Global Social Compliance Programme

Environmental Reference Requirements

October 2010

About the GSCP
Global Social Compliance Programme

/ GSCP objectives and scope

The Global Social Compliance Programme is a business-driven programme for the continuous improvement of working and environmental conditions in global supply chains. The GSCP was created by and for global buying companies (manufacturers and retailers) wanting to work collaboratively on improving the sustainability (social and environmental) of their often-shared supply base. To this end, these companies seek to harmonise existing efforts to deliver a shared, global and sustainable approach.

The scope of the Programme encompasses:

• social and labour practices,

• site-specific environmental practices (not product related).

The Programme can be applied at all levels of the supply chain.

The Programme is neither a monitoring initiative, nor a substitute to existing systems. **The GSCP will not undertake accreditation or certification activities** as it must remain a non-aligned, neutral reference framework.

/ The GSCP Reference tools

To drive convergence, the GSCP has developed a set of Reference tools and processes that provide a common interpretation, based on best existing practice, of fair labour/social and environmental requirements and their implementation in the supply chain.

/ Users & Usage

These tools are openly available for all to use. Users can include GSCP member and non-member buying companies, suppliers and employment sites. Multi-Stakeholder Initiatives and other initiatives, auditing bodies and other scheme owners can and are encouraged to also use the GSCP Reference tools.

The Reference tools can voluntarily either be:

• integrated by users into their respective systems; or

• utilised by users as a reference against which to compare their existing tools through the GSCP Equivalence Process[1].

/ Responsibility

The GSCP does not monitor nor audit in any way the compliance by a user's supply chain with the GSCP Reference tools or any standards.

The adoption of part or all of one or more Reference tools cannot be put forward as a proof of adequate due diligence. The responsibility of the implementation of these tools, of the monitoring of the user's supply chain's compliance and of any due diligence linked to it, resides with the user. Any use of the GSCP name or logo has to follow the terms established by the GSCP. These terms are available on the GSCP website **(www. gscpnet.com)**.

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1. The Equivalence Process is a mechanism by which a social and/or environmental compliance scheme is objectively benchmarked against the requirements defined in one or more GSCP Reference tools, to determine their level of equivalence. Through the Equivalence Process, the GSCP enables the comparison of various standards and schemes against the GSCP Reference tools, aiming at bringing convergence in requirements and approaches and building mutual recognition.

The Consumer Goods Forum

The GSCP is housed by The Consumer Goods Forum, a retailer and manufacturer parity industry body, driven by its members[2]. It brings together retailers, manufacturers and suppliers to collaborate across the value chain to enrich shopper and consumer value in all markets. It supports processes and practices that optimize the value chain as an interrelated whole, in accordance with all anti-trust laws.

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2. For more information, please visit www.theconsumergoodsforum.com

Acknowledgments
Thank you to those who contributed to this Reference tool

This Reference tool has been developed by supply chain experts from GSCP member companies, with input from key stakeholders, including other brands and retailers, initiatives and international organisations, auditing and certification bodies and civil society representatives. The GSCP would like to thank all those who have helped with the development and continuous improvement of this Reference tool.

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ABOUT THE GSCP ENVIRONMENTAL REFERENCE REQUIREMENTS

Objective & Scope

A framework of Reference requirements has been developed as a Reference tool for employment sites across the whole supply chain. The Reference requirements reflect the need to comply with existing local, national and international legislation and provide a common understanding of good environmental practice. They are applicable to all raw material processing, agricultural, manufacturing and logistics sites in the supply chain.

These Reference requirements are intended to be applied in parallel with the GSCP Reference Code, which defines minimum standards related to working conditions and labour relations in global supply chains.

Structure

The Reference requirements provide a model for continuous improvement in environmental performance from basic compliance to leading-edge performance. This model is based on three levels:

• Level 1 – Awareness and Compliance;

• Level 2 – Proactive Management and Performance Improvement; and

• Level 3 – Leading Practice.

Sites can use these Environmental Reference requirements to support improvement in their environmental performance and gradually progress from Level 1 through to Level 3 by meeting the requirements described at each level. The following diagram shows the progression from Level 1 to Level 3:

Level 1
Awareness and Compliance

Level 2
Proactive Management and Performance Improvement

Level 3
Leading Practice
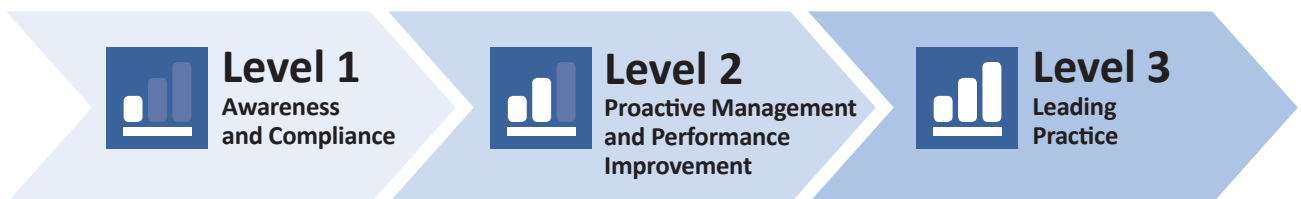
The following table outlines the generic minimum requirements for environmental practice at each performance level. Further guidance on how to implement these requirements is provided in the GSCP implementation guidelines.

LEVEL	GENERIC REQUIREMENTS
1. Awareness and Compliance	• Basic environmental management structure, with defined management responsibilities and environmental management controls in place • Understanding and awareness of significant environmental aspects and impacts, and applicable legal requirements • Compliance with applicable legal requirements • Information and training of workers on environmental and health issues and hazards • Focus is on operations, activities and potential environmental impacts at the site level
2. Proactive Management and Performance Improvement	• Meeting Level 1 requirements • Environmental Management System (EMS) in place • Engaging workers and their representatives at the site in dealing with environmental issues • Environmental management and performance in line with recognised international standard practice • Demonstrable management of all significant environmental aspects and impacts, and achievement of performance improvement targets • Focus is broadened to consider how the site influences and interacts with the local environment
3. Leading Practice	• Meeting Level 1 and 2 requirements • Leading practice environmental management and performance (beyond recognised industry/sector standards) • Engagement with key stakeholders through the value chain to achieve significant performance improvement • Consideration of potential impacts on, and influence over, activities beyond the immediate environs of the site • Demonstrable leadership in environmental management and achievement of stretching performance improvement targets

Note on regulated sites: where specific international, national, regional or local regulatory requirements and/or permit requirements are more stringent than the GSCP Environmental Reference requirements, the regulatory and/or permit requirements shall take precedence. Therefore, where actions specified at Level 2 and/or 3 by the GSCP Environmental Reference requirements are covered by international, national, regional or local regulatory requirements, these must be complied with at Level 1.

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PERFORMANCE AREAS

The Reference requirements are provided in relation to the following eleven performance areas, namely:

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Who is the document for?

The document is for use by all raw material processing, agricultural, manufacturing and logistics sites in the supply chain. This document refers to employment sites, hereafter referred to as "site". Although we refer to the "site" (i.e. a single site) throughout the document, it is equally applicable to a small multi-site company or a larger global multinational.

Scope

The document relates to operational and production activities at a site. Product-related issues per se (including finished product design, manufacturing of packaging and use of packaging in relation to a site's products) lie outside the scope of this document. However, packaging arriving at site (e.g. in relation to packaged raw materials), the use and handling of packaging on-site and the disposal of packaging arising on-site are included in the scope and are discussed, where applicable.

When and how to use this document

A site can use the document to assess its status against current level requirements and/or what it is required to do to progress to the next 'level' of performance.

Please note that this document is not intended to be, nor should it be construed as, legal guidance, given that specific legal requirements will differ globally.

Where legal requirements in the site's country(ies) of operation are not in line with these Reference requirements, those which afford the highest level of protection to the environment and the people on site should be applied. If, however, legal requirements are absent, these Reference requirements can be applied.

Some notes about 'BAT', 'Leading Practices' and 'Key Performance Indicators'

'BAT'

Within the European Union legislative regime, the term 'Best Available Techniques' (or Best Available Technologies') ("BAT") has a legal definition and implementing BAT is a legal requirement for those installations subject to integrated environmental permitting under the European Integrated Pollution Prevention and Control (IPPC) regime. As such, given that Level 1 contains the requirement to be 'compliant with applicable legal requirements' the implementation of BAT would be considered a Level 1 requirement for installations regulated under IPPC. However, BAT would be considered a Level 2 or Level 3 requirement for installations not regulated under IPPC or where they are outside of the scope of IPPC.

'Leading Practices'

The term 'Leading Practice' is subjective and there is no single or legal definition of leading practice. In general, companies confirmed as being at Level 3 will be *going beyond* what is defined and prescribed at Levels 1 and 2 (including going beyond recognised international standards), and will be *proactive* in trying to identify, develop and adopt the latest technology, techniques or practices. They will also be applying the Reference requirements to their Tier 1 suppliers to encourage and promote performance improvement through the supply chain.

'Key Performance Indicators - KPIs'

Key Performance Indicators (KPIs) are calculations, measurements or comparisons that demonstrate how a company, area or activity is performing against a pre-defined level or measurement.

Examples include mass or concentration emissions to air, tonnes of solid waste generated, the amount of energy or water consumed, the quantity of wastewater generated etc. Other indicators may include, for example, the number of environmental incidents or spills, exceedances of consent or permit limits, number of routine area checks or inspections carried out etc.

'Normalised' indicators are indicators divided by a variable, such as production tonnages, production hours, or person hours worked, so that realistic and meaningful comparisons can be made between reporting periods. KPIs should be chosen so that they reflect the important aspects of an organisation's performance and help to assess whether the organisation is meeting, for example, its annual objectives and targets or legally-defined limits or target.

REFERENCE REQUIREMENTS

1. Environmental Management Systems

	LEVEL 1: Awareness and Compliance
1.1.1	Understanding and awareness of significant environmental aspects and impacts (negative and positive)
1.1.2	Understanding and awareness of applicable legal requirements
1.1.3	Mechanism to remain up-to-date with applicable local legal requirements
1.1.4	Basic management controls in place
1.1.5	Member of management responsible for coordination of environmental management activities
1.1.6	Informing and training on environmental and health issues and hazards all personnel according to their function

	LEVEL 2: Proactive Management & Performance Improvement
1.2.1	Environmental Management System (EMS) is established, documented, implemented, maintained and continually reviewed/improved
1.2.2	The EMS includes: a. Environmental Policy b. Planning: environmental risk assessment, setting objectives and targets c. Implementation and operation: operational procedures; adequate training; documentation and its control d. Checking: monitoring and measurement, audit and inspections e. Management Review *A definition of Environmental Management System is available in the glossary. For more details please refer to the GSCP implementation guidelines*
1.2.3	All personnel (management, workers and their representatives, contractors) are engaged in the management of environmental issues according to their function
1.2.4	Information on environmental performance is made available to appropriate internal and external stakeholders (please refer to the GSCP implementation guidelines for detailed definition)

	LEVEL 3: Leading Practice
1.3.1	Forward looking environmental strategy to drive leading practice
1.3.2	Environmental management and environmental performance targets are designed to improve or sustain the environment and local ecosystem, or global when appropriate
1.3.3	Proactive engagement with relevant stakeholders, to achieve significant performance improvement
1.3.4	Where relevant, commitment to voluntary standards

2. Energy Use, Transport and Greenhouse Gases (GHGs)

	LEVEL 1: Awareness and Compliance
2.1.1	Meet legal requirements
2.1.2	Relevant, up-to-date permits are held and compliance maintained
2.1.3	Tracking of energy consumption/calculation of GHG emissions including fuel use for on-site transport
	LEVEL 2: Proactive Management & Performance Improvement
2.2.1	Formal systems and processes in place to manage and audit energy use and GHG emissions as per the site EMS
2.2.2	Energy consumption and greenhouse gas emissions (including on-site vehicle emissions) are made available to appropriate internal and external stakeholders
2.2.3	Renewable energy use targets and GHG emission reduction targets (normalised) are established/reviewed at least on an annual basis to drive continuous improvement
2.2.4	Demonstrable reduction in energy (normalised; please refer to the GSCP implementation guidelines for further definition)
2.2.5	Targets include on-site vehicle emissions reduction, which are reviewed on an annual basis to drive continuous improvement
	LEVEL 3: Leading Practice
2.3.1	Leading practice mechanisms in place to reduce greenhouse gas (GHG) intensity (for further definition please refer to the GSCP implementation guidelines)
2.3.2	Use of energy sources with lower GHG intensity • Energy consumption level is sustainable within availability of local energy resources • Demonstrable achievement of stretching energy and fuel efficiency and GHG emission targets beyond recognised international standard practice
2.3.3	Engagement with appropriate stakeholders down the value chain identifying ways to reduce GHG emissions
2.3.4	Carbon accounting in business system
2.3.5	Specification of the most environmentally efficient combinations of vehicle types, fuels and technologies for distribution fleet
2.3.6	Fuel consumption and vehicle emission reduction targets are reviewed on an annual basis to drive continuous improvement for the entire fleet

3. Water Use

	LEVEL 1: Awareness and Compliance
3.1.1	Meet legal requirements
3.1.2	Relevant, up-to-date permits are held and compliance maintained
3.1.3	Measurement of water consumption is undertaken
	LEVEL 2: Proactive Management & Performance Improvement
3.2.1	Formal systems and processes in place to manage and audit water consumption as per the site EMS
3.2.2	Water consumption data are made available to relevant internal and external stakeholders
3.2.3	Water consumption efficiency targets are reviewed on an annual basis to drive continuous improvement
3.2.4	Demonstrable achievement of water efficiency targets (normalised)
	LEVEL 3: Leading Practice
3.3.1	Where relevant, water consumption level is sustainable within local ecosystem limits and water catchment area
3.3.2	Investigation of and use, if relevant, of alternative water sources with lower ecosystem impact
3.3.3	Demonstrable achievement of stretching water efficiency targets beyond recognised international standard practice
3.3.4	Leading practice water efficiency mechanisms in place, including re-use, recovery and recycling
3.3.5	Engagement with appropriate stakeholders down the value chain to improve water efficiency

4. Wastewater/Effluent

LEVEL 1: Awareness and Compliance	
4.1.1	Meet legal requirements
4.1.2	Relevant, up-to-date permits are held and compliance maintained
4.1.3	Drainage plan in place with a general understanding of wastewater flow direction and discharge points
4.1.4	Identification of the contaminants, their flow direction and potential impact

LEVEL 2: Proactive Management & Performance Improvement	
4.2.1	Formal systems and processes in place to manage wastewater effluent as per the site EMS
4.2.2	Basic on-site wastewater treatment in place to achieve improvements in wastewater quality or connection to off-site wastewater treatment system
4.2.3	Regular wastewater quality testing/monitoring is undertaken to ensure ongoing compliance with permitted effluent limits and as per the site's EMS
4.2.4	Wastewater quality data are made available to relevant internal and external stakeholders
4.2.5	Wastewater quality and volume improvement targets are reviewed on an annual basis to drive continuous improvement
4.2.6	Demonstrable improvement in wastewater quality

LEVEL 3: Leading Practice	
4.3.1	Wastewater effluent quality and discharge volume are sustainable in the context of local receptors and ecosystem limits
4.3.2	Leading practice wastewater treatment in place
4.3.3	Leading practice mechanisms in place to improve quality of wastewater discharged to local environment, including reuse of grey water
4.3.4	Demonstrable achievement of stretching wastewater effluent quality improvement and volume reduction targets (normalised) beyond recognised international standard practice
4.3.5	Engagement with appropriate stakeholders down the value chain to improve wastewater effluent quality

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5. Emissions to air

5.1 General

	LEVEL 1: Awareness and Compliance
5.1.1	Meet legal requirements (including monitoring)
5.1.2	Relevant, up-to-date permits are held and compliance maintained
5.1.3	An inventory of main point source emissions to air is maintained and site has considered potential for fugitive emissions *For requirements in relation to Greenhouse Gas (GHG) emissions (including in relation to transport) please refer to Section 2.0 Energy Use and GHG emissions*

	LEVEL 2: Proactive Management & Performance Improvement
5.2.1	Formal systems and processes in place to manage emissions to air as per the site EMS
5.2.2	Regular air emissions quality testing/monitoring is undertaken to ensure ongoing compliance with permitted limits
5.2.3	Air emissions quality data are made available to relevant internal and external stakeholders
5.2.4	Air quality improvement targets are reviewed on an annual basis to drive continuous improvement
5.2.5	Demonstrable reduction in emissions to air (normalised)

	LEVEL 3: Leading Practice
5.3.1	Emissions to air are sustainable within local ecosystem limits
5.3.2	Leading practice abatement technologies in place to minimise emissions to air or efforts to reduce emissions at source
5.3.3	Demonstrable achievement of stretching air quality improvement targets beyond recognised international standard practice
5.3.4	Engagement with appropriate stakeholders down the value chain to reduce emissions to air
5.3.5	Additional and proactive emissions monitoring performed

5.2 Ozone Depleting Substances (ODS)

	LEVEL 1: Awareness and Compliance
5.1.4	Meet legal requirements
5.1.5	Relevant, up-to-date permits are held and compliance maintained
5.1.6	An inventory of ozone-depleting substances (ODS) is maintained
5.1.7	Regular maintenance of ODS containing equipment
	LEVEL 2: Proactive Management & Performance Improvement
5.2.6	Proactive ODS leak detection and maintenance of ODS-containing equipment
5.2.7	Targets in place to phase-out use of specific types of ODS, such as CFCs, halons, TCE, CCl4 in line with recognised international standard practice
5.2.8	Demonstrable reduction, control and substitution of ODS
	LEVEL 3: Leading Practice
5.3.6	Complete phase-out of all ODS (beyond legal requirements)

6. Waste management

	LEVEL 1: Awareness and Compliance
6.1.1	Meet legal requirements
6.1.2	Relevant, up-to-date permits are held and compliance maintained
6.1.3	Regular checks that waste contractors have appropriate permits are undertaken
6.1.4	Hazardous and non-hazardous waste is segregated and employee awareness and training provided on handling and segregation of wastes
6.1.5	Inventory/management/storage/transportation procedures for hazardous waste streams in place
6.1.6	Records of on-site and off-site waste disposal/treatment maintained
6.1.7	No on-site waste burning/or uncontrolled waste landfilling is undertaken
	LEVEL 2: Proactive Management & Performance Improvement
6.2.1	Formal systems and processes in place to manage waste generation, storage, transportation, and disposal as per the site EMS, including waste minimisation audit and consideration of waste hierarchy principles
6.2.2	Evaluation of waste management contractors (suitability, disposal/treatment methods)
6.2.3	Engagement with suppliers to identify waste avoidance/reduction/recycling/reuse opportunities
6.2.4	Segregation of waste streams in line with recognised international standard practice
6.2.5	Monitoring and measurement of waste generated and recycled, with data available to relevant internal and external stakeholders
6.2.6	Waste reduction and recycling targets are reviewed at least on an annual basis to drive continuous improvement
6.2.7	Demonstrable waste reduction (normalised)
	LEVEL 3: Leading Practice
6.3.1	Waste disposal method and volume is sustainable within local operating environment and availability of waste treatment and disposal facilities
6.3.2	Leading practices in place to minimise resource/virgin material use and achieve waste reduction/recycling/energy from waste
6.3.2	Demonstrable achievement of stretching waste reduction/recycling targets beyond recognised international standard practice
6.3.4	Engagement with appropriate stakeholders down the value chain to identify waste avoidance/reduction/recycling/reuse/energy from waste measures

7. Pollution Prevention/Hazardous and Potentially Hazardous Substances

	LEVEL 1: Awareness and Compliance
7.1.1	Meet legal requirements
7.1.2	Compliance with prohibited chemicals list (e.g. for agrichemicals from World Health Organisation, WHO)
7.1.3	Relevant, up-to-date permits are held and compliance maintained
7.1.4	An inventory of hazardous substances used and stored is maintained together with relevant up-to-date Material Safety Data Sheets (MSDS)
7.1.5	Specific procedures/controls in place for the management/storage/transportation of all hazardous substances, minimising potential for air, water, soil and groundwater impacts
7.1.7	Pollution prevention and response training is delivered to all relevant employees
7.1.8	Incidents are notified to the authorities as required by applicable permits/legislation
	LEVEL 2: Proactive Management & Performance Improvement
7.2.1	Formal systems and processes in place for pollution prevention and to reduce the potential for pollution incidents as per the site EMS
7.2.2	Dedicated site emergency response team in place to deal with pollution incidents
7.2.3	Regular practice drills are carried out for pollution incidents
7.2.4	Targets are reviewed on an annual basis to reduce the use of hazardous substances, minimise associated risks and substitute with non-hazardous alternatives where possible
7.2.5	Where relevant, specific pollution prevention mechanisms are considered in agricultural production, including optimisation of agrichemicals input
7.2.6	Demonstrable reduction in hazardous substances use (normalised) and minimisation of associated risks, as appropriate
	LEVEL 3: Leading Practice
7.3.1	'Zero pollution incident' target and policy in place
7.3.2	Detailed pollution prevention inspections are conducted
7.3.3	Promote the use of non-hazardous and non-toxic alternative substances
7.3.4	Demonstrable achievement of stretching hazardous substance reduction/substitution targets beyond recognised international standard practice
7.3.5	Engagement with appropriate stakeholders down the value chain to improve hazardous substance use

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8. Major incident prevention and management

LEVEL 1: Awareness and Compliance	
8.1.1	Meet legal requirements
8.1.2	Relevant, up-to-date permits are held and compliance maintained
8.1.3	Site emergency plan in place with detailed guidelines/training for major incident response, as needed and reflecting the risks of activities undertaken on-site
8.1.4	Emergency response plan communicated to local authorities, emergency services and local communities, as required
LEVEL 2: Proactive Management & Performance Improvement	
8.2.1	Formal systems and processes in place to manage emergency response as per the site EMS
8.2.2	Reduction in potential occurrence and impacts of major incidents (e.g. explosions, fires, major spills etc.)
8.2.3	Regular Quantitative Risk Assessment (QRA) reviews
8.2.4	Major incidents reported to relevant stakeholders
8.2.5	Dedicated site emergency response team in place
8.2.6	Regular practice drills are carried out for all emergency scenarios
LEVEL 3: Leading Practice	
8.3.1	'Zero major incident' target and policy in place
8.3.2	Proactive engagement with local community to ensure awareness of risks of major incidents and emergency response procedures
8.3.3	Local community is involved in site's emergency response drill and has been contacted by the emergency response team, as relevant
8.3.4	Leading practice mechanisms in place to reduce risk of major incidents e.g. process changes

9. Contaminated land/Soil and Groundwater Pollution Prevention

	LEVEL 1: Awareness and Compliance
9.1.1	Meet legal requirements
9.1.2	Relevant, up-to-date permits are held and compliance maintained
9.1.3	Understanding and awareness of site setting/sensitive receptors in site's vicinity
9.1.4	Not causing or knowingly permitting contamination of soil and groundwater
	LEVEL 2: Proactive Management & Performance Improvement
9.2.1	Formal systems and processes in place to manage contaminated soil and groundwater as per the site EMS
9.2.2	Qualitative, desk-based (as appropriate) soil and groundwater risk assessment completed including: a. All potential current and historical on-site sources of potential soil and groundwater impact b. All potential current and historical off-site sources of potential soil and groundwater impact c. Mapping of all receptors and pathways d. Assessment of risk of soil and groundwater impact
9.2.3	All actions completed following results for soil and groundwater risk assessment, e.g. and as required: a. Focused Phase II investigation b. Appropriate and efficient remediation of soil and/or groundwater contamination performed
9.2.4	Any soil and groundwater contamination is communicated to relevant stakeholders, as required
	LEVEL 3: Leading Practice
9.3.1	'Zero contamination' target and policy in place
9.3.2	Proactive management of soil and groundwater quality
9.3.3	Leading practice techniques in place to prevent further/future soil and/or groundwater contamination and in relation to remediation
9.3.4	Proactive engagement with stakeholders in the local community to ensure awareness of potential soil and/or groundwater contamination
9.3.5	Engagement with appropriate stakeholders down the value chain in relation to the prevention and management of soil and groundwater contamination

10. Land Use and Biodiversity

	LEVEL 1: Awareness and Compliance
10.1.1	Meet legal requirements relating to planning and development
10.1.2	Relevant, up-to-date permits are held and compliance maintained
10.1.3	No negative impact on designated protection areas or species
	LEVEL 2: Proactive Management & Performance Improvement
10.2.1	Formal systems and processes in place to manage land use and biodiversity as per the site EMS
10.2.2	In agricultural production, proactive management to maintain soil fertility, avoid soil erosion and promote soil and biodiversity recovery
10.2.3	Where appropriate, demonstrable improvement in land use and biodiversity performance including deforestation, rehabilitation and conservation activities
	LEVEL 3: Leading Practice
10.3.1	Land use is sustainable within local ecosystem context
10.3.2	Leadership role in biodiversity conservation, for example partnership with relevant local organisations
10.3.3	Leading practice mechanisms in place to promote biodiversity and leading practice land management
10.3.4	Engagement with appropriate stakeholders down the value chain to improve land use and biodiversity performance, within and beyond site boundaries
10.3.5	Demonstrable achievement of stretching targets beyond recognised international standard practice

11. Nuisances

	LEVEL 1: Awareness and Compliance
11.1.1	Meet legal requirements
11.1.2	Relevant, up-to-date permits are held and compliance maintained
11.1.3	Understanding and awareness of nuisance levels from site activities and associated impacts (including odour, noise, visual and general housekeeping)
	LEVEL 2: Proactive Management & Performance Improvement
11.2.1	Formal systems and processes in place to manage nuisances (including odour, noise, visual and general housekeeping) and complaints as per the site EMS
11.2.2	Impacts and complaints data are made available to relevant internal and external stakeholders
11.2.3	Impacts and complaints reduction targets are reviewed on an annual basis to drive continuous improvement
11.2.4	Demonstrable reduction in nuisance impacts and complaints
	LEVEL 3: Leading Practice
11.3.1	'Zero complaints' target and policy in place
11.3.2	Proactive engagement with local community/stakeholders to reduce impacts
11.3.3	Leading practice mechanisms in place to ensure reduction of impacts e.g. process changes
11.3.4	Demonstrable achievement of stretching performance targets beyond recognised international standard practice

Glossary of terms

A

Absolute Data

Absolute data comprise totals or usage data without comparison to any variables, e.g. total kWh of electricity used, total tonnes of hazardous waste produced in a month etc. An organisation can decide whether absolute or normalised data are going to be the most appropriate and representative data to collate/report. Within each of the performance areas discussed in this document there are examples of variables against which data can be normalised.

Assurance

"The methods and processes employed to evaluate an organisation's disclosures about its performance as well as underlying systems, data and processes against suitable criteria and standards…"

AA1000 Assurance Standard 2008

B

Best Available Techniques (BAT)

- 'Techniques' shall include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned;

- 'Available' techniques shall mean those developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the costs and advantages, whether or not the techniques are used or produced inside the country in question, as long as they are reasonably accessible to the operator; and

- 'Best' shall mean those most effective in achieving a high general level of protection of the environment as a whole.

Definitions adapted from Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control, Art. 2(11)

Biological Oxygen Demand (BOD)

Biological Oxygen Demand (or Biochemical Oxygen Demand) (BOD) is an indicator of the level of organic matter in the water and, hence, the rate at which oxygen in the water is used up as the organic matter is consumed by organisms in the water. Generally, the lower the BOD, the better the water/wastewater quality.

C

Carbon footprint

According to the UK Carbon Trust, a 'carbon footprint' is "the total set of greenhouse gases (GHG) emissions caused by an organization, event or product.

CAS and CAS Numbers

The Chemical Abstracts Service (CAS), which is a division of the American Chemical Society, establishes "CAS registry numbers" (or "CAS numbers"). There are unique number sequences used internationally to identify chemicals, chemical compounds, mixtures, alloys, and other substances. A CAS number is separated by hyphens into three parts, the first consisting of up to 7 digits, the second consisting of two digits, and the third consisting of a single digit. The numbers are assigned in increasing order and do not have any specific meaning.

Chemical Oxygen Demand (COD)

Chemical Oxygen Demand (COD) is an indicator of the level of organic matter and chemicals in the water and, hence, the rate at which oxygen in the water is used up as the organic matter and chemicals are consumed. Generally, the lower the COD the better the water/wastewater quality.

Climate Change

A long-term, measurable, change in the expected climate or weather for the Earth as a whole or in a particular region, as a result of human activity.

Continual Improvement

The recurring process of enhancing the environmental management system in order to achieve improvements in overall environmental performance consistent with an organisation's environmental policy.

ISO14001:2004

E

EINECS Numbers

EINECS("European Inventory of Existing Commercial chemical Substances") numbers are an alternative to CAS numbers for the classification of chemicals. EINECS numbers are used for substances (excluding polymers) that were commercially available in the EU from 1st January 1971 to 18 September 1981. The EINECS number is made up of seven digits (xxx-xxx-x). There are other European-based numbering systems (including ELINCS and NLP numbers), however, EINECS numbers are the more commonly used system.

EMS – Environmental Management System

A management system is a set of interrelated elements used to establish policy and objectives and to achieve those objectives.

ISO14001:2004

Environmental aspect

An element of an organisation's activities or products or services that can interact with the environment

ISO14001:2004

Environmental impact

Any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organisation's environmental aspects

ISO14001:2004

Environmental Impact Assessment (EIA)

An assessment of the potential impact(s), either positive or negative, that an operation, activity or project has or could have on the natural environment.

K

Key Performance Indicator (KPI)

"A quantifiable metric that reflects the environmental performance of a business, in the context of achieving its wider goals and objectives"

DTI Environmental KPIs - Reporting Guidelines for UK Business

L

Legionella Bacteria

Legionella bacteria are responsible for Legionnaire's Disease. Symptoms of Legionnaires' disease include high fever, chills, headache, muscle pain, dry cough, difficulty with breathing, and diarrhoea or vomiting. About half of sufferers become confused or delirious. Legionnaires' disease can be treated effectively with appropriate antibiotics. However, infection with Legionella bacteria has been fatal in approximately 12% of reported cases. Legionnaires Disease is normally contracted by inhaling Legionella bacteria, either in very small water droplets (aerosols), or in the nuclei of such droplets (i.e. the particles left after the water has evaporated) contaminated with Legionella bacteria, deep into the lungs. Legionella bacteria are commonly encountered in naturally occurring water bodies (e.g. rivers, lakes and reservoirs). However, they also colonise manufactured water systems and be found in cooling tower systems, hot and cold water systems and other equipment which uses, transfers or stores water.

M

Management

People who identify and achieve organizational objectives through the deployment of appropriate resources. A manager can have responsibilities in one or more of five key areas: managing activities; managing resources; managing information; managing people; and managing him- or herself at the same time as working within the context of the organizational, political, and economic business environments.

Monitoring framework

Types of monitoring and assurance processes that a company implements to, for example, assess environmental performance. This could comprise detailed monitoring regimes to evaluate compliance with performance limits (e.g. emissions to air), a detailed audit process to assess compliance with, for example, the Framework Requirements, or a self-assessment questionnaire to assess improvement in performance. A detailed audit process could range from internal self-assessment inspections to detailed third party compliance audits.

N

Normalised Data

Normalised data includes a comparison of totals or usage data against a predefined variable (or set of variables), e.g. kWh of electricity used per employee on-site, kg of hazardous waste per unit of production etc. An organisation can decide whether absolute or normalised data are going to be the most appropriate and representative data to collate/report. Within each of the performance areas discussed in this document there are examples of variables against which data can be normalised.

NO_x

"NO_x" is the collective term for various oxides of nitrogen, including: nitrous oxide (N_2O) which is a colourless gas, formed by soil bacteria when decomposing certain organic material, which reacts with ozone in the upper atmosphere; nitric oxide (NO) which is a colourless gas formed during high temperature combustion of fuels and which is oxidised by ozone; and nitrogen dioxide (NO_2) which is a highly toxic reddish-brown gas formed, for example, during the reaction of other oxides of nitrogen with ozone and which can also act as a retardant to plant-growth.

P

"Phase I"

"Phase I" is commonly used in reference to soil and groundwater investigation as the initial phase of review and assessment. Typically, a Phase I study would be desk-based and would comprise a review of the site setting in terms of the site's activities and operations, surrounding land uses to the site, the underlying geology and hydrogeology (groundwater), hydrology (surface waters – rivers, streams, lakes, reservoirs, seas etc.), soil type (potentially) and other receptors.

"Phase II"

"Phase II" is commonly used, in reference to soil and groundwater investigation, as the intrusive stage of investigation work. The intrusive work may include trial pits, boreholes or other excavations, together with sampling and analysis of soil and/or groundwater.

"Phase III"

"Phase III" is commonly used, in reference to soil and groundwater contamination, as the remediation stage of the work (i.e. clean-up of contaminated soil and/or groundwater to a pre-defined quality/level). Phase III may include additional sampling and analysis of soil and/or groundwater, as well as the actual remediation work.

Pollution prevention

In the context of this document, "pollution prevention" relates to the controls and measures adopted to reduce the likelihood and/or impact of a release of a substance to the environment and the associated potential for pollution to occur.

R

Renewable Energy

This relates to energy generated by a renewable source (i.e. source which is not depleted or used up as it is naturally replenished. Renewable sources can either be managed so that they last forever, or so that their supply is not significantly impacted.

Unlike fossil fuels, most renewable energy sources do not release carbon dioxide and other air pollutants as by-products into the atmosphere. As the amount of fossil fuel resources on Earth decreases, it is becoming increasingly important to find and utilise renewable energy sources. Examples include: solar, biofuels, wind, hydro-electric, geothermal, tidal and wave.

S

SO_x

"SO_x" is the collective term for various oxides of sulphur, including: sulphur dioxide (SO_2) and sulphur trioxide (SO_3). Sulphur oxides exist and are produced naturally. In addition, human activities can increase SO_x levels, e.g. through combustion of sulphur-containing fuels. SO_x can contribute to acid rain, smog, can affect breathing and can adversely impact vegetation.

Stakeholder

A person with an interest or concern in the organisation, site or project. Stakeholders can include (but not necessarily be limited to): site workers and management, trade unions, the Board, non-executive directors, shareholders, other financial backers (private equity house, venture capitalist etc.), regulators, customers, suppliers, the local community etc.

Sustainability/Sustainable Development

"Development that meets the needs of the present without compromising the ability of future generations to meet their own needs".

AA1000 Assurance Standard 2008

T

Target

A detailed performance requirement (quantified where possible and applicable to all or parts of the organisation), that arises from the setting of environmental objectives and which needs to be set and met in order to achieve those objectives.

A specific task in the achievement of an environmental objective. Environmental targets must be stated in a measurable and quantifiable manner.

ISO14001:2004

Targets can be based on absolute data or normalised data.

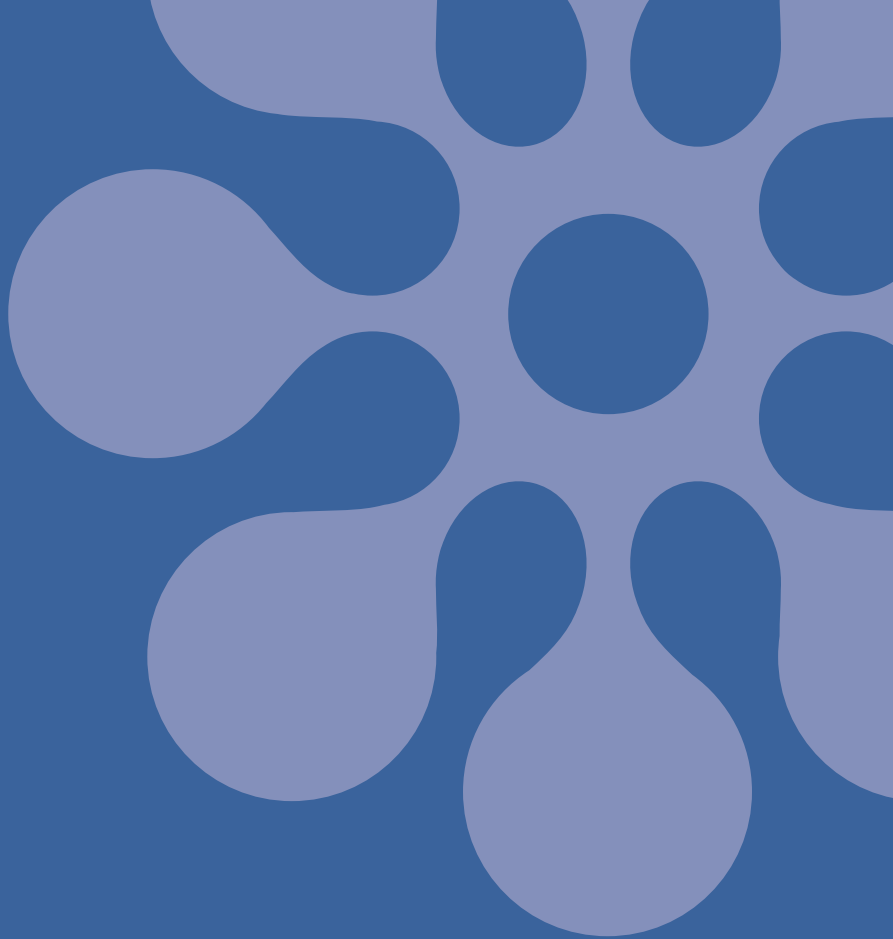## V

Volatile organic compounds (VOCs)

Organic compounds (i.e. typically those containing carbon) (e.g. ethylene, propylene, acetone, dichloromethane, benzene, xylene, toluene, styrene) that readily evaporate and which contribute to air pollution, either directly or through other chemical reactions producing 'secondary pollutants'. Examples of materials containing VOCs include solvents, paints, thinners, petroleum fuels, etc.

W

Worker

A person working on an employment site, in any capacity.