

# Environmental Management System (EMS) Summary

Yorkshire Water Projects  
  
Environmental Management System (EMS) Summary

**1 - Project Introduction**

SGN Gas to Grid ProjectCo1 Ltd. (SGN) proposes to build and operate 2 x new biomethane to grid (BtG) plant within Knostrop Sludge Treatment Facility (STF) & Blackburn Meadows Wastewater Treatment Works (WwTW). Both facilities are proposed to be constructed within the wider YW wastewater treatment works which is owned and operated by Yorkshire Water Services (YWS). Both YWS sites are regulated facilities and the BtG plants will also be regulated facilities, requiring environmental permits to operate. Both facilities will be regulated by the Environment Agency (EA). The area of land that the BtG plants will be built on is being leased to SGN by YWS. YWS is submitting applications on both sites for the ‘partial surrender’ of this area of land from the present day STF permit boundary.

Biomethane will be produced from treating / upgrading raw biogas, a waste gas generated at the

YWS facilities through anaerobic digestion of sewage sludge. Consequently, the BtG plants will be a

Directly Associated Activity (DAA) to the YWS anaerobic digestion activity and SGN is applying for a bespoke DAA environmental permits for the BtG plants.

SGN’s environment and sustainability policy describes our commitment to drive continuous improvements in our environmental performance and operate our business in a sustainable manner. SGN Gas to Grid ProjectCo1 Ltd, part of the SGN group, is an ISO 14001:2015 certified company. The ISO 14001 standard requires us to establish, implement, maintain and continuously improve an environmental management system (EMS). Our EMS, which considers life cycle perspective, is embedded within our Safety Management Framework (SMF). This procedure describes the way in which we demonstrate our conformance with ISO 14001 2015 by considering our full scope of activities which is available to stakeholders and other interested parties. It is expected through treatment and upgrading of the currently produced biogas across both projects it is expected that approximately 138GWh of biomethane will be produced annually at these sites once operational in 2025. That is enough to heat approximately 10,000 local properties with renewable energy whilst reducing current emissions from biogas flaring and use in Combined Heat and Power plant.

Both projects proposed will be constructed and commissioned in 2025 and operated over a 20-year term. On completion of the operational phase, the plants may be shutdown and de-commissioned or further extension to operational term should there be continued environmental, commercial, and moral benefit.

**2 - Management Procedure for Environmental Management System**

SGN Gas to Grid ProjectCo1 Ltd will manage the Environmental Management System in accordance with SGN Safety Management Framework (SMF) procedure - SGN/PM/SHE/60. This has been included in **Appendix 1.** This is in accordance with ISO14001:2015.

SGN Gas to Grid Project Co1 Ltd, part of the SGN group, is an ISO 14001:2015 certified company. The Environmental Management System (EMS) for SGN Gas to Grid ProjectCo1 Ltd will be managed in strict accordance with the SGN Safety Management Framework (SMF) procedure, specifically SGN/PM/SHE/60. Documentation supporting this, in compliance with ISO 14001:2015, has been provided in **Appendix 1.**

**3 - Environmental Management System – Contents**

The Environmental Management System will include but not limited to the following –

**3.1 - Site Plan**

Site infrastructure plan drawn to scale showing extents of permit boundary and activities covered by DAA permits. Site Plan will detail all buildings, security fences & storage facilities for hazardous materials like oil & chemical stores, gas bottle storage, storage of waste materials, spill kits & fire extinguisher locations, location of items & equipment for use in accidents and emergencies, entrances and exits that can be used by emergency services.

Site plan will detail the location of mains water, biogas and electricity supplies on site as well as exported biomethane. The site plan will also detail all isolations for mains/potable water, biogas, biomethane and electrical isolations.

Site plan will also detail inspection or monitoring points for sampling and analysis of trade effluent/condensate & emissions to air. Site plan will detail if necessary any vulnerable locations on/or near each site such as rivers or streams.

**3.2 – Site Drainage Plan**

The EMS will include drainage plan showing surface water and condensate discharge. Condensate/potentially contaminated drainage facilities will be marked in red and surface water drainage facilities marked in blue. The drainage plan will detail the direction of flow of the water in the drain the location of discharge points to the YWS foul water sewer. The site drainage plan will also detail the location of manhole covers, oil interceptors, non-return valves and the location of stop and diverter valves. Discharges will be managed in accordance with **Appendix 4** – SGN/PM/SHE/52

**3.3 – Site Operations**

The EMS will provide a section detailing Site Operations. This section will detail the day-to-day operations activities carried out onsite – including start up, operation and shutdown activities. Site operations will also detail waste management (see **Appendix 3** – SGN/PM/SHE/50) and storage of materials (in accordance with **Appendix 5** – SGN/PM/SHE/23) – maximum volumes of wastes/raw materials held onsite and the durations in which they will be kept onsite.

**3.4 – Fire Prevention**

Following fire risk assessment’s being undertaken – there may be a requirement for Fire Prevention Plan. The EMS will detail how risk of fire will be prevented and managed in the event of a fire. SGN’s EMS will detail how fire risk and prevention is managed through the implementation of **Appendix 13** – SGN/PM/SHE/16

**3.5 – Site & Equipment Maintenance Plan**

Site and equipment maintenance plan will detail how SGN will maintain the plant, equipment and infrastructure within the site. SGN will maintain all plant and equipment in accordance with manufacturer and supplier recommendations and record and retain all maintenance reports and documentation. Maintenance will be managed by competent person, scheduling of maintenance aligned to minimise downtime and within contractual limits with YW. Site maintenance will be completed to the highest standards in accordance to operating parameters to ensure continued operation in compliance with requirements of the DAA permit.

**3.6 – Contingency Plan**

SGN EMS will include contingency plan to inform management and impact to the environment in the event of breakdowns, shutdowns, and changes to the normal operation of the biomethane to grid facility.

**3.7 - Accident Prevention and Management Plan**

EMS will detail procedure for dealing with any incidents or events that could result in:

* Pollution and land contamination – See **Appendix 2** - SGN/PM/SHE/53, SGN/PM/SHE/80
* not being able to comply with DAA permit

The plan must identify potential accidents, for example:

Reporting & Investigation will be managed in line with management procedure **Appendix 7** – SGN/PM/INV/1

SGN will protect and manage impact to habitats through implementation of management procedure **Appendix 9** – SGN/PM/SHE/56

**3.8 – Climate Change**

EMS will detail SGN’s management procedure for climate change in accordance with **Appendix 6** – SGN/PM/SHE/51.

**3.9 – Cyber Security**

EMS will detail SGN’s management procedure for Cyber Security in accordance with **Appendix 8** – SGN/PM/INE/9.

**3.10 – Contact Information**

EMS will detail if required - SGN’s key contact details and procedure detailing display notice showing -

* the permit holder’s name (company name at least)
* an emergency contact name and telephone number
* Statement detailing the facility is permitted by the Environment Agency
* the permit number
* Environment Agency telephone number 03708 506506 and the incident hotline 0800 807060 (or another number they subsequently tell you about in writing)

**3.11 - Complaints procedure**

EMS will detail how complaints are managed, recorded and actions taken to rectify concerns/incidents. All complaints are recorded relating to activities covered by the DAA permit. Complaints are investigated and actions reported inline with management procedure found in **Appendix 7** – SGN/PM/INV/1

SGN typical complaints procedure is detailed below –

You can contact our Customer Service team by emailing [greengasenquiries@sgn.co.uk](mailto:greengasenquiries@sgn.co.uk). If you prefer, you can write to us at SGN Customer Service, Stroma Suite, Grampian House, 200 Dunkeld Road, Perth PH1 3GH. Or, you can speak to our Customer Service team by calling 0800 912 1700.

When you contact us, it would be helpful if you could provide the following information so we can deal with your complaint:

* Full contact details (your name, company name (if applicable), address, telephone number and email address)
* Full site location address and postcode
* Any relevant reference numbers or site names or names of who you may have spoken with before contacting us.

We treat all complaints seriously and confidentially. We will fully investigate your complaint in line with our complaints handling procedure, and we will do this in a polite, prompt, and straightforward manner. Your complaint will be reviewed by our Customer Service team or local depot management team. We’ll provide a response within 5 working days or 10 working days where a site visit or third-party enquiry is required.

How we aim to put things right -

The different resolutions you can expect are:

* An apology where we have failed to provide a satisfactory level of service.
* An explanation addressing the issue(s) you have raised.
* Where required, appropriate remedial action

**3.12 – Competence & Training**

EMS will detail SGN’s resource management and management procedure for managing competence via SGN’s Competence Assurance Scheme. This is managed through implementation of management procedure **Appendix 10** – SGN/PM/SHE/77 & 79

EMS will detail who is responsible and accountable for day-to-day operation of the site and deemed as technically competent to perform roles they carry out in relation to activities covered by DAA permit.

The EMS also details competence reviews completed for staff and contractors as well as training and qualifications for the work performed.

**3.13 – Records & Document Control**

EMS will detail records kept and duration for retention as required by the conditions of the DAA permit. This may consist of the following if applicable –

* Permits issued to the site from Environment Agency
* Permits & other safe systems of work issued to work parties.
* Risk Assessment & Method Statements
* Management Plans
* Delivery Notes
* Any plans or management plans required by the permit
* Equipment operating, maintenance and certification literature
* Maintenance records
* Staff competence and training records
* Contractor competence and training records
* Emissions, Discharge & Monitoring sample analysis as required
* Compliance records
* Investigation & Reporting documentation
* Record of complaints – investigation and findings in line with SGN/PM/INV/1
* Audit findings, records & action log
* Management plan reviews
* Certification & Conformity Records

Plant & Equipment records will be managed in line with management procedure found in **Appendix 11** – SGN/PM/RE/2

**3.14 – Management System Review**

EMS will be reviewed as per management procedure in Appendix 1 – SGN/PM/SHE/60

Top management representatives will review our EMS, on an annual basis, to ensure its continuing suitability, adequacy and effectiveness. The review will examine:

* the actions and notes documented from the previous meeting
* a clause by clause review of performance against the ISO14001 requirements
* the external and internal issues that are relevant to and may affect the intended outcomes of the environmental management system along with the potential changing requirements of stakeholders and other interested parties
* Results of audits
* Compliance with regulations/legislation
* Incidents analysis
* Complaints analysis

Performance against environmental objectives will undergo a thorough review of our aspects and the risk and opportunity scores and action plans associated with each item. The outputs of the review will include:

* Confirmation of the continuing suitability of the EMS
* Recommendations for continuous improvements
* Identification of business changes and other external factors that need to be considered for integration within our EMS
* Any implications that may affect the strategic direction of the business
* Recalculated risk scores for aspects

Notes of review including actions, target dates and ownership. The notes and actions arising from the meeting will be circulated to participants and other top managers within 2 weeks of the meeting.

**3.15 – Site Closure & De-Commissioning**

EMS will detail arrangements and work sequence for deconstruction of the proposed BtG plant. These actions will be put in place prior to de-commissioning an close co-ordination will be carried out between SGN and YWS. The plant will be safely mechanically and electrically isolated and all pipework will be suitably vented to atmospheric pressure and purged with inert gases to make safe. All activated carbon, lubricants and coolants will be decanted and safely removed and disposed of via specialist waste contractors. Following this, BtG plant will be de-constructed and de-commissioned in-line with the SGN Work Instruction found in **Appendix 12** – SGN/WI/PLANT/1 & European standard BS EN 12327:2012 and documented on SGN Decommissioning certificate inlinewith requirements of SGN/WI/PLANT/1

**Appendix 1 – Management Procedure for Environmental Management System**



**Appendix 2 – Management Procedure for the Control of Land Contamination Risks & Using Substances Hazardous to the Environment**





**Appendix 3 – Management Procedure for Waste**



**Appendix 4 – Management Procedure for Waste Water**



**Appendix 5 – Management Procedure for Warehouse & Stores**

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**Appendix 6 – Management Procedure for Climate Change**



**Appendix 7 – Management Procedure for Reporting & Investigation**



**Appendix 8 – Management Procedure for Cyber Security**



**Appendix 9 – Management Procedure for Protection of Habitats**



**Appendix 10 – Management Procedure for Competence Assurance System & Developing competence within Technical Roles**





**Appendix 11 – Management Procedure for Capture of Plant & Equipment Records**



**Appendix 12 – Plant 1 Management Procedure & Decommissioning Certificate**

 

**Appendix 13 – Management Procedure for Fire Safety**

