager • Station Process Owner – Technical Safety Support Manager • Peer Group Member – Environmental Safety Group Head • Policy Owner – Head of Health, Safety and Environment A Station Director is nominated as sponsor for each process, including one for the environment process and one as sponsor for the Net Zero and Sustainability. Sponsoring Director, process owner and peer group member responsibilities are set out in the Process Management Manual (Reference 13)	Process Owner Listing (Reference 11) Policy Owner Listing (Reference 12) Process Management (Reference 13)
	The Environmental Safety and Sustainability Branch Manager shall secure resource to establish fleet governance, provide oversight, support and advice to support high performance and effective environmental management across Nuclear Operations. ESS Management Manual (Reference 15) documents the process for delivering these requirements as required within Reference 14. The Environmental Safety and Sustainability Branch Manager is also responsible for provision of resource to champion and drive the Nuclear Operations commitment to Help Britain Achieve Net Zero.	Process Management (Reference 13) Management System Manuals (Reference 14) **Environmental Safety and Sustainability Branch Manager**
	Nuclear Operations Process Owners: Where appropriate Process Owners (defined within Reference 11) should nominate a process environmental lead to raise awareness of environmental risks and controls and to provide a primary interface with ESS within HSE or station ESG as appropriate.	**Process Owners**
	TSSMs shall secure resource to establish local station compliance arrangements, provide oversight, support and advice to deliver required environmental performance at their power station.	Process Management (Reference 13)
	Land and Biodiversity Manager shall secure resource to establish Nuclear Operations arrangements, provide oversight, support and advice to support required environmental performance within their business area.	**Land and Biodiversity Manager**
	All Staff: Environmental protection and control is the responsibility of all staff. All individuals (not just those in environmental specialist roles) are key to delivering effective environmental management. Appendix A summarises how the Nuclear Operations company processes embed environmental control and protection.	As per process – key interfaces defined in Appendix A
	Staff in Environmental Specialist Roles: Environmental support functions are established to ensure availability of appropriate Suitably Qualified and Experienced Personnel (SQEP) to provide guidance, support and advice.	Information

	Action	Responsibility[2]
	Managers of Nuclear Operations Activities that are not under direct control of the power station, ' Non Power Station Activities'[3] shall secure resource to implement compliance with the IMS Environmental Arrangements, establish local supplementary compliance arrangements where required, provide oversight, support and advice to support required environmental performance within their business area.	**Managers of 'Non Power Station Activities'**

[3] For example this includes, but is not limited to Strategic Spares, Wythenshawe Boiler Rig, Emergency Response Centres, Fleet Turbine and Maintenance.

	Action	Responsibility[2]
4.2.4	**Environmental Peer Groups: Environmental Safety Group Head Peer Group** The Environmental Safety and Sustainability Branch Manager should assign a TSSM as Environmental Safety Group Head (ESGH) Peer Group Sponsor and appoint a chair.	**Environmental Safety and Sustainability Branch Manager**
	The **ESGH Peer Group** Chair should ensure the group delivers its purpose: • To support a fleet approach to environmental management and ensure process deployment; • To provide the Functional Governance Meeting requirements for the environment process via quarterly meeting by endorsement of the Quarterly Environment Report and Safety Fleet Alignment Meeting (SFAM) input; • To review and approve the environment process annual assessment (as per Governments Arrangements Reference 16); • To ensure compliance with relevant EU and UK legislation; • To maintain appropriate Key Performance Indicators to monitor performance (as per Section 4.4); • To influence the strategic direction and agree an environmental improvement plan (Section 4.4); • To ensure OPEX is shared and assessed in a timely manner and actions agreed as appropriate to reduce potential for environmental events; • To maintain oversight of the process performance and management of any elevated or escalated risks (Section 4.9.4), identify any adverse trends and where appropriate escalate and take appropriate action. This may include upward communication to the Safety Fleet Alignment Meeting; • To share and replicate best practice to underpin sustainable environmental performance; • To influence improvements in company environmental performance; and • To set direction and accountability for sub-groups. • To ensure that there is appropriate consideration of delivery of Intelligent Customer Arrangements (Reference 79) The ESGH Peer Group shall sponsor and agree the purpose for any additional fleet environmental peer groups which are required to ensure effective environmental management. The ESGH Peer Group should also nominate a chair for each peer group. As a minimum the peer groups shall include: • Environmental Compliance Co-ordinators (ECC) Peer Group (Section 4.2.5) • Operational Radioactive Waste Group (ORWG) (Section 4.2.6) • Discharges and District Survey (DADS) Peer Group (Section 4.2.7) Peer groups with a primary environmental focus are summarised in Appendix C. A record of the meeting and actions shall be maintained on the V drive.	**ESGH Peer Group Chair**

	Action	Responsibility[2]
4.2.5	**Environmental Peer Groups: Environmental Compliance Co-ordinator (ECC) Peer Group** The ECC peer group has the following purpose: • Share and assess OPEX in a timely manner and agree actions as appropriate to reduce potential for environmental events; • Communicate relevant and emergent environmental issues; • Provide support on environmental matters; and • Provide challenge on environmental matters. • To ensure that there is appropriate consideration of delivery of Intelligent Customer Arrangements (Reference 79) The ECC Peer Group Chair should ensure the group convenes regularly and delivers the purpose above. As a minimum ECC Peer Group membership includes station ECC's (to be quorate at least three stations must be in attendance). The ECC peer group should have an improvement plan in place (Section 4.4).	**ECC Peer Group Chair**
4.2.6	**Environmental Peer Groups: Operational Radioactive Waste Group (ORWG)** The ORWG peer group has the following purpose: • Provide oversight of the radioactive waste management and disposal practises across the fleet; helping to ensure adequate standards during radwaste generation, storage and disposal and ensuring regulatory compliance against Site Licence Conditions 25, 32, 33 and 34. Solid and liquid radioactive wastes which are not discharged to sea or air are to be discussed. Non-radioactive wastes and radioactive effluent discharges are discussed at the ECC and DADS peer group meetings respectively. • Act as the SQEP body for peer review of radwaste governance. Identify areas for improvement, gaps and challenge non-value adding activities. Discuss relevant advice given by sites' RWA bodies within the group to ensure that a level of consistent RWA advice is provided across all sites. • Gather and share relevant OPEX from across the industry, promoting and assisting in the implementation of best practice through the Radioactive Waste Improvement Plan where appropriate. Communicate and celebrate successes with regards to radwaste improvements. • Provide a forum for the open discussion of individual station issues to identify where resources (time and money) can be saved by adopting an approach used elsewhere in the fleet. • Be an effective representation of the peer group which is able to identify and address fleet wide issues; influencing and advising key stakeholders, escalating risks and issues within the company where necessary, forming sub groups for particular assignments and tasks as required and coordinating support for all members of the group and other employees where appropriate. • To support the stations' appointed AccRWEs in the provision of their radioactive waste advice. • To ensure that there is appropriate consideration of delivery of Intelligent Customer Arrangements (Reference 79) The ORWG chair should ensure the group convenes at least quarterly and has terms of reference to ensure the purpose is delivered. A record of the meeting shall be maintained on the V drive. The ORWG peer group should have an improvement plan in place (Section 4.4).	**ORWG Peer Group Chair**

	Action	Responsibility[2]
4.2.7	**Environmental Peer Groups: Discharges and District Survey (DADS) Peer Group** The DADS Peer Group has the following purpose: • To collate, review and benchmark all stations existing data to ensure that there is no unexplained trend in discharges to, or measurements made in the environment. • To collate, review and benchmark all stations analysis quality assurance (QA) data to ensure that there are no unexplained trends. • To achieve best practice within Nuclear Operations, as appropriate to life-cycle status with regard to: the assessment of radioactive liquids, gases, mists and dusts discharged; district survey sample collection and analysis, which requires: identifying areas where consistency or improvements are required by the comparison of practices, both within and outwith Nuclear Operations; and prioritising these areas to the ESGH Peer Group. • To revise and approve any changes to the generic methods (which are regarded as Best Practice) which are employed to sample and measure radioactive liquid and gaseous discharges. • To support the stations' appointed AccRWEs in the provision of their radioactive waste advice. • Form part of the compliance arrangements for Radioactive Substances Regulation (RSR). • To ensure that there is appropriate consideration of delivery of Intelligent Customer Arrangements (Reference 79) The DADS Peer Group chair should ensure the group convenes at least twice per year and has terms of reference to ensure the purpose is delivered. A record of the meeting shall be maintained on the V drive. The DADS peer group should have an improvement plan in place (Section 4.4).	**DADS Peer Group Chair**
4.3	**Environmental Risk Management**	
4.3.1	**Environmental Risk and Opportunities Management Approach** Risks and opportunities which may impact on achieving the intended outcome of the IMS Environmental Arrangements (Figure 1) and delivery of the environmental policy are identified and assessed via a number of sources as identified in Appendix A. Understanding these risks is key to planning effective IMS Environmental Arrangements with appropriate controls and to driving improvements. Key risk processes are summarised within this Section.	Information
	Process owners shall establish and maintain arrangements and provide support and advice for the risk assessment processes identified in Appendix A (summarised below).	**Process Owners**

	Action	Responsibility[2]
4.3.2	The Environmental Safety and Sustainability Branch Manager shall establish and maintain the following **environment risk identification / assessment** processes: • ***Context of the Organisation and Stakeholder Needs*** (Reference 10): assessment of organisation context and stakeholders (Section 4.1) to identify risks that may arise and ensure appropriate controls are in place. • ***Environmental Aspects*** (Reference 17): identification and assessment of key risks relating to the main systems, plant and activities. • ***Compliance Obligations*** (Reference 5): identification and assessment of applicable compliance obligations and ensure the business is informed of requirements. Compliance obligations include any legal or other requirements which Nuclear Operations has to comply with and those which we choose to comply with (for example contracts, codes of practice and industry standards). • ***Best Practicable Means/Best Available Techniques*** (Reference 18): assessment to ensure that relevant operational and radioactive waste management activities: – Use BAT / BPM (i.e. optimised techniques) based on a systematic consideration of potential alternatives, including consideration of health, safety, the environment, waste prevention, minimisation and disposal and other likely costs and benefits for the whole lifecycle of the waste. – Ensure that all ionising radiation exposure to members of the public are kept as low as reasonably achievable (ALARA), economic and social factors being taken into account.	**Environmental Safety and Sustainability Branch Manager**
4.3.3	**Risk Management, Asset Management and Business Planning Processes:** • ***One Risk:*** This tool provides for recording and assessment of significant environmental risks (formerly BERL, then NGRL). The One Risk log is used for significant issues which may impact on nuclear, radioactive, industrial and environmental safety and delivery of the business imperatives.	Risk Management (Reference 19) Asset Planning (Reference 20)
4.3.4	**Work Prioritisation and Management:** • ***Work Management and Risk Assessment:*** Routine and emergent work at Nuclear Operations power stations is planned using the On Line Work Management Process. This assesses risk to prioritise work. When Work Order Cards (WOC) are prepared these include risk assessments and method statements to manage risks to people, plant and the environment whilst undertaking the work. • ***Minor Work/Tool Pouch Work Risk Assessment:*** Minor work not covered by a WOC is controlled by the specifier, this should consider environmental risks. • ***Setting to work, pre-job and post-job debriefs*** will ensure appropriate level of brief is undertaken for the task, risks have been considered and communicated and 'Take 5' is followed to identify any associated general hazards or new or unmitigated risks prior to commencing work.	Online Work Management (Reference 21) Setting to Work (Reference 23)
4.3.5	**Supply Chain Risks (Work, Services and Goods):** • ***Environmental Risks Arising from Supply Chain*** are identified, assessed and controlled via the Acquire Goods and Services (or Procurement) Process. This includes selection of companies; specification of work, services and goods; and delivery of work, services and goods to ensure management of environmental risks. This is supported by the Health, Safety and Environmental Requirements for Contractors Standard.	Procurement (Reference 24). Contractor HSE Requirements (Reference 25).

	Action	Responsibility[2]
4.3.6	**Projects:** • ***Environmental Risks Arising from Projects*** are identified, assessed and controlled via the Project Management Process using the Environmental Risk and Waste Management Assessment Form (Reference 27).	Project Management (Reference 26)
4.3.7	**Engineering Change Maintain Design Integrity:** • ***Environmental Risks Arising from Engineering Changes*** which have the potential to impact on nuclear safety are identified, assessed and controlled via the Maintain Design Integrity Process and the Environmental Protection Specialist Assessment Checklist (Reference 29).	Maintain Design Integrity (Reference 28) Environmental Specialist Assessment (Reference 29)
4.3.8	**Defueling operations and decommissioning preparations** Defueling operations and management of decommissioning activities are controlled via the Defuelling and Decommissioning Processes (References 30 and 31).	Decommissioning (Reference 30) Defuelling (Reference 31)
4.3.9	**Risks associated with Nuclear Operations activities that are not under direct control of the power stations, 'Non Power Station Activities'.** These activities include those under direct control of Nuclear Operations or the IMS Environment Arrangements, however not under the direct scope/line management of the power station organisation[4]. Any project type work undertaken within these activity areas (e.g. this may include construction of buildings, decommissioning of plant, outage support) should be assessed using the Projects Environmental Risk and Waste Management Assessment Form (Reference 27) and managed appropriately, whether they are under direct control of Projects/Investment Delivery or not. These forms should be reviewed and approved by an ECC at the station where the work is to be delivered or by ESS.	**Managers of 'Non Power Station Activities'**
4.4	**Environmental Actions and Objectives**	
4.4.1	**Environmental Actions and Planning** Appropriate actions and controls shall be defined, planned and implemented to deliver the policy (Section 4.2) and mitigate significant risks (Section 4.3). These should be integrated into the Nuclear Operations business processes as appropriate. Actions and controls may be: • Included in plant design and engineering controls; • Embedded into procedures, work instructions etcetera; • Delivered via competence, training and awareness; • Inspection, maintenance or testing; • Part of an improvement programme or key objective (Section 4.4) To determine whether actions are required and appropriate the level of risk, BAT/BPM assessment, economic and technological viability should be considered. Effectiveness of actions is monitored via performance monitoring (Section 4.8).	As per processes used to identify and mitigate risk (refer to Section 4.3 above) or via improvement plans (Section 4.4.2 below)

[4] For example this includes, but is not limited to Strategic Spares, Wythenshawe Boiler Rig, Emergency Response Centres, Fleet Turbine and Maintenance.

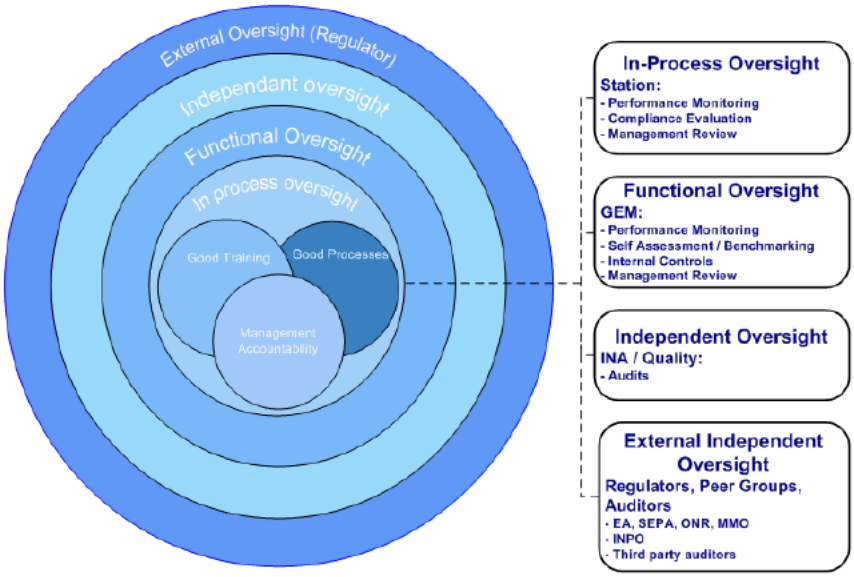
	Action	Responsibility[2]
4.4.2	**Environmental Indicators, Objectives, Improvement Targets and Plans** ***Key Performance Indicators*** for environmental management are developed, monitored and managed by the fleet manager / process owner as part of the Fleet Performance Management Programme (Reference 32). Environmental indicators and their definitions are in the Performance Management Metrics Data Dictionary (Reference 33) series of documents as per Appendix G.	Performance Management (Reference 32)
	A Fleet Environmental Improvement Plan shall define key fleet improvement objectives. The plan should be defined by considering performance, events, risks and forthcoming changes. ORWG, ECC and DADS Environmental Peer Group activities should support this.	**ESGH and Environmental Peer Group Chairs**
	Station Environmental Improvement Objectives and Targets shall be established. These should be consistent with the Environmental Policy and should be Specific, Measurable (where possible), Achievable, Relevant and Time Bound (SMART). Objectives and targets should be selected with the primary focus of risk mitigation or performance improvement. Inputs considered when selecting targets should include: locally significant environmental aspects, environmental performance, compliance obligations and other risks (Section 4.3). Note: key risk mitigations included within the ESRG (Section 4.8.89) can be used to demonstrate the station has appropriate objectives and targets. Objectives and targets should be agreed via the Station ESRG and should have defined delivery plans and clear accountability and resources secured for delivery. Delivery of these should be tracked via the ESRG's (Section 4.8.89).	**Station ESRG (or equivalent as per Section 4.8.89)**
	Sustainability: a sustainability performance dashboard will be maintained to support EDF in delivery of the ambition 'Helping Britain to Achieve Net Zero'.	Sustainability Governance (Reference 47)
	Biodiversity Action Plan: Biodiversity Action Plans and Integrated Land Management plans are developed as per Specification Biodiversity Management (Reference 34).	Biodiversity Management (Reference 34)
4.4.3	**Monitoring Delivery Against Plan** Delivery against the plans, objectives and targets should be monitored by an appropriate oversight group or manager as follows and in the event of deviation from plan appropriate actions agreed: • Key Performance Indicators – Safety Fleet Alignment Meeting • Fleet environmental improvement plan – ESGH Peer Group • DADS/ORWG/ECC peer group improvement activities – relevant Peer Group • Station objectives and targets - ESRG (or equivalent as per Section 4.8.89) • Net Zero and Sustainability performance dashboard – Nuclear Operations Management Team	**Peer Groups / Managers**
4.5 Support Arrangements		

	Action	Responsibility[2]
4.5.1	**Documents and Records** The Documented Information Process shall be used to control: • Nuclear Operations documents required to deliver effective environmental management (for example standards, procedures, guidance notes, forms, templates and environmental advice notes). • Any records required to demonstrate effective environmental management and/or that the intended outcome is achieved. Requirement for these records should be specified within arrangements. Refer to Section 4.5.4 for control of information received from regulators/third parties.	Documented Information Process (Reference 35)
4.5.2	**Resources** The Nuclear Operations Management System Manual (Reference 1) requires adequate resources to be provided, these should be secured via the Integrated Business Planning Process (Reference 36). Key resources will be controlled via: • Asset Management (Reference 20); • Financial Control (Reference 37); • Procurement and Materials Management (Reference 24); • Human Resources (Reference 38); and • Management of Change (Reference 39).	Integrated Business Planning (Reference 36) Asset Mgt (Reference 20) Financial Control (Reference 37) Procurement (Reference 24) Human Resources (Reference 38) Mgt of Change (Reference 39)
4.5.3	**Competence and Training** Recruitment, selection and orientation of staff are covered by the Human Resources Process. Recruitment should ensure appropriate SQEP requirements for the role. Role and post specific competence requirements are delivered via the 'Systematic Approach to Training' (SAT) process. Environment specific roles are defined for: • ESS Environment Officers (Reference 42) • Station ESG Environmental Safety Engineers (Reference 43) • Authorisation and appointment of radioactive waste advisors (Accredited Radioactive Waste Engineers - AccRWEs) (Reference 44) Environmental requirements appropriate to other roles will be specified in the relevant Training Programme Description, Post Training Profiles and Role Training Profiles. ENVAWARE for Nuclear (general environmental awareness training for working on a power station) is a requirement for all staff within Nuclear Operations. Nuclear professionalism training is delivered via 'Human Performance' process. Training records are held in the personnel management system on the intranet. Competence and training of contractors is managed via the Procurement Process.	Human Resources (Reference 38) Systematic Approach to Training (Reference 40) Mgt of Human Performance (Reference 41) Procurement (Reference 24)

	Action	Responsibility[2]
4.5.4	**Communication and Awareness of Environmental Matters** Communications of environmental matters to employees, those working on our behalf and community liaison should be in accordance with Nuclear Operations Communication Process.	Communications (Reference 45)
	Communication with Employees Arrangements to ensure communication with employees on environmental matters, including awareness of issues relevant to their work includes: • Environmental peer group and station meetings (Section 4.2 and Appendix C); • Leadership (leading by example), team meetings, daily safety messages, setting to work and pre and post job briefings; • Corrective action programme and use of operational experience • Access to standards and procedures via CDMS • Embedding requirements in work management processes e.g. work instructions; • Info Comms and Process Comms • Publication of Sustainability case studies; • Sustainability Location Co-ordinators Peer Group; • Promotional campaigns, screensavers etcetera such as World Environment Day.	Work Control (Reference 21) Setting to Work (References 23) Documented Information (Reference 35) Communications (Reference 45) Organisational Learning (Reference 46)
	Communication/Interactions with Regulators are managed in accordance with the Independent Assessment Process and the following supporting specifications/ procedures: • Safety Regulator Interactions (Reference 48), and • Management of Safety Regulator Correspondence (Reference 49). Fleet environment regulator meetings will be held as appropriate subject to business need in accordance with Reference 48.	Independent Assessment (Reference 50)
	Communication with Other External Stakeholders Nuclear Operations Management System Manual (Reference 1) sets out communication with other external stakeholders (for example media, supply chain partners, NLF trust, WANO). Environmental reporting to stakeholders is as per Reporting Procedure (Reference 51) and for specific compliance obligations will be identified in the relevant NGL standard. All Nuclear Operations power stations have established meetings with local communities (for example Local Community Liaison Groups). These enable sites to communicate on environmental performance and invite feedback from the local community. Any complaints should be managed in accordance the Organisational Learning Process.	Management System Manual (Reference 1) ERO Reporting (Reference 51) Organisational Learning (Reference 46)
4.6 Develop Controls		

	Action	Responsibility[2]
4.6.1	**Establish Operational Controls** The Environmental Safety and Sustainability Branch Manager shall ensure development, approval and review of Nuclear Operations environmental governance, standards and guidance required for effective environmental management, this shall include documentation to: • Set standards for required support processes and tools; • Set standards to manage the key risks identified; • Set standards to ensure compliance with the policy, legal and other obligations. Arrangements should include appropriate performance indicators/monitoring and/or measurement to confirm effectiveness and compliance (refer to Section 4.8.2). Key environment process specific documentation is identified in Appendix D.	**Environmental Safety and Sustainability Branch Manager** **Land and Biodiversity Management Specialist**
	Process Owners shall ensure appropriate environmental controls are embedded to manage environmental risks as identified in Appendix A. Arrangements should include appropriate performance indicators/monitoring and/or measurement to confirm effectiveness and compliance (refer to Section 4.8.2). Process requirements should be communicated to those with responsibilities.	**Process Owners**
	Local arrangements should be developed if necessary to supplement fleet processes to: • Incorporate site specific requirements and responsibilities; • Control site specific risks and comply with any local obligations; and • Clarify local implementation arrangements of the Nuclear Operations standards.	**TSSM** **Managers of 'Non Power Station Activities'[5]**
4.6.2	**Establish Emergency Preparedness Controls** Emergency response arrangements are specified within the Nuclear Operations Emergency Arrangements Process.	Emergency Arrangements (Reference 52)
4.6.3	**Change Control** The potential impact of planned changes (for example to resources, people, plant design, operation, organisation etcetera) should be considered via the risk assessment and resource management processes identified in Sections 4.3 and 4.5. Potential impacts throughout the lifecycle of the planned change (i.e. from design to preparation for delivery, delivery, construction, modification, operation and final decommissioning) should be considered. Other unplanned changes should be identified and managed (including potential environmental risks arising) as appropriately via: • Performance evaluation (Section 4.8); • Operational Decision Making within Operations Process (Reference 53); • Management of Maintenance Process (Reference 54).	Risk Processes Section 4.3 Resource Mgt Section 4.5 Performance Evaluation Section 4.8 Operations (Reference 53) Maintenance (Reference 54)
4.7 Implement and Maintain Controls		

[5] For example this includes, but is not limited to Strategic Spares, Wythenshawe Boiler Rig, Emergency Response Centres, Fleet Turbine and Maintenance.

	Action	Responsibility[2]
4.7.1	**Implement Controls** Responsibilities for implementing environmental controls are included within the relevant documents (refer to Appendices A, D and E).	Information
4.7.2	**Maintain Controls** Plant which has potential to pose a significant risk to the environment in the event of failure or deterioration in condition or operability/availability is controlled by: • Environmental Maintenance Inspection and Test Specification (EMITS) (Reference 55) to ensure appropriate maintenance, inspection and condition monitoring; and/or • Environmental Specifications (ESPECS) (Reference 56) to monitor and respond to any changes in operability/availability which may elevate environmental risk. The Availability Assessments Specification (57) also supports this. Controls which are embedded within process documentation (e.g. specifications) are subject to periodic review as part of the Documented Information Process (Reference 35) to ensure they remain appropriate to the risk posed.	EMITS (Reference 55) ESPECS (Reference 56) Availability Assessment (Reference 57) Documented Information (Reference 35)
4.8	**Monitoring and Performance Evaluation**	
4.8.1	The Nuclear Operations oversight model is a fleet approach (Reference 32) follows a layered approach, commonly known as the onion model. The graphic below illustrates this in the context of environmental management. 	Information
4.8.2	**Performance Monitoring** The Fleet Performance Improvement Process (Reference 32) specifies requirements for monitoring of KPI's (refer to Section 4.4 for setting Environmental KPI's).	Fleet Performance (Reference 32)

	Action	Responsibility[2]
	ESS monitors, analyses and reports on fleet environmental performance (Reference 51). This enables adverse trends to be identified and appropriate action to be taken.	Environmental Reporting (Reference 51)

	Action	Responsibility[2]
	Appropriate monitoring requirements are required to be embedded in processes (Section 4.6) to enable action to be taken in the event of adverse results. Monitoring and calibration techniques and requirements should be appropriate to the level of risk. Methods for monitoring, calibration, evaluation against specified criteria, analysis and communication of results should be specified as appropriate. Types of monitoring could include: • Plant condition and operability via EMITS and ESPECS (Section 4.7); • Quantity / composition of discharges to the environment (inc. waste disposals); • Quantity of resource usage; • Monitoring environmental conditions, changes may result in (1) potential risk that environmental changes impact on Nuclear Operations, or (2) identification that activities are not as planned and have impacted the environment; • Adverse indicators: defects and condition reports; • System health (SHIP); and • Effectiveness / health of control process (e.g. level of control deployment[6]). Monitoring techniques may include inline instrumentation, sampling and analysis, direct or remote observation, derivation, calculation or estimation.	Responsibilities as per Section 4.6

[6] Delivery of training, effectiveness of compliance evaluations and management review, compliance with planned programme

	Action	Responsibility[2]
4.8.3	**Evaluation of Compliance** Evaluation of compliance against applicable obligations (Section 4.3) is undertaken in accordance with Specification 'Evaluation of Environmental Compliance'.	Evaluation of Compliance (Reference 58)
4.8.4	**Internal Audit and Independent Assessment** Internal audit to confirm environmental management and the integrated management system is effective and adheres to arrangements is as per the Quality Management Process, supported by specifications 'Management System Audits – Fleet and Stations' (Reference 61). The Independent Assessment Process provides for oversight and assessment, independent from the line organisation, to ensure adherence to the organisation's arrangements.	Quality Management (Reference 59) Independent Assessment (Reference 50)
4.8.5	**Process Controls** Assessment to confirm process controls are implemented is as per Specification 'Governance Arrangements'. Appendix B specifies the tests for the Environmental Process.	Governance Arrangements (Reference 16)
4.8.6	**Functional Self Assessment and Oversight** Environmental functional oversight is provided via monitoring of objectives (Section 4.4), performance and management review (Section 4.8). Additional specific surveillance activities may be appropriate in response to emergent risks or adverse trends. This will deliver the requirements of specification 'Fleet Managers Approach to Process Assurance and Support' (Reference 62). Oversight output should be appropriately recorded and communicated for example using the Surveillance Process (Reference 63) or via Self Assessment / Benchmarking within the Organisational Learning Process (Reference 46).	**Environmental Safety and Sustainability Branch Manager**

	Action	Responsibility[2]
4.8.7	**Fleet Environmental Management Review** Nuclear Operations 'Management System Manual' (Reference 1) and 'Governance Arrangements' (Reference 16) within the Governance Process (Reference 64) set out the Nuclear Operations requirements for management review. Fleet Environmental Management Review is primarily delivered by the: • Quarterly Functional Governance Meeting (via ESGH Peer Group Section 4.2) supported by the quarterly environmental performance report; • Quarterly Safety Fleet Alignment Meeting; and • Approval of the annual process controls assessment (Section 4.8.5) confirming the environment process continues to perform effectively to deliver the intended outcome. Additional meetings may also demonstrate further management review, such as: • Plant Risk Sub Committee (reviews key plant risks) • Engineering Governance Forums (oversight of engineering and key project delivery) • Gloucester Business Park HESAC (reviews location relevant performance / issues by exception) • Weekly SS&A Team Brief (performance / issues by exception) • SS&A Directorate Report to the EDF Nuclear Operations Board (performance / issues by exception)	Management System Manual (Reference 1) Governance Process (Reference 64)
4.8.8	**Station Environmental Management Review** Management review ensures continued suitability, adequacy and effectiveness of the IMS Environmental Arrangements and their deployment. Management review shall make decisions and take appropriate actions to address any adverse trends or inadequate performance identified. Each station should be able to demonstrate where the minimum requirements for Management Review are covered (as set out in Appendix E), these do not need to be via one forum as many processes contribute to effective Management Review. Appendix E includes example forums that stations may use to demonstrate the minimum requirements are covered.	TSSM
4.8.9	**Station Environmental Strategy Review Groups** An Environmental Strategy Review Group (ESRG) (or equivalent) shall be established for each station as per the terms of reference and requirements in Appendix F. The ESRG (or equivalent) demonstrates some of the elements of management review and ensures ongoing focus on mitigating key risks to ensure compliance and environmental protection.	TSSM
4.9 Improvement		

	Action	Responsibility[2]
4.9.1	**Improvements** Priorities and potential improvements to environmental management and performance are identified via risk assessment (Section 4.3), actions and objectives (Section 4.4) and performance evaluation (Section 4.8).	Information
4.9.2	**Nonconformity and corrective action** In the event of any potential or actual adverse condition being identified this will be recorded and actioned in accordance with the Organisational Learning Process and Specification 'Environmental Event Categorisation' (Reference 65).	Organisational Learning (Reference 46)
4.9.3	**Environment Regulator Commitments** Environment regulator actions and commitments are managed and tracked in accordance with 'Management of Safety Regulatory Correspondence' (Reference 49).	Management of Safety Regulatory Correspondence (Reference 49)
4.9.4	**Fleet Elevation Recorder** If further attention is required for any deficiencies identified (for example they aren't appropriately resolved in a timely manner or are significant enough for wider attention), then these should be managed as appropriate using the Fleet Elevation Register within 'Fleet Managers Approach to Process Assurance and Support'.	Fleet Managers Approach to Process Assurance and Support (Reference 62)

5 Definitions

AccRWE	Accredited Radioactive Waste Engineer
AGR	Advanced Gas Reactor
ALARA	As Low as Reasonably Achievable
AMS	Asset Management System
BAT	Best Available Techniques
BERL	British Energy Risk Log (now NGRL)
BPM	Best Practicable Means
CAP	Corrective Action Programme
CDMS	Controlled Document Management System
CEEMS	Central Environmental Management System (within EDF Energy, outwith Nuclear Operations scope)
CESC	Central Emergency Support Centre
DADS	Discharges and District Survey (DADS) Peer Group (fleet peer group)
EA	Environment Agency
ECC	Environmental Compliance Co-ordinators as a minimum at each station, some additional parts of the business 'Non Power Station Activities' may also have an ECC
ECO	Environmental Conditions for Operation (within ESPECS)
EMITS	Environmental Maintenance Inspection and Testing Schedule
EMS	Environment Management System
ENV	Environmental categorisation of a condition report within CAP
ESG	Environment Safety Group (at Station)
ESGH	Environmental Safety Group Head (at Station)
ESPECS	Environmental Specifications
ESR	Environmental Surveillance Requirements (identify whether ECO's are met)
ESRG	Environmental Strategy Review Group
ESS	Environmental Safety and Sustainability Branch (within HSE, SS&A Safety, Security and Assurance)
GDF	Geological Disposal Facility
HAW	Higher Activity Radioactive Waste
HESAC	Health, Environment and Safety Committee
HSE	Health, Safety and Environment (within SS&A Safety, Security and Assurance)
HR	Human Resources
ICP	Integrated Company Process
IMS	Integrated Management System
INA	Independent Nuclear Assurance
INPO	
ISO14001:2015	International Standard for EMS
KPI	Key Performance Indicator
LAW	Lower Activity Radioactive Waste

LLW	Low Level Radioactive Waste
MMO	Marine Maritime Organisation
MSM	Management System Manual
KPI	Key Performance Indicator
NG	Nuclear Generation
NGL	Nuclear Generation Limited
NGRL	Nuclear Generation Risk Log (formerly BERL)
NLF	Nuclear Liabilities Fund
Non Power Station Activities	Activities that are not under direct control of the power station e.g. Wythenshawe, Strategic Spares, Fleet Turbine Maintenance Group, Emergency Response Centres
ODS & F Gas	Ozone Depleting Substances and Fluorinated Gases
One Risk	Nuclear Operations risk log
ONR	Office for Nuclear Regulation
OPEX	Operational Experience
ORWG	Operational Radioactive Waste Group (fleet peer group)
PTP	Post Training Profile
PWR	Pressurised Water Reactor
QA	Quality Assurance
RSR	Radioactive Substances Regulations
RWA	Radioactive Waste Advisor
RTP	Role Training Profile
SAT	Systematic Approach to Training
SEPA	Scottish Environment Protection Agency
SFAM	Safety Fleet Alignment Meeting
SHIP	System Health Indicator Programme
SMART	Specific, Measurable, Achievable, Relevant and Time Bound
SQEP	Suitably Qualified and Experienced Personnel
SS&A	Safety, Security and Assurance
TPD	Training Programme Description
TSSM	Technical and Safety Support Manager (at Station)
WANO	World Association of Nuclear Operators
WOC	Work Order Card

6 References

1	BEG/MSM/001	Management System Manual
2	BE/POL/009	EDF Energy Environmental Policy
3	N/A	BS EN ISO 14001:2015 Environmental Management System
4	BEG/MSM/001/003	Cross References Between the Management System Manual and External Standards
5	BEG/SPEC/SHE/ENVI/002	Register of Environmental Legislative Regulatory and Other Policy Requirements
6	BEG/SPEC/SHE/008/025	Licence Condition 25 Operational Records Compliance Principles
7	BEG/SPEC/SHE/008/032	Licence Condition 32 Accumulation of Radioactive Waste Compliance Principles
8	BEG/SPEC/SHE/008/033	Licence Condition 33 Disposal of Radioactive Waste Compliance Principles
9	BEG/SPEC/SHE/008/034	Licence Condition 34 Leakage Escape of Radioactive Material Radioactive Waste Compliance Principles
10	ERO/REP/0162/GEN	Environmental Management Process: Organisational Context and Key Stakeholders
11	BEG/MSM/001/004	Process Owner Listing
12	BEG/MSM/001/005	Policy Owner Listing
13	BEG/MSM/001/001	Process Management
14	BEG/MSM/001/002	Management System Manuals
15	ERO/MAN/001	ESS Management Manual
16	BEG/SPEC/GOV/001	NG Governance Arrangements
17	BEG/SPEC/SHE/ENVI/011	Aspects Identification and Scoring Process
18	BEG/SPEC/SHE/ENVI/021	The Application of Best Practicable Means and Best Available Techniques
19	BEG/ICP/API/001	Risk Management
20	BEG/ICP/API/003	Asset Planning
21	BEG/ICP/WM/001	Online Work Control Process at a Nuclear Power Station
22	BEG/SPEC/SHE/COP/016	Risk Assessment Process
23	BEG/SPEC/OPS/HU/005	Setting to Work Including Pre Job Brief and Post Job DeBrief
24	BEG/ICP/PRO/010	Acquire Goods and Services Standard
25	BEG/SPEC/SHE/COP/004	Health, Safety and Environmental Requirements for Contractors
26	BEG/ICP/PD/001	Project Delivery
27	BEG/FORM/PD/110/004	Environmental Risk and Waste Management Assessment Form
28	BEG/ICP/DAO/001	Maintain Design Integrity Process
29	BEG/FORM/SHE/ECA/035	Attributes SA Environmental Protection and LC34 Compliance
30	BEG/ICP/DCM/001	Decommissioning
31	BEG/ICP/PDE/001	Defuelling
32	BEG/ICP/OPS/011	Fleet Performance Management through the Fleet Approach
33	BEG/SPEC/NOS/003	Performance Management Metrics Data Dictionary
34	BEG/SPEC/SHE/ENVI/039	Biodiversity Management
35	BEG/ICP/DM/003	Documented Information
36	BEG/ICP/BUS/001	Integrated Business Planning
37	GEN/ICP/FIN/001	Financial Control
38	BEG/ICP/HR/006	Management of Human Resources
39	BEG/ICP/HR/MOC/001	Licence Condition 36 Organisational Capability – Compliance Arrangements
40	BEG/ICP/TRNG/001	Systematic Approach to Training Principles and Responsibilities

41	BEG/ICP/OPS/014	Management of Human Performance and Monitoring Improvement of Nuclear Safety Culture
42	BEG/TRNG/TPD/617/001	Training Programme Description, Environmental Safety and Sustainability Branch, Environment Officer
43	BEG/TRNG/TPD/203/001	Training Programme Description – Environmental Safety Engineer
44	BEG/SPEC/SHE/ENVI/049	Corporate Arrangements for Management / Appointment of Radwaste Advisors
45	BEG/ICP/COMM/001	Communications
46	BEG/ICP/OL/001	Organisational Learning Process
47	To be issued (on ICP implementation plan)	Governance of Sustainability
48	BEG/SPEC/SHE/010	Safety Regulator Interactions
49	BEG/SPEC/SHE/004	Management of Safety Regulatory Correspondence
50	BEG/ICP/QUA/005	Independent Assessment
51	ERO/PROC/016	Environmental Performance Review and Reporting
52	BEG/ICP/OPSV/EPG/001	Developing and Maintaining Emergency Arrangements
53	BEG/ICP/OPS/001	Management of Operations at Nuclear Sites
54	BEG/ICP/MNT/001	Management of Maintenance
55	BEG/SPEC/SHE/ENVI/023	Preparation, Management and Implementation of The Environmental Maintenance, Inspection and Testing Schedules (EMITS)
56	BEG/SPEC/SHE/ENVI/022	Production, Modification and Use of Environmental Specifications ESPECS
57	BEG/SPEC/SHE/ENVI/035	Environmental Availability Assessment
58	BEG/SPEC/SHE/ENVI/036	Evaluation of Compliance
59	BEG/ICP/QUA/017	Quality Management
60	BEG/SPEC/QUA/020	Management System Auditing
61	BEG/SPEC/QUA/021	Management System Audits – Fleet and Stations
62	BEG/SPEC/OPS/072	Fleet Managers Approach to Process Assurance and Support
63	ERO/PROC/014	Environmental Surveillance
64	BE/ICP/GOV/001	Governance
65	BEG/SPEC/SHE/ENVI/015	Environmental Event Categorisation
66	BEG/ICP/FUEL/001/01	Management of AGR Nuclear Fuel
67	BEG/ICP/FUEL/001/02	Management of PWR Nuclear Fuel
68	BEG/ICP/FUEL/001/03	Management of Dangerous Goods
69	BEG/ICP/OPS/009	Outage Management
70	BEG/SPEC/DAO/029	Management of Safety Cases
71	BEG/ICP/ENG/SH/001	Technical Governance
72	BEG/ICP/FENG/001	Management of Engineering at Stations
73	BEG/ICP/FIRE/001	Fire Safety Management
74	BEG/ICP/SHE/016	Company Radiological Safety Rules
75	BEG/ICP/SHE/IND/001	Industrial Health and Safety Management
76	BEG/ICP/SEC/ORG/001	Management of Security
77	BEG/ICP/IM/001	Information Management
78	BEG/ICP/CHEM/001	Management of Chemistry
79	BEG/SPEC/HR/MOC/006	Intelligent Customer Arrangements

7 Records

No	Record Title	Template No./Identifier	Record No./Identifier or Link to Record	Requirement for Record	Record Originator	Record Owner	Retention Period	Storage Location	Security Classification
01	RECORD DELETED (Refer to Reference 10) Environmental Management Process: Organisational Context and Key Stakeholders	ERO/FORM/005	ERO/REP/0162/GEN	BEG/ICP/SHE/017 Section 4.1 and ISO14001:2015	ESS	ESS	5 years	CDMS	**Not Protectively Marked**
02	RECORD DELETED (Refer to Reference 2) Environment Policy	N/A	BE/POL/009	BEG/ICP/SHE/017 Section 4.2 and ISO14001:2015	EDF Energy	NGLB	10 years	CDMS	Not Protectively Marked
03	Record of ESGH, ORWG, DADS & ECC Peer Group Meetings	N/A	Peer Group Defined	BEG/ICP/SHE/017 Section 4.2	Peer Group Chair	Peer Group Chair	10 years	V:\ERO\Peer Groups Previous minutes under CDMS records DADS/MIN or ORWG/MIN (ORWG previously under AR 915710).	**Not Protectively Marked**
04	Fleet Environment Improvement Plan	N/A	Peer Group Defined	BEG/ICP/SHE/017 Section 4.4	ESGH Peer Group	ESGH Peer Group Chair	5 years	V:\ERO\Peer Groups	**Not Protectively Marked**
05	Station Objectives and Targets	Station defined	Station Defined	BEG/ICP/SHE/017 Section 4.4 and ISO14001:2015	Station ESRG (or equivalent as per Appendix F)	Station ESRG (or equivalent as per Appendix F)	5 years	Station Defined Or V:\ERO\Technical Folders\EMS\Objectives & Targets	**Not Protectively Marked**
06	Station Environmental Management Review	N/A	Station defined	BEG/ICP/SHE/017 Section 4.8 / Appendix F / F and ISO14001:2015	Relevant Station Forum (Station defined) Station ESRG (or equivalent as per Appendix F)	Relevant Station Forum (Station defined) Station ESRG (or equivalent as per Appendix F)	5 years	Station Defined	**Not Protectively Marked**

No	Record Title	Template No./Identifier	Record No./Identifier or Link to Record	Requirement for Record	Record Originator	Record Owner	Retention Period	Storage Location	Security Classification
07	RECORD DELETED NGL Implementation of EDF Energy Environment Policy EDFE-POL-ENV-1	ERO/FORM/005	ERO/REP/0181/GEN	BEG/ICP/SHE/017 Section 4.2	ESS	ESS	5 years	CDMS	Not Protectively Marked
08	Completed Environmental Impact Forms	BEG/FORM/PD/110/004	Group defined	BEG/ICP/SHE/017 Section 4.3	Non Power Station Activities	Non Power Station Activities	10 years	AMS	Not Protectively Marked
09	Peer Group (ORWG, DADS, ECC) Improvement Plans	N/A	V:\ERO\Peer Groups	BEG/ICP/SHE/017 Section 4.4	Peer Group	Peer Group Chair	5 years	V:\ERO\Peer Groups	Not Protectively Marked
10	RECORD DELETED (Refer to Reference 34) Biodiversity Action Plan	Biodiversity defined	Biodiversity defined	BEG/ICP/SHE/017 Section 4.4	Biodiversity	Biodiversity	5 years	AMS	Not Protectively Marked

Records associated with this ICP shall be controlled, stored and archived in accordance with the requirements of BEG/ICP/DM/003 (Reference 35).

Appendix A Nuclear Operations Processes, Organisation and Key Environmental Controls

Process	How does the process support the Environmental Management System (EMS)?	Supporting References
Management System Manual	Determines organisational context, key stakeholders, their needs and expectations.	BEG/MSM/001 ERO/REP/0162/GEN supplements BEG/MSM/001 by providing Environment specific analysis.
	Establishes leadership responsibilities for ensuring compliance with EDF Energy policies and legislation; setting strategic direction; developing and implementing management systems.	
	Establishes organisation structure, responsibilities and accountability for the management system.	
	Requires provision of adequate resources for deployment of the management system.	
	Sets out communication with other external stakeholders (e.g. media, supply chain, INPO).	
Risk Management	Significant risks which may impact on environmental safety will be logged and managed via the OneRisk Log (formerly NGRL / BERL) for assessment.	BEG/ICP/API/001
Asset Management	Supports delivery of mitigations for risks in the One Risk Log to drive improvement.	BEG/ICP/API/003
	Ensure physical resources are maintained to control risks.	
Business Planning	Work required to deliver environmental improvements and mitigations should be incorporated into business plans as appropriate.	BEG/ICP/BUS/001
	Ensure required resources are secured.	
Finance	Controls financial resources required to support deployment of the IMS Environmental Arrangements.	GEN/ICP/FIN/001
Management of Change	Ensures any changes in organisation or organisational capability (i.e. financial and human resources) don't adversely impact on safe operation.	BEG/ICP/HR/MOC/001
Performance Management	Ensure strategic objectives and improvement targets (KPIs) are developed, monitored and managed. Supports environmental performance and delivery of the environmental improvement plan.	BEG/ICP/OPS/011 Performance Management Metrics Dictionary BEG/SPEC/NOS/003 and supporting documents ICP/SHE/ENVI/017 Appendix G
	Identify any changes in performance.	
Governance	Sets out the process for meeting the needs of key stakeholders.	BE/ICP/GOV/001 ERO/REP/0162/GEN supports BE/ICP/GOV/001 by providing Environment specific analysis. BEG/ICP/SHE/017 Appendix B (environment process tests) BEG/SPEC/GOV/001 Governance Arrangements
	Establishes leadership responsibilities for directing Nuclear Operations to ensure consistency with EDF Energy policies; ensure legal compliance; set strategic direction; development and implementation of management systems.	
	Specifies the process controls assessment process which confirms that Nuclear Operations processes conforms to requirements.	
	Ensures that processes (including the Environment Process) are reviewed by senior management to confirm that they continue to perform effectively and deliver the intended outcome. This is achieved via the SFAM arrangements and review/approval of Process Controls	
Independent Assessment	Provision of oversight and assessment, independent from the line organisation to ensure adherence to arrangements and obligations.	BEG/ICP/QUA/005 BEG/SPEC/SHE/004 Regulatory Correspondence BEG/SPEC/SHE/010 Safety Regulator Interactions
	Specifies process for managing interactions with environmental regulators.	
Quality Management	Requires internal audit of Nuclear Operations management arrangements / processes to review conformity with them and with ISO14001 and confirm that the management system is effectively implemented and maintained.	BEG/ICP/QUA/017 BEG/SPEC/QUA/021 Management System Audits

Process	How does the process support the Environmental Management System (EMS)?	Supporting References
Management of Nuclear Fuel and Dangerous Goods	Management of environmental issues within the fuel lifecycle.	BEG/ICP/FUEL/001/01 BEG/ICP/FUEL/001/02 BEG/ICP/FUEL/001/03
Defueling	Ensure defueling is controlled, from planning, preparation, execution to confirmation of fuel free. This includes management of changes required to procedures, resourcing and permits, ensuring risk (including environmental risk) continues to be appropriately managed through these phases.	BEG/ICP/PDE/001
Maintenance	Maintain plant / resolve defects to ensure potential risk posed by plant are minimised (including environmental risk).	BEG/ICP/MNT/001
Management of Operations	Operate plant and respond to any changes to ensure potential risks posed are minimised (including environmental risk). Operating instructions, plant tours and Operational Decision Making process support this.	BEG/ICP/OPS/001 BEG/SPEC/SHE/ENVI/022 - ESPECs
	ESPECs establish operating criteria (Environmental Conditions for Operation ECOs) for environmentally sensitive / vulnerable plant and barriers. Where required Environmental Surveillance Requirements (ESR's) are established to enable compliance with ECO's to be demonstrated. The operations process will ensure delivery of ESRs and management of entry into ECOs.	
Outage Management	If appropriate, changes in plant state will feed into the outage planning process; this includes plant which may be environmentally significant. This process will prioritise and plan work.	BEG/ICP/OPS/009
Work Management	Prioritise routine and emergent work by consideration of risk (including that arising from potential environmental impact). This will drive improvements.	BEG/ICP/WM/001
	Ensures all work undertaken within the scope of this process is subject to risk assessment and method statement to manage risks arising from doing it (including that arising from potential environmental impact).	
	Plans routine work activities (ensure activities specified in EMITS are incorporated into work planning cycles as per requirements).	
Maintain Design Integrity	Ensures that potential risks arising from changes to design which may impact on nuclear safety are identified, assessed and controlled. This is achieved by identifying requirement for and undertaking environmental assessment where there is potential for environmental impact arising from the proposed changes. Ensures identified controls and improvements are incorporated.	BEG/ICP/DAO/001 BEG/FORM/SHE/ECA/035 - Environmental Specialist Assessment
	Requires radioactive waste safety cases and provision of authorised designer role to provide radioactive waste safety cases.	BEG/SPEC/DAO/029 Management of Safety Cases
	Safety cases may reference relevant ESPECs as appropriate.	
Technical Governance	Manages fleet technical risks by specifying and monitoring technical standards and guidance for the plant. Focus is on maintaining safe operation, equipment reliability and effective asset management. Where appropriate this will include standards for environmentally sensitive plant and barriers and environmental controls in other technical standards where appropriate.	BEG/ICP/ENG/SH/001 and supporting standards
Project Delivery	Applies to projects, jobs or tasks which are of sufficient value, complexity or business significance to be designated as a project.[7] Ensures compliance with company processes and legislation and identification and control of environmental risks including waste management.	BEG/ICP/PD/001 BEG/FORM/PD/110/004 Environmental Risk and Waste Assessment INV/SPEC/PD/110 HS&E for Project Delivery

[7] The ICP on project management does not include fleet critical programmes or IT Projects.

Process	How does the process support the Environmental Management System (EMS)?	Supporting References
Management of Engineering	Ensures engineering standards are set to deliver equipment reliability and minimise risks (including environmental risks). Defines engineering strategy and maintenance and outage requirements for plant and systems.	BEG/ICP/FENG/001 BEG/SPEC/SHE/ENVI/023 EMITS BEG/SPEC/FENG/006 BEG/SPEC/FENG/019 Contract Engineering Technical Specification (CETS) should include consideration of appropriate environmental issues.
	Provides overview of delivery of the engineering strategy (i.e. system health, equipment integrity, failures, maintenance deferrals, investment, projects and improvement of the plant / systems).	
	Requires engineers to have understanding of environmental impact of work, consider environmental risk mitigation, wastes and resources.	
	Plans activities to resolve any equipment performance / condition deficiencies of plant including that which has environmental implications.	
	Specifies Maintenance/Inspection/Testing requirements (EMITS) for environmentally sensitive / vulnerable plant and environmental barriers and establishes tolerances and approval requirements for delivering this. EMITS are specified as part of engineering strategy (these will be embedded in processes by work management and delivered by maintenance process).	
Procurement and Materials Management	Provide process and controls for securing services or goods from the supply chain. This process enables NGL requirements to be specified to the supply chain as appropriate to the services, works or goods. The process ensure that potential environmental risks arising from the supply chain are identified, assessed and controlled. This includes: - Assessment and control of approval of companies; - Specification of work, services and goods; and - Delivery of work, services and goods	BEG/ICP/PRO/010 BEG/SPEC/PRO/013 BEG/SPEC/PRO/019
	Control supply chain resources required to enable delivery of efficient and effective IMS Environmental Arrangements.	
Environment	Establishes scope of the IMS Environmental Arrangements and provides overview.	BEG/ICP/SHE/017
	Defines environmental management specific processes, these are: 1. Environment specific organisational context and stakeholder review; 2. Define IMS Environmental Arrangements; 3. Secure environmental specialist support; 4. Environmental Peer Groups; 5. Environment Process Risk Assessment: Context/Stakeholders, Aspects, Compliance obligations, BPM/BAT; 6. Environmental objectives, targets and improvement plan; 7. Establish IMS Environmental Arrangements actions / operational controls; 8. EMITs and ESPECs; 9. Performance monitoring; 10. Compliance evaluation; 11. Environmental oversight 12. Station Environmental Management Review	
Fire Safety	Fire safety principles (minimisation of combustibles and good housekeeping) also support good environmental standards. Fire safety planning and arrangements require consideration and mitigation of environmental risk due to potential for discharge events.	BEG/ICP/FIRE/001
Emergency Preparedness	Provides process for ensuring emergency preparedness and response. This includes those incidents which may have an impact on the environment.	BEG/ICP/OPSV/EPG/001
Radiation Protection	Management and controls of radioactive sources will protect environment.	BEG/ICP/SHE/016
	Clearance procedures and control of materials/tools and equipment entering the controlled areas will support waste hierarchy.	
Industrial Health and Safety Management	Establishes processes for task related risk assessment and pre-job final safety checks (including environmental risks)	BEG/ICP/SHE/IND/001
	Establishes Code of Practice which specifies minimum requirements for contractors (including environmental requirements)	BEG/SPEC/SHE/COP/004
	Specifies asbestos, COMAH, COSHH process which also has environmental implications.	BEG/SPEC/SHE/COP documents
Security	Security of facilities.	BEG/ICP/SEC/ORG/001

Process	How does the process support the Environmental Management System (EMS)?	Supporting References
Documented Information	Specifies process for developing and controlling documents.	BEG/ICP/DM/003
	Ensures access to current version of controlled documents.	
	Ensures process standards are subject to periodic review (this will ensure requirements remain appropriate to the risk posed).	
	Specifies process for control of records (including those required to be maintained to deliver an effective IMS Environmental Arrangements and demonstrate compliance).	
Information Management	Security of information and access.	BEG/ICP/IM/001
Org. Learning See Note[8]	Provides the corrective action programme (CAP) and operational experience (OPEX) processes which: - Ensures recording, investigation and action management in response to potential or actual adverse conditions; - Supports performance monitoring; - Supports communication of relevant environmental issues to employees.	BEG/ICP/OL/001
	Provides Functional Self Assessment and Benchmarking processes (which can be used for environmental oversight).	
Communicat-ion	Establishes processes for communications to employees, those working on our behalf and community.	BEG/ICP/COMM/001
Human Resources	Provides process to secure and control human resources (this includes those required to deliver an efficient and effective IMS Environmental Arrangements).	BEG/ICP/HR/006
Human Performance	Establishes human performance process and arrangements for analysing and setting improvement activities for Nuclear Safety Culture. This aims to improve reliability of tasks performed when implementing arrangements, reduce frequency and consequence of undesirable events and foster a strong Nuclear Safety Culture (behaviours). This will support awareness of risks and controls relevant to work (including environmental issues).	BEG/ICP/OPS/014 BEG/SPEC/OPS/HU/003 Error prevention tools BEG/SPEC/OPS/HU/005 Setting to work (PJB/PJDB)
Systematic Approach to Training	Assesses competence requirements and determines required education, training or experience to deliver this for all roles. Relevant environmental requirements will be within relevant TPD, PTP and RTP.	BEG/ICP/TRNG/001 BEG/TRNG/TPD/617/01 ESS Environment Officer BEG/TRNG/TPD/203/001 Env Safety Engineer
	Requires training records and competence records to be maintained.	
Decommiss-ioning	Establishes end of life activities for nuclear power stations. This will include consideration of environmental (conventional and radiological) issues and review of responsibilities and processes within the environment process at point of entry into the decommissioning phase to ensure IMS Environmental Arrangements remains fit for purpose.	BEG/ICP/DCM/001
	Provides nuclear liabilities controls – this will include consideration of radiological issues and liabilities associated with radioactive waste.	
Chemistry	Establishes control of system chemistry and implements chemistry requirements of plant design and licensing basis. This is key to minimise environmental discharges.	BEG/ICP/CHEM/001
	Chemistry also ensures management of chemical inventories and control of stock. This will interface with environmental legislative requirements such as COMAH.	

[8] Org Learning replaces CAP/Self Assessment BEG/ICP/OPSV/CAP/001 and OPEX BEG/ICP/OPSV/OPEX/001

Appendix B Process Controls

The process controls identified within this Appendix are designed to provide assurance that environmental risk associated with Nuclear Operations sites are identified and appropriately managed and also assure compliance with ISO 14001. These tests will be considered for inclusion within the periodic 14001 Compliance Evaluation undertaken in accordance with Reference 58.

The annual process controls report is collated by considering oversight and performance monitoring information (Section 4.8), the quarterly environmental performance report the outcome of periodic Compliance Evaluations.

RISK/CONTROL AREA 1: BUSINESS CONTEXT AND COMMUNICATIONS/INTERACTIONS WITH KEY STAKEHOLDERS
CONTROL: Business context and key stakeholders for the IMS Environmental Arrangements are understood and considered in planning and management of the arrangements.
TESTS will be defined as appropriate in the assessment year to evaluate compliance with this control, for example: ➢ Has an assessment of context and stakeholders been undertaken and is this up to date? ➢ Are requirements considered in planning the IMS Environmental Arrangements?
CONTROL: Communication with key stakeholders is adequate to ensure awareness of the issues which may impact on the intended outcome of the IMS Environmental Arrangements.
TESTS will be defined as appropriate in the assessment year to evaluate compliance with this control, for example: ➢ Were any complaints received? Have these been adequately tracked, actioned and are mitigations deployed? ➢ Does the Site Stakeholder Group / Local Community Liaison Committee meet regularly and provide an effective means for two way communication for environmental issues? What environmental information has been shared with this group? Are there any specific environmental concerns raised? ➢ What key regulatory communications / concerns were raised? How are these tracked? ➢ Are regulatory actions and commitments owned, tracked, adequately actioned and effective?

RISK/CONTROL AREA 2: ENVIRONMENTAL RISKS ASSOCIATED WITH THE SCOPE OF THE BUSINESS / IMS ENVIRONMENTAL ARRANGEMENTS / ACTIVITIES UNDERTAKEN
CONTROL: Changes to risks which may impact on the output of the IMS Environmental Arrangements are identified, assessed and adequate mitigations deployed by processed for: ➢ Legislation and obligations ➢ BPM/BAT assessment ➢ Engineering changes / modifications ➢ Projects ➢ Environmental aspects (Note changes and management of risks arising from stakeholder needs/business context are tested in RISK AREA 1).
TESTS will be defined as appropriate in the assessment year to evaluate compliance with this control, for example: ➢ Have changes to compliance obligations (legislation etcetera) been identified, assessed, communicated and adequate mitigations deployed or improvement plans put in place? ➢ Have BPM/BAT assessments been adequately completed for any changes in plant / operation etcetera - i.e. is it of adequate quality to identify key risks, assist decision making and identify mitigations required? ➢ Is an environmental specialist assessment completed for Engineering Changes where appropriate? Is the specialist assessment appropriate and adequate? Have the controls, mitigations and requirements specified in the specialist assessment been deployed? ➢ Are environmental assessments completed for projects? Are these appropriate and adequate? Is quality checked by environmental SQEP? Have the mitigations and requirements specified been deployed? ➢ Have any changes to environmental aspects been identified, assessed and adequate mitigations deployed or improvement plans in place? Changes may arise from changes to legislation, projects, engineering change, and other work activities. ➢ Has the annual review of the aspects register been undertaken – i.e. has the register been updated to reflect station performance trends such as events, defects, output from oversight?

RISK/CONTROL AREA 3 – NUCLEAR OPERATIONS CONTINUALLY IMPROVES PERFORMANCE
CONTROL: Fleet improvement initiatives are defined by the ESGH peer group
TESTS will be defined as appropriate in the assessment year to evaluate compliance with this control, for example: ➢ Are fleet improvement initiatives defined? Do these initiatives reflect key fleet risks and potential performance improvements? ➢ Are actions to support delivery of the improvement plan embedded in work and business plans where appropriate? Is delivery progressing / resulting in performance improvement?
CONTROL: Local environmental improvement objectives/targets are established.
TESTS will be defined as appropriate in the assessment year to evaluate compliance with this control, for example: ➢ Are environmental objectives / targets defined - are they in place do they reflect fleet risks, locally significant aspects and performance trends at the location as appropriate? Are they SMART (Specific, Measurable, Achievable, Realistic, Time Bound) and adequately owned. ➢ Are objectives and targets completed as per plan? Did they result in performance improvements? Are objectives/targets tracked by mgt review and are actions taken where not to plan?

RISK/CONTROL AREA 4 – PLANT OPERATIONS WITH POTENTIAL ENVIRONMENT IMPACT ARE CONTROLLED [9]
CONTROL: EMITS are implemented to ensure plant which poses an environmental risk or provides an environmental barrier is adequately maintained and tested.
TESTS will be defined as appropriate in the assessment year to evaluate compliance with this control, for example: ➢ How many EMITS tasks entered second half tolerance and go beyond maximum tolerance? ➢ Are approvals in place as per BEG/SPEC/FENG/006?
CONTROL: Unplanned entry into ECOs is reported, tracked and mitigations are put in place to minimise this.
TESTS will be defined as appropriate in the assessment year to evaluate compliance with this control, for example: ➢ How many ENV 28's were raised? What were the key trends (subject area and cause)? ➢ Are trends of ENV 28's considered? Is there a strategy in place to reduce ECO's?

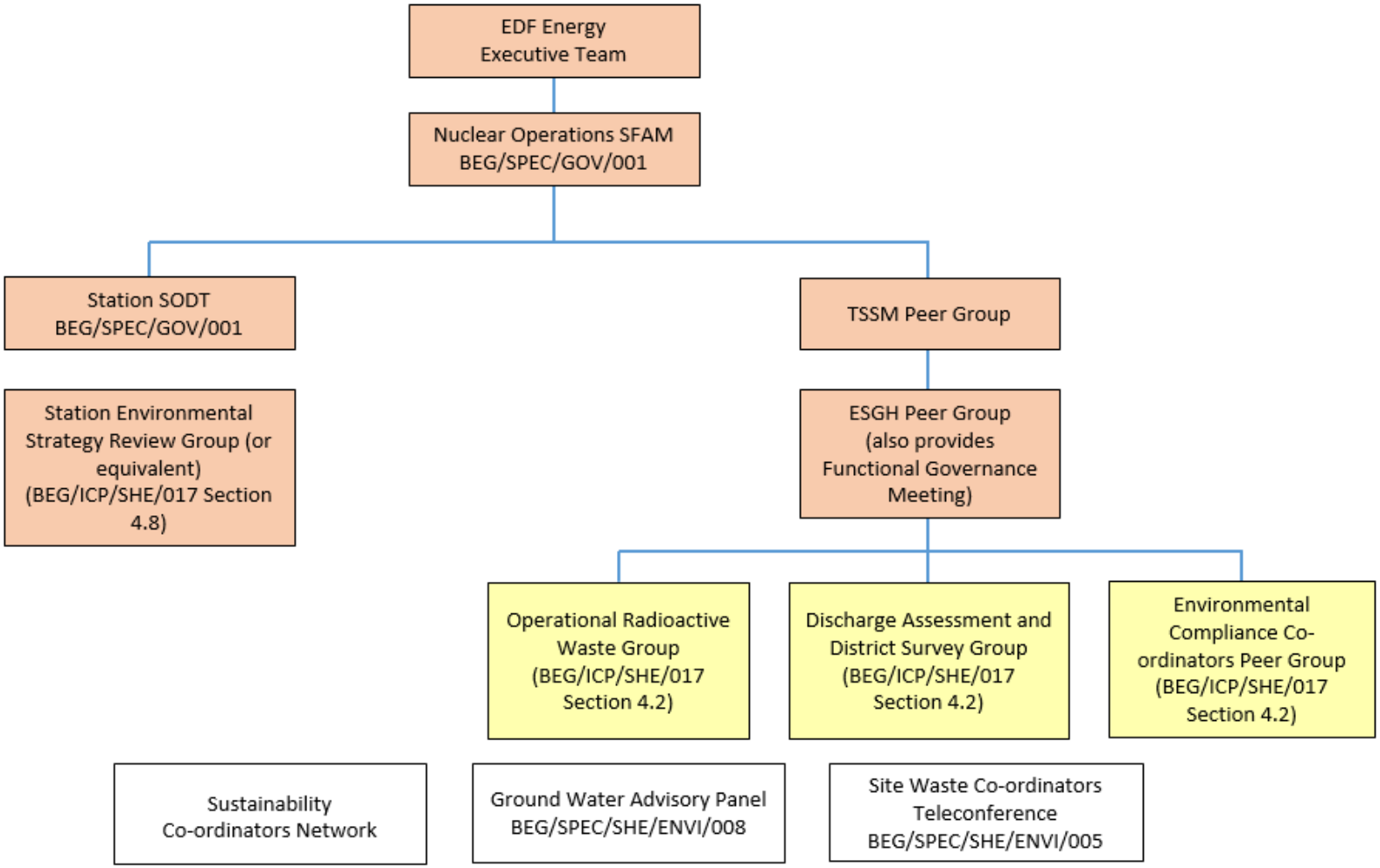
RISK/CONTROL AREA 5 - ENVIRONMENTAL PERFORMANCE IS REVIEWED TO IDENTIFY TRENDS, WEAKNESSES, NON COMPLIANCE AND BEST PRACTICES
CONTROL 6.1: Environmental performance and the management system is monitored at different levels to ensure compliance, identify adverse trends and share best practise.
TESTS will be defined as appropriate in the assessment year to evaluate compliance with this control, for example: ➢ Does the evaluation compliance programme include all relevant requirements and is risk level appropriate? ➢ Is the evaluation of compliance programme adhered to, are evaluations completed to time? ➢ Does the output of compliance evaluations demonstrate compliance with obligations? ➢ What are the key trends arising from non-conformities and adverse conditions? Are these challenged? ➢ Does management review address the areas required within BEG/ICP/SHE/017? ➢ Is the management review effective, with appropriate membership and challenge and clear actions taken to address any deficiencies identified?

RISK/CONTROL AREA 6: CORRECTIVE AND IMPROVEMENT ACTIONS IDENTIFIED ARE PROGRESSED AND EFFECTIVE.
CONTROL: Actions arising are tracked, owned, deliver improvements and are effective.
TESTS will be defined as appropriate in the assessment year to evaluate compliance with this control, for example: ➢ Are CR's categorised appropriately, investigated and OPEX shared? ➢ Are actions from the previous process controls review tracked, owned, deliver improvements and effective and progressing in an appropriate timeframe? ➢ Are internal and external audit and compliance evaluation actions tracked in AMS to completion to correct the adverse situation and prevent a reoccurrence? Are these effective?

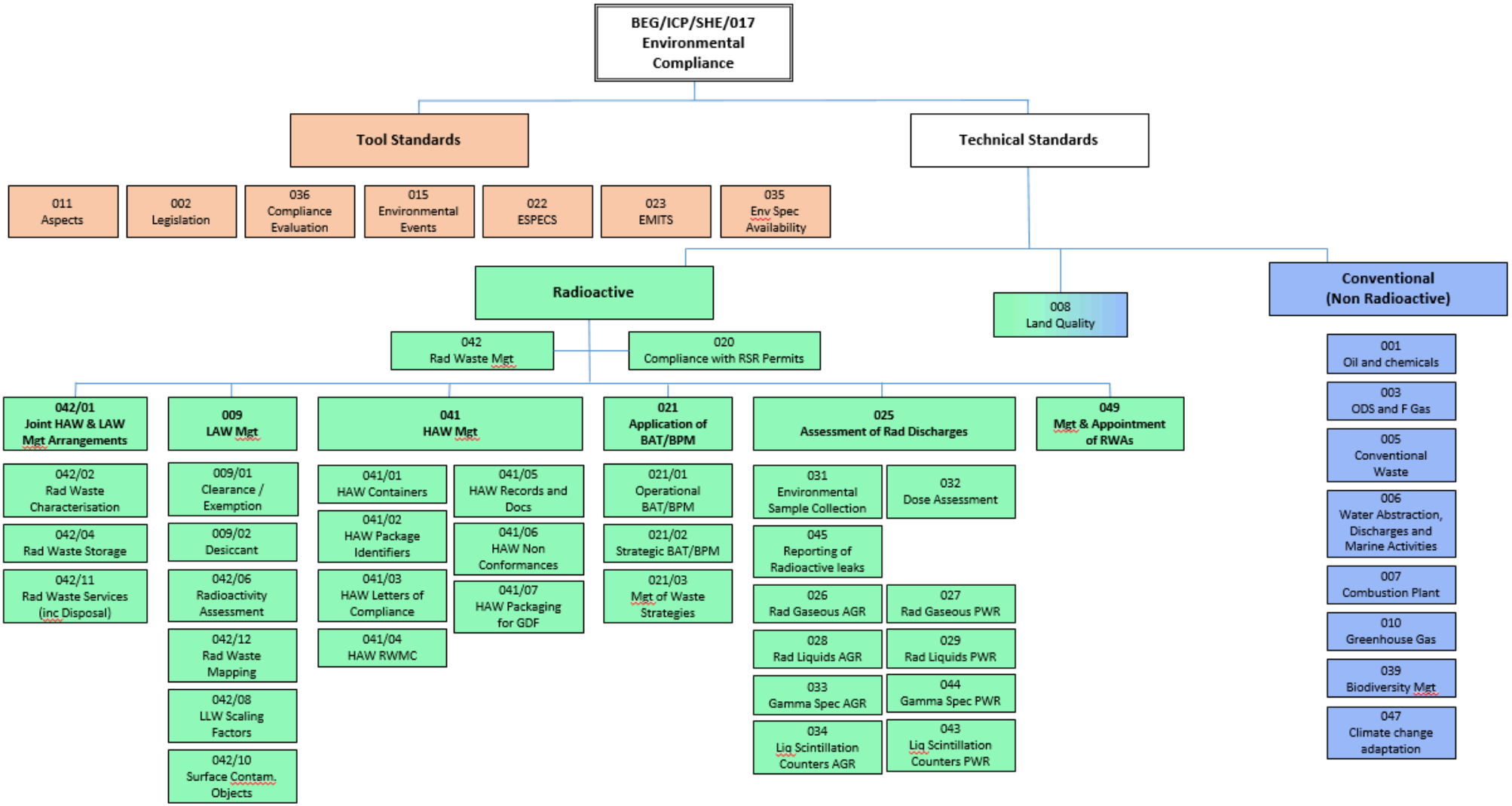
RISK/CONTROL AREA 7 - RESOURCES ARE AVAILABLE/EFFECTIVE
CONTROL: Resources are made available to enable the intended outcome of the IMS Environmental Arrangements to be delivered. Resources include adequate SQEP personnel, financial, plant and equipment and leadership.
TESTS will be defined as appropriate in the assessment year to evaluate compliance with this control, for example: ➢ Have any weaknesses or opportunities for improvement been identified as part of this process controls assessment relevant to environmental risk management which may be a result of inadequate resources?

[9] (Note: Adherence to operational controls is considered via compliance evaluation, self assessment, internal audit and therefore tests aren't duplicated here adherence will also be monitored via performance monitoring - refer to risk 5 for relevant tests)

Appendix C Environmental Peer Groups



Appendix D Nuclear Operations Environmental Process Specifications



Appendix E Minimum Requirements for Environmental Management Review

Environmental management review is undertaken in a variety of forums both at station and at a fleet level. As a minimum stations need to demonstrate the following elements are covered within processes to provide appropriate Management Review and challenge. There is no requirement for one forum to deliver all of these.

The ESRG (or equivalent) as per section 4.8.9 / Appendix F Terms of Reference provides one of the elements to demonstrate some of the elements of Management Review.

Environmental Management Review - Minimum Requirements	Example forums / governance arrangements which may be used to demonstrate management review of minimum requirement, stations may have other forums and governance arrangements which deliver this
Changes in external/internal issues relevant to IMS Environmental Arrangements	EC Processes. Management of Change Processes. By exception at ESRG.
Changes in needs/expectations for interested parties, including compliance obligations	Regulators focus included in ESRG. Station / Regulator Annual Review of Environment and regulator Site Environmental Reports. Site Local Community Liaison Committees / Site Stakeholder Groups. Fleet legislation screening meeting. Fleet Quarterly Environmental report summarises changes in compliance obligations. Reviewed as part of ESRG preparation and new risks / changes included by exception where appropriate.
Changes in significant environmental aspects	Environmental aspects are considered as part of preparing for and identifying key risks for the ESRG. Fleet Quarterly Environmental Report includes plant risk RAG.
Changes in risks and opportunities	EC Processes and supporting forums. Daily Operational Focus Meetings / Station Focus Meetings. Operational Safety Review Committees. Plant Health Committees. Defuelling and Decommissioning Meetings Transition and Transfer Meetings
Extent to which environmental objectives have been achieved	Key risk mitigations provide environmental objectives and targets, progress of these are tracked in the ESRG. Site specific meetings may track certain objectives, e.g. COMAH working group, risk specific working groups. Some stations use CAP process to track O&T.

Environmental Management Review - Minimum Requirements	Example forums / governance arrangements which may be used to demonstrate management review of minimum requirement, stations may have other forums and governance arrangements which deliver this
Information on performance including trends in non-conformities and corrective actions	ESRG includes ENV 01 to ENV 03 in detail, unplanned ECO entries ENV 28, ENV 06 trends. CAP processes will cover all CR and corrective actions, including requirement for and adequacy of investigations. Fleet environmental peer groups (ESGH, DADs, ORWG, ECC) will include oversight of these.
Information on performance including trends in monitoring and measurement results	ESRG includes environmental KPI's (e.g. Events, RWFI, LC34 leaks, EMITS, ECO entries). Equipment Reliability Index and Operation Focus Indexes and forums which track. Preparation for ESRG includes review of monitoring and measurement results and will be included by exception. Site annual BAT/BPM review. Fleet Ground Water Assessment Panel.
Information on performance including trends in fulfilment of compliance obligations	Compliance evaluation reviews fulfilment of compliance obligations on periodic basis. Outcome of compliance evaluation will be covered at fleet level in Quarterly Environmental Report. Any site compliance evaluations identifying weaknesses or gaps will be raised as CR's – therefore covered via CAP processes. Site annual BAT/BPM review. Station / Regulator Annual Review of Environment and regulator Site Environmental Reports NG/Regulator meetings
Information on performance including trends in audit results	Regulatory focus included in ESRG – regulator audits / inspections will be covered as appropriate. Any audit results identifying weaknesses or gaps will be raised as CR's – therefore covered via CAP processes.
Adequacy of resources	Investment decision & challenge meetings. Curriculum review committees HR processes to ensure Nuclear Baseline resource maintained. Management of Change Committees
Relevant communications from interested parties, including complaints	Regulatory focus in ESRG will include significant regulatory communications. Any environmental complaints will be managed by the stations communications team. Justified complaints will be raised as CR's – therefore covered via CAP processes.

Environmental Management Review - Minimum Requirements	Example forums / governance arrangements which may be used to demonstrate management review of minimum requirement, stations may have other forums and governance arrangements which deliver this
Opportunities for continual improvement	CAP Processes (screening meetings, CARBs etc.) Fleet environmental peer groups Engineering change review groups Business planning processes Investment delivery processes ESRG

Appendix F Environmental Strategy Review Group Terms of Reference

Environmental Strategy Review Group (or Equivalent)	
TERMS OF REFERENCE	The purpose of the Environmental Strategy Review Group (or equivalent) is to: • Provide oversight of key environmental risks to ensure delivery of mitigations to maintain compliance with regulatory requirements, prevent harm to the environment and to maintain expectations of stakeholders. • Ensure the EMS remains suitable, adequate and effective at identifying and managing relevant risks, issues and stakeholder needs. The ESRG (or equivalent) shall make decisions and take appropriate actions to address adverse trends or inadequate performance identified and to drive continual improvement. As a minimum the ESRG (or equivalent) should consider the following items: • Actions from previous ESRG (or equivalent), • Key risks, mitigation plans and progress of these, • Performance against environmental KPI's, • Event trends, • Regulatory focus. In preparation for the ESRG other performance data and environmental insights should be considered and items raised by exception where adverse trends or new potential risks are identified. The ESRG is one element of Management Review as per the minimum requirements in Appendix E of BEG/ICP/SHE/017, other forums and processes will also contribute to Management Review.
RECORD	A record of the ESRG shall be maintained via a supporting information pack and minutes.
TEMPLATES	Fleet best practice templates are available including agenda, meeting pack, minutes.
FREQUENCY	The ESRG should be held quarterly, recommended duration is 1 to 1.5 hours.
Attendees	
MINIMUM ATTENDENCE FOR QUORATE	• Technical and Safety Support Manager • Engineering Manager or Delegate Group Head • Environmental Safety Group Head • Environmental Compliance Co-ordinator • One of: Plant Mgr, Station Director, Operations Mgr or Delegate Ops Group Head
REQUIRED INVITEES	• Radioactive Waste Environmental Safety Engineer • Radioactive Discharges Environmental Safety Engineer • Key risk owners (station/risk specific) • Station INA • Environmental Safety and Sustainability Branch Manager (or delegate)
OPTIONAL INVITEES	• Station Chemist • Project / Investment Delivery Manager • Fuel Route Manager • Nuclear Decommissioning • ESS Environmental Focus Engineer

Appendix G Environment Process and Quality Indicators

Tier 1 and level 2 KPIs for the Environment Process are as follows:

Name: Tier 1 - Environmental Incidents (EI)
Definition: Number of top tier Environmental Incidents as defined as CR's categorised as ENV 01 and ENV 02
Calculation: See BEG/SPEC/NOS/003/004 Environmental Incidents
Frequency: Monthly

Name: Tier - 2 ENV 03
Definition: Number of ENV 03 categorised CR's
Calculation: Monthly count
Frequency: Monthly

Name: Tier 2 - Radioactive Waste Focus Index (for AGR's)
Definition: A composite indicator which assesses station radioactive waste management focus. The indicator calculates a single normalised and weighted value from a series of sub-indicators.
Calculation: See BEG/SPEC/NOS/003/704 Radioactive Waste Focus Index
Frequency: Monthly

Name: Tier 2 - Lower Activity Waste Accumulated (for PWR)
Definition: Monitoring volume of unprocessed lower activity radioactive waste accumulation.
Calculation: See BEG/SPEC/NOS/003/815 Radioactive Waste Focus Index
Frequency: Monthly