OMA Report – Emissions to Air – EPR

Summary sheet			
Permit Number: AP3136UA	Compliance Officer:Gary Evans		
Operator: Dragon LNG	Auditor (if different):		
Emission Point(s): 13	Others Present:Karen Dunn		
OMA Sections			SCORE
OMA 1 – Management of monitoring			19/25 76%
OMA 2 – Periodic monitoring and test laboratories			37/40 93%
OMA 3 – Continuous monitoring			33/35 94%
OMA 4 – Quality assurance			27/30 90%
		OVERALL SCORE	88%
OVERALL SITE ASSESSMENT COMMENTS			Letter
			Variation
			Enforcement
		Date of audit: 26th February 2015	
		Signed:Gary Evans	
		Date:13th March 2015	

OMA 1: Management of monitoring		
OMA ELEMENTS	**SCORE**	**COMMENTS**
A. Documentation of management system procedures for monitoring	4	DLNG-P-EV-0010 Monitoring Procedure in place with EHS organisation presented along with brief description of environmental roles and specific to monitoring.
B. Organisational structure for monitoring	4	DLNG-P-EV-0010 details the responsibilities for air emission monitoring. Posts are clearly and formally identified as having responsibility for monitoring issues.
C. Schedules and planning of monitoring, including contingencies	4	Monitoring schedules were produced for all determinands and contained in the "Maximo" maintenance tracking system.
D. Monitoring records and use of monitoring data	4	CEM results are currently reviewed; extractive monitoring results are also reviewed against permit in accordance with DLNG-P-EV-0010 Section 6.
E. Understanding the requirements of the permit and monitoring methods	3	DLNG staff have experience of monitoring, and good understanding of the monitoring requirements, and relevant guidance.
OMA 1 – SCORE	19/25	

SUMMARY COMMENTS FOR OMA 1

A. DLNG-P-EV-0010 Monitoring Procedure details the management system for monitoring. The company are ISO14001 Accredited. The company also need to include reviews of SSPs in accordance with Annex D of MCERTS Manual stack emission monitoring – Performance standard for organisations.
A method statement is required by the contractors prior to work starting and the operator has established that they fully meet requirements.

B. The Assistant C & I Engineer is responsible for the CEMS under DLNG-P-OM-066. Clear outlines of responsibility are defined and also clarity on specific job roles on reporting under Section 5 of DLNG-P-EV-0010.

C. The "Maximo" system is utilised to develop work orders specifically lined to the montoring requirements. This process needs to be outlined in DLNG-P-EV-0010.

D. DLNG-P-EV-0010 Section 6 covers monitoring records and data gathering. Permit breach follows DLNG-P-M-014. Procedure DLNG-WI-IN-002 details review of monitoring data for process control.
Examples of good practice
- A review of results and compliance with permitted emission limits as a standing item on the agenda of appropriate operator management meetings.

E. The score reflects the practical understanding and experience demonstrated, for example, knowledge of MCERTS, monitoring methods, reference conditions, oxygen corrections, isokinetic sampling and quality assurance standards for CEMs, such as BS EN 14181.
Recomendations
- Attendance at relevant training courses and training records may be regarded as evidence.
- Personnel responsible for monitoring should demonstrate an understanding of how the process may impact on the environment.
- Guidance detailing the monitoring knowledge expected of personnel responsible for monitoring is available at: www.mcerts.net.

OMA 2: Periodic monitoring and test laboratories		
OMA ELEMENTS	**SCORE**	**COMMENTS**
A. Sampling provisions *Critical Element*	4	Sample Platform and monitoring location need to be fully reviewed and documented against TGN M1
B. Certification of equipment	5	All the instrumentation has MCERTS certification for the relevant determinands and ranges where available.
C. Measurement methods and standards *Critical element*	4	Determinands are monitored using standard methods at the highest available level of priority in the hierarchy of standards. The relevant methods are complied with in full. The operator has needs a formal review process against TGN M2.
D. Calibration methods *Critical element*	5	UKAS (United Kingdom Accreditation Service) /MCERTS accreditation UKAS/MCERTS accreditation for all relevant determinands and methods.
E. Frequency of maintenance and calibration	5	UKAS/MCERTS accreditation for all the required determinands.
F. Reliability of equipment (data availability)	5	The equipment is very reliable with over 95% availability Repeat analysis and/or rescheduling of samples due to equipment failures occur rarely.
G. Breakdown response	4	A breakdown service will provide repairs within 24 hours. The company utlise MCERTS Contractor ISO 17025.
H. Traceability	5	Full and complete records are available demonstrating the traceability of all measurements to national or international standards.
OMA 2 – SCORE	37/40	

SUMMARY COMMENTS FOR OMA 2

A. All extractive sampling postions should be assessed for compliance against TGN M1 and BS EN 13284-1. Any deviations should be assessed for their effect on sampling uncertainty.
B. Site demonstrates that the equipment meets the performance requirements of applicable standards such as EN 14792 and EN 15058.

C. A formal review should be carried out to ensure the monitoring methods chosen are and remain fit for purpose as per TGN M2 guidance (CEN/ISO/BS/US EPA hierarchy). This review should be formally documented. Evidence should be presented to demonstrate that all methods have been validated and are appropriate to the ELV. This review could be included in the DLNG-P-EV-0010.
D. Monitoring complies with EN ISO/IEC 17025.
E. UKAS/MCERTS accreditation for all the required determinands outlines Score of 5.
F. Evidence of equipment reliability can be provided by demonstrating that repeat sampling and analysis is rare.
G. DLNG to check MCERTS Contractor breakdown service repairs in 24hrs.
H. Periodic monitoring is performed by appropriately accredited test laboratories, then the score for this section will be 5.

OMA 3: Continuous monitoring		
OMA ELEMENTS	**SCORE**	**COMMENTS**
A. Provisions for monitoring and location of CEMs *Critical Element*	5	Dragon LNG sampling facilities fully comply with Environment Agency requirements specified in TGN M1, EN 13284-1 and EN 15259.
B. Certification of CEMs	4	All the CEMs have MCERTS certification for the relevant determinands and ranges.
C. Calibration methods *Critical element*	5	The operator performs zero and span checks, and manages the results using control charts WID and LCPD installations The operator goes beyond the requirements of EN 14181.
D. Frequency of maintenance and calibration	5	The frequency of maintenance and calibration gives an added degree of confidence for the type of equipment. (weekly compared to monthly)
E. Reliability of equipment (data availability)	5	Equipment is very reliable. For continuous monitors, valid results are produced more than 98% of the available time. Dragon LNG run at 98.8%
F. Breakdown response	4	Spares are demonstrably available within 24 hours or equivalent duplicate equipment is available. The person(s) responsible for undertaking repairs is trained and competent and training records need to demonstrate this aspect.
G. Traceability	5	The calibrations of CEMs are fully traceable to national or international standards. Full details of calibration are documented.
OMA 3 – SCORE	33/35	

SUMMARY COMMENTS FOR OMA 3

A. All extractive sampling postions should be assessed for compliance against TGN M1 and BS EN 13284-1. Any deviations should be assessed for their effect on sampling uncertainty.
B. For CEMs at LCPD and WID installations, if all the CEMs have MCERTS certification for the relevant determinands and ranges, a score of 4 is appropriate; a score of 5 can only be achieved if the data-recording software is also MCERTS-certified.

C. The installation is subject to EN 14181 (If LCP), then the operator needs to apply the minimum requirements of EN 14181 to get a score of 3. Further guidance on this standard is covered in Environment Agency Technical Guidance Note (TGN) M20 - Quality assurance of continuous emission monitoring systems - application of EN 14181 and BS EN 13284-2.
D. QAL2 exercises should be performed at least every three years for WID installations, and at least every five years for LCPD installations. ASTs are performed annually in the interim years. Additional QAL2s are required when there are major changes to the process or CEMs.
E. MCERTS requires a minimum availability of 95% for certification, so this is now the benchmark. Operators are only likely to achieve 100% availability if there are tandem CEMs, i.e. two on one stack.
F. A competent person would be an individual with relevant training in the appropriate equipment. Documentary evidence should be provided.
G. Calibration gases i.e. gases used to adjust the reading of the instrument must be traceable to EN ISO/IEC 17025 by third party accreditation from a nationally recognised accreditation body such as UKAS. Gases used to verify the drift of an instrument (for example, QAL3) must be stable but do not have to be traceable to EN ISO/IEC 17025 by third party accreditation. TGN M2 provides guidance on the performance requirements for test gases.
The site is subject to EN 14181 and should comply with all aspects of the standard. Further guidance is available in TGN M20.

OMA 4: Quality assurance		
OMA ELEMENTS	**SCORE**	**COMMENTS**
A. External quality control schemes	5	All monitoring activities are MCERTS accredited. The organisation carrying out monitoring participates in a recognised inter-laboratory proficiency testing scheme and other comprehensive external quality control activities.
B. Internal data quality control	5	DLNG-P-EV-0010 outlines the review checks by the Compliance Engineer. No data capping.
C. Competence of monitoring personnel	5	Sampling and analysis personnel have the appropriate level of training, qualifications and experience. DLNG utilise MCERTS Contractor with Level 2 staff.
D. Auditing of monitoring	4	DLNG carry out audits on contractors in line with ISO 14001 systems requirements.
E. Audit compliance	4	DLNG audit contractor performance via ISO 14001. Increased quality of audits and history required to increase score.
F. Reporting	4	The contents of the monitoring report meet the permit requirements and in the most part meet acceptable reporting standards but further improvements are taking place.
OMA 4 – SCORE	27/30	

SUMMARY COMMENTS FOR OMA 4

A. Schedules of accreditation for accredited organisations are published on the UKAS web site. Such schedules list the methods and standards for which the test laboratory is accredited; they should be checked to ensure that all relevant methods are included. Accreditation schedules can be viewed at www.ukas.org.
B. The operator doesn't currently review using statistical tests and acceptance/rejection criteria for data.
C. The MCERTS personnel competency scheme is applicable to people who carry out manual stack emission monitoring. A Level 2 certified person with technical endorsements appropriate to the methods specified in the permit is required to approve the site specific protocol, lead the site work and approve the monitoring report. An individual‟s certification status can be confirmed by referring to their MCERTS certificate or identification card.DLNG may choose to check during audits.
D. DLNG to carry out audits on contactors. Internal and external on-site audits to be carried out to check that the documented procedures are being followed. The operator should

also audit test reports as well as contractors in accordance with Annex E of MCERTS Manual stack emission monitoring – Performance standard for organisations.

E. The operator should also audit test reports as well as contractors in accordance with Annex E of MCERTS Manual stack emission monitoring – Performance standard for organisations.
F. DLNG currently report in accordance with their permitting requirements but for improved score, the reporting of data has to be a high standard (LCP) providing additional confidence. This includes measures to cover physical tampering, archiving and auditing.